

## Chapter 1

The Earth is cooling and I can't really blame it. Ten years ago, the engineers rocketed the reflective material into the atmosphere, bucking the warming trend. The plan for a merely lukewarm future went out the window, and the temperature began to plummet. We all lived, this is no doomsday tale, but the options for survival bifurcated.

Communities either bundled within the urban cocoon of a technocratic future, or they reverted to the ways of the plains. After college, I asked of the world if those were the only two options. When I didn't hear back, I moved to New York City.

I grew up pumping gas in my home state of Vermont. Ten years of smelling like petrol was enough to turn me off the stuff, but the experience taught me two things. First, I realized I'm the type of person to question whether my task is worthwhile. It didn't matter that much making minimum wage, but it became a pattern. Second, I learned that there is always work in maintaining legacy systems: too many folks just aren't willing to get their hands dirty. Upon arrival in the city after college, I became an engineer - repairing the last fleets of the city's bike sharing program before even its hardiest of denizens fled underground. Two wheeled transit was a sound enough concept under moderate temperatures: participating members checked out and docked their temporary vehicles at a whim. Yet as the average exhalation resulted in a puff of cold air, the urbane shed their peripatetic ways for a life indoors, and I was left pedaling the avenues in comparative solitude.

Snow arrived for the first time this summer, making my company's job more difficult, even as my own role grew more innovative. Preventing the last of the bikes

from crashing into one another becomes a puzzle in these polar conditions. While everyone around me takes the subway, I do my best to remain on the surface, taking notes and formulating improvements. I either fine tune my climatically adaptive creations, or I walk. Thus, in a melting pot of a metropolis dominated by conflicts of religion, gender, and race, my biggest complaint on a Sunday afternoon is that my apartment is too small to work on my bike.

While the countries of Western Europe may bicker over who first invented the bike, my education in winter adaptations to this vehicle originated in a Vermont garage. The crux of the matter revolves around fatter tires with lower pressure, allowing the wheels to float over the snow. Accommodating the wider tires, however, requires a whole host of other modifications: some simple, some maddeningly complex. Spare wrenches and oily rags littered the varnished floors of my flat at the top of an old brownstone. This wasn't even a particularly messy day, it had just been so long since the window had been opened. Devoid of a fresh breeze to clear them out, the dust and mothballs debated amongst themselves what they should chip in for rent.

Sundays were hack days, and every available inch needed to be in service of getting a working prototype up and running for Monday. I shut off my cell phone to ward off distraction, but the landline in the corner was already flashing with messages unheard. No one was expected to require immediate assistance, merely the usual suspects who could use a nudge away from the brink every week or two. Among the anxious were my old buddies from the bike shop back home. Having plied my trade with them from the time I got sick though the end of high school, I knew they had ideas - but they never went anywhere with them. Our early prototypes afforded a few glorious runs

through the maple trees during a lunch break; they were stolen, magic filled days. When I brought up our responsibility towards helping the rest of the population move through the bone chilling cold though, my reasoning fell on deaf ears. Why would they distribute mobility among a nation who viewed the forests we called home as inputs to their next remodeling? Steeped in a culture that prized adventure above all else, we were poised to be the perfect guinea pigs for a world where gasoline was priced out but everyone still had a family member that needed to get to work. We didn't need television ads of villagers carrying jugs of water on their head to stir our sympathy, the desperate limits of the situation were apparent on a ride downtown, witnessing the masses either trudging myopically through an incoming storm or chipping snow off a vehicle they could no longer afford. For me, bringing a solution to market that could withstand the cold carried the same moral impetus as spreading irrigation to regions of the cracked desert.

But the situation I had gotten into was murky, and no one was quicker to point that out than the ones who had never made it out of the boonies in the first place. The bike share I work for is backed by one of the city's largest financial institutions, the same one that financed all the roads and bulldozers which changed the face of our deciduous state for good. While I can quell my conscious, trying to work with an incessant red dot bleeping away is no way to live. I went over to the answering machine to hear what everyone had to say. A few telemarketers - high volume snow blowers and mohair scarves - the usual fare. The beginning of a voicemail from my landlord which I skip. The beginning of a voicemail from my sister which I skip. Red dot removed, machine unplugged, and I am back in a blissful, albeit chilly, state of uninterrupted concentration.

Sunsets over the West Side Highway are one of the reasons I got this apartment. Late afternoons used to be my favorite time of day; now they represent the awakening of the heaters as the midday sun lessens in scope. Radiators belch on occasion, everyone knows that, but at this hour the internal clunking of the steam has reduced my zen transcendence into a demilitarized zone surrounded by missiles of vaporized water. Complaints had been filed with my landlord before, but the torch of culpability was always passed to some other entity: his guy in Queens, the tenants on the second floor, my oversensitive eardrums. Pausing with the cradle of the phone in my hand, I debated whether this fiasco was worthy of plugging the line back in and risking the deluge. A knock rattled against the door before I came to a conclusion, and it swung open to reveal the mustached man himself, grunting an acknowledgment and panting like a wooly mammoth after ascending the flights of stairs.

“The heater’s not working properly,” I said.

“What do you think I’ve been calling you about for the last forty eight hours?” Ray said. He trampled across my spare parts with mud stained boots, his beady eyes appraising the radiating culprit in the corner. “See, I know what the problem is. You have the valve turned all the way to the right.”

“I did that so it would stop.”

“Well, you can’t do that. Otherwise the thing is not going to work. You rural kids have no idea what it takes to fill an apartment with steam heat.”

If on my deathbed, understanding what that takes still remains an unknown, let me declare now that I shall still pass peacefully into the void. I’ve always detested this genre of social interaction: asymmetrical information, moral bearing on behalf of the

mustache completely out of proportion to observable reality, flipping of broken amenities into failings of courage and strength. My belongings are few precisely to avoid dealing with this class of person, and my nostalgia for small town life abates as I remember all the local charlatans getting away with murder. My job within venture backed bike sharing represents the greatest meritocracy I have known. Despite the pressures of working on a Sunday, I am going to cling to this opportunity.

“Maybe it’s got something to do with the irregularity of power coming from the main?” I mention. Ray stares at me incredulously and I can’t tell if it’s because I dared to question his analysis of heating failures or if it was the phrase the main. I’m pretty sure that’s a thing. Quickly elaborating, I say, “I’ve been reading in the papers about the increased load behind the blackouts. The city can’t keep up.”

“All energy comes from New Jersey, but I wouldn’t trouble yourself with the other side of the river, kid. Just stay in your cozy little bubble. Mommy and Daddy are shelling out enough for it.”

Despite living in the city for two years, I’ve never been to New Jersey. Despite working at a bank for two years, most people assume I don’t pay for my own apartment. You’re either a trust fund child or a greedy capitalist in the eyes of the world, but I know in my heart I enjoy tackling challenging problems, and I’m willing to go wherever I get to do that. Besides, my own life and it’s doubters aren’t very interesting. What keeps me up at night - aside from everything - is my own uncertainty over how I’ll fit into the very uncertain science of climate change. Among engineers, a pecking order exists. The most talented spearheaded the field of geo-engineering, actually designing the reflective material and considering the issue at a global scale. The rest of us remain mired in the

types of tasks we know should be done whether the temperature is going up or down: reducing consumption, lessening our dependency on fossil fuels. But ask around as to exactly what proportion of our energy is coming from renewables, and Ray's reaction is the most common: it's always someone else's problem. He has scurried off to deal with his next plaintiff by the time I return from my musings. Alone, I content myself with refitting the rear derailleur and testing out the front brake tube, leaving the larger problems of deforestation and strip mining to better men.

Night fell and to their credit the surrounding apartments all lit up, everyone working away at something. Even the people I disagree with in this city have some degree of conviction behind their ideas which eluded me during my bucolic days. A glimmering skyline of worthy opponents carries me through the night. The bank mentioned that if I can get a working prototype by the end of August, they'll fork over the resources to bring on a full time team to make biking viable again. Despite all the bickering, my plan is to bring on my friends from the shop back home - implementing the designs they originally came up with, only now with the backing necessary to make it scale. Not wanting to put the cart before the horse, I retrain my eyes on the nuts and bolts before me, while oscillating visions of material greatness and material sleep tug-of-war for control.

After midnight, more scuffs from the hallway, but this time no automatic entry. The land line was still unplugged; communication with the lone engineer throttled to the interpersonal. My hand winced as a spark shot off onto the brass doorknob: wool socks will do that. Beyond the threshold, in all her bundles, waited my younger sister Haley. She had walked the few short blocks from her dorm at NYU; I'm not fully sure how she got in the building. Part of my job at the bike share, when I'm not a mechanic, is to head

up the predictive analytics team, reasoning about who will frequent what station at which time. On many an occasion, I've pinpointed exactly how someone should react given their age, demographic, and riding history, but sibling order is the equivalent of a shotgun aimed directly at my scatterplot. No one's ever actually shot at me, it would be too risky if they missed and hit one of the laptops next to my shoulder, but the fact remains that when you factor in the effect of being the oldest or the youngest, all else becomes a mute point. We hug because that is what even diametrically opposed siblings do, and I ask the obligatory questions about how her anthropology major is going.

Coursework itself is fascinating, she said. The problem - as always with Hayles (as I like to call her) - is her depression. On this count the gene pool affected us both equally, but whereas I have found an outlet in the inner workings of machines, Haley hasn't landed on her panacea yet. Wincing at her forced and broken smile, I try and root out the source of her woes, moving swiftly down the list. Boyfriend is still the arrogant boyfriend, friends are still the one upping friends.

"I don't have biking," she said, "I have to use a chemical means of achieving a more sane perspective."

"I'm not lending you money for that," I replied. While escaping reality is an urge that makes sense to me, engineering has always been that surreal trap door, where I can shape the world into exactly what I want it to be. "In many respects," I said to Haley, "You walk the nobler path. With your anthropology major, you're raising a lens to how humans live, and you can't help but hold a mirror up against yourself."

“What does that even mean? What am I supposed to do with that?” she screamed. She’s barely sleeping because her room mates are loud, and the only other places she can go are her boyfriend’s crummy studio and the coffee shop full of homeless people. Visions of my sister cavorting amidst tattered rags and spilled lattes spoil my view of the West Side, and I find myself handing her money. At least it will bring this interaction and its nonsensical guilt to a conclusion. Somewhere, Virginia Woolf smiles at the prospect of another woman with a room of her own, but I frown against the statistical realities of the funds being diverted in an alternate direction.

We both end up crying, an involuntary reaction at the sheer volume of emotion this city demands. Over a mug of hot cocoa, the last of her tears trickle down and dry amidst the robin’s egg blue of my spare graph paper - something of a de facto attempt at interior decoration. It’s sad to see her so close to doing what she dreams of and constantly held in check by these apparent allies who contribute nothing. I pretty much do what I want but stress about how hard life is for everyone else, even getting this adaptive bike working is mostly about bringing my friends out of the styx.

“You have a good heart, Sam” she says, on the way out the door. I know she means it but I can’t help but feel it is my overdrive mind which allows the underlying heart to be known. No one told me I was a good person when I worked at a gas station with nothing to give. I’ve studied too much biology to know that even organisms on the cusp of sentience watch out for their own; that’s all I’m really doing now. The clock strikes two, and I am back to being surrounded by my gadgets, no closer to a working anything than I was when the setting sun was more than a distant memory.



## Chapter 2

My goal was to ride triumphantly aboard a newly minted fat tire. My reality was three cardboard boxes of spare parts, a cardboard tasting green tea, and a cardboard thin conviction after so little sleep. Sticking to what remained intact, I walked up Seventh Avenue from Grove Street, eschewing the Christopher Street Station. My fingers got so cold in the gloves I used to wear, I ended up buying a pair of leather mittens. Failing to put together the lapse in environmental stewardship at the point of sale, I've felt conflicted about owning an animal product ever since. Throwing them out though, would only further the disgrace. Instead, they balanced the mound of junk I carried, with all the instability of a waitress loaded up to the forearms with plates and cutlery.

At 8th street, my feet skidded on the ice and one of the three boxes toppled over, spilling its contents onto the pavement. It became a race against the ticking clock of frostbite upon exposed flesh and the insatiable appetite of desperate pedestrians to snatch at anything that wasn't theirs. Only a few of us left above ground are true thrill seekers, invigorated by the cold and moved by the sense that to forget our bipedal history is to forget ourselves. The rest are no modern day Hemmingways; they're too cheap to buy a metro card.

All items were recovered with the exception of my bike light - which at seven hundred lumens is not insubstantial. Picture a pitch black forest lit up with the intensity of a highway construction zone, and that gives you some idea of how I roll into the backcountry. There isn't a dire need for a light of this magnitude in the city that never sleeps, just a certain reassurance that comes from being one's own source. Placing a

sense of self in an accoutrement like this proves to be a failing strategy as that piece of me now smuggles itself towards Union Square, concealed amidst the innumerable persons who might be carrying it.

By the time I hit 14th street, the adventurer in me had caved to the commuter. Descending into the underground abyss of the subway terminal, I was as nonplussed as those weary travelers who must have abandoned the Oregon Trail and settled for Missouri. Subterranean Manhattan is the world of the consumer: a subnivean hibernation of consumer brands Americans know and love, nestled in between some new friends. Disposable razors for every week, custom t-shirts for every day: durable products fled before the subscription model. No one was safe from the insatiability of the monthly plan. In place of a sweater to keep me warm right then, I had the option of signing up for an online sweater series, destined to keep me hemmed in for every month aside from when I needed it most until I either died of hypothermia or they got acquired by a larger conglomeration of pants. The messages from these verticals surrounded me on every side, inducing a kind of vertigo. Unable to withstand it any longer, I hopped over the banister of the escalator and took the stairs, which were empty.

Drudgery within the depths made me appreciate those small dens of creativity I had already excavated from New York. For the first time that morning, I was looking forward to arriving at work. Without further mishap, I settled in among my fellow pilgrims, most of whom had mastered the art of staring straight ahead even better than I had. Apart from the bankers hoping to broker, and the believers warning of brimstone, the morning commute was remarkably devoid of flora or fauna. The vegetation above

the Bryant Park Station had long since been replaced by astroturf; the raccoons surely sliding amidst the mounds of garbage buried beneath an avalanche of refuse.

Content with a wildlife sighting upon a later date, I entered the offices of the bike share, housed within the bank. Twelve flights up gets you either an engineering lab in the heart of midtown or five years in a minimum security prison, depending on whether you took the elevator this year or last. My ancillary group used to be housed in a separate building, but after the capital markets team became implicated in the geo-engineering overshoot, space opened up in HQ. That team is all employed on the opposite side of the park now with neighboring firms, so us tinkering types don't have too much guilt over inheriting a brand new space. You'd barely recognize us toiling away amidst the glass walls and oaken conference tables habitually reserved for the executives who grace us with their presence every now and then. It was our animal kingdom now, high fives of congratulation hovering on either side of my entrance until my colleagues saw the boxes sprawled within the compass of my arms, and a job left undone between them.

"How was the ride in?" one of the fellow members of the Vehicle Adaptation team asked. Several "Pssts" assured him that my failure over the weekend was complete. Meetings stretched to fill the stray crevasses of the morning; by the time I could resume my designs it was nearly 3pm. On the wall above the adaptation pod hung a giant map of the borough of Manhattan, adjacent to portions of Brooklyn & Queens where we also supported stations. For all our talk of connection, we were in fact stewards of density, only servicing areas already intertwined. Harlem, East New York, the Bronx: these neighborhoods lay beyond our purview; the most efficient bike in the world would not

bring them within range. Their inclusion rested in the capricious hands of the station selection pod; their entrance into our known world as likely as the moa stepping out of extinction. For my own survival, I had to focus on the narrow task of improving the winterized bike. The problem was how to secure space within the office to actually perform my job in peace. After checking conference room availability, I opted for one of the few spaces with frosted windows; that way no one could see I was focusing on trying to improve the product rather than responding to some trivial email. In honor of the historical urban revitalizations we hoped to emulate, each conference room was named after a different city from Western Civilization. I lugged my cardboard portmanteau over to Constantinople and set to work. By the time 3:30 rolled around, I had every piece of equipment splayed out nicely, in roughly the same order as in my apartment the night before. A knock on the door informed me that the room had been booked.

“That’s impossible, I just booked Constantinople through the end of the day,” I said.

“Sorry, we had to bump you,” a woman from marketing said, “the board dropped by for an unannounced visit and we’re filming a promotional video on the vision and scope.”

Defeated, I dragged the cardboard boxes back to my pod and resolved to go for a stroll before I said anything I would regret.

“Roberts, where do you think you’re going?” my manager asked, sidling up to me and placing one hand on my shoulder while using the other to straighten out his man bun after the three steps over from the espresso machine.

“Making some comparisons with the median of the fleet, sir.” Similar to my comment of the main, I could only make approximations of the vernacular belonging to a group of elder men who had resigned themselves to the sorry state of the world and their contributions to its status quo.

He stared suspiciously at me. No one could really say how median differed from mean, let alone average or mode. Thankfully, the code of the engineering manager, like that of the noble samurai, is all about saving face. As his questioning glare softened into a grin, he added, “Better take a helmet.”

Even though I was just planning on going for a walk, I headed up Sixth Avenue with a head protected, helmet bouncing off the aggravated passersby. The bustling Forties of mid afternoon were on a collective coffee break; a relaxed air pervaded that I rarely encountered during rush hour.

“Nice helmet, faggot,” someone shouted from the nameless troves of traders. People always harangue the internet as the commons without accountability, but I would argue midtown Manhattan basks within that same light. His phrase shattered my calm; instinctively, I started jogging, then sprinting, desperate to find the nearest docking station. 45th and 6th had a few left. I entered the keycode, then backtracked down to 44th and took a hard right through a row of green lights to the West Side bike path. Admittedly, calling it a bike path is to pay homage to history rather than to acknowledge the dearth of traffic - cyclical or otherwise - along the island’s Western shelf. Under the increasing pressure of the cold, the city had drawn in its hunched shoulders, the way my uncle used to do when he would go out on the back deck to smoke a cigarette. Free reign of the path was mine, a personal corridor within which no one could say anything

hurtful, for there was no one around. Transportation in this city - life itself for that matter - is all about the grid, and if you can't escape it, the next best thing is to push all the way to the edge. The fading sun reflected off the inky surface of the Hudson: a shimmer recovering from a recent oil spill which no one ever owned up to. Newspapers fluttered in the wind, typographic replicas of a leaf-filled autumn.

On 46th, I ascended the ramp of the great aircraft carrier, the Intrepid. Countless tourists used to flock to this border of Mid Town West, drifting from Broadway plays and Times Square toward an attraction that didn't try and glitter. The massive ship jutted further out into the Hudson than any pier. On its broad swath of runway, fossilized fighter jets and stealth planes populated a flightless deck. Swerving in between the legs of the aviators, I tried to discern just how far I could get away rolling the wheels of my bike on black ice. Applying just the right amount of pressure to the front and back brakes to prevent fishtailing, getting a feel for the minimum turning radius when I threw the handlebars sideways.

Astronomical fuel prices had effectively made aircraft an endangered species - even the board at the bank reminisced nostalgically about how many years it had been since they boarded a plane. Thick offshore ice, as well as the frozen tundra made drilling prohibitively expensive except for the shallowest of coal and gas deposits. I couldn't help but force my blue lips into a wry smile at how the invisible hand tightened its grip around even the sharpest of drills. Spokes flashing in the waning sun was the only movement on the current horizon, engulfed as I was in relics. The sole invention flitting among the hulking scraps was a bicycle, and not even an adaptive one at that.

The silence gave way to beeping, a shrill chirrup from my watch. My heart sank at the interruption, all the moreso because it was a reminder of my own making. An outdated feature of our busier days at the bike share was the timer. Every model faced the obstinate restraint of a forty five minute window before the rider accrued substantial fees. As bank employees, we were expected to uphold the golden standard of conformity. What ever happened to the locals' discount? So close to a breakthrough on the adoptive vehicle, risking a delay on the stock model for a few extra minutes of dusk was not worth it.

"Helloooo", I shouted to the West, letting my cry echo off the ship before reverberating up and down the Hudson. As I swung the bike around, my gaze tracked North towards the silhouette of the George Washington Bridge. Ray the landlord's words came to mind, of all the power streaming in from New Jersey. Something about his manner - I don't know it could have just been his mustache - made me want to fact check and find out for myself. The GW wasn't an insurmountable distance, by Vermont standards it barely qualified as a full day's ride.

Now I had become the person in need of a talking off the ledge, back onto the island which had accepted a rustic engineer and given him the budget to realize his dreams. The day was close, assuming I could deliver on my end of the bargain. Ridges in the gangway clanked as I glided down the ramp. Somewhere over the Hudson, the last of my "Hellos" died out without further protest from George Washington. It wasn't the first time I had come to the banks of the river and resolved to live differently, and it wasn't the last I would turn my back on the horizon with the sense of something left undone.

## Chapter 3

Slipping back into the bustle of the office without attracting suspicion is more of an art than a science. But as I peered around the doors of Floor Twelve, the dynamic center of the bike sharing universe was little more than a ghost town. Unaware if there had been another disastrous climate event or if we had simply been liquidated and sold off in spare parts to the MTA, I tiptoed back to the Adaptive Vehicles pod that was my home. Littered coffee cups from the morning's minor victories had been replaced with beer cans and hollow whiskey bottles still one third full. Glass of that size and shape still reminded me of the ships-in-a-bottle that occupied so much of my youth. I hoped they always did, no matter how many corporate happy hours I was forced to skiff through.

A cursory email check disclosed that an invitation had gone out shortly after I left beckoning employees to come out and meet the board of directors over drinks: a toast to a nonexistent success. There was still time to make it, these types of celebrations usually lasted well into the night, but my spare bike parts peeked out at me as desperately as a crate full of forgotten toys. The shame and anger I felt at our collective inability to deliver a vehicle worthy of the future left me unable to devote myself to either revelry or level headed progress. A full day was needed in order to get the adaptive prototype functioning, but one tweak felt doable before heading out.

Every mechanical engineer needs to know how to write at least a few lines of code. Take cars: forty years ago they might have been the sole domain of auto mechanics, but in the final decades before the demise of the combustible, automobiles evolved into little more than frames for a series of interconnected computers. Our shared bikes were no



exception. Each model we shipped contained a chip with hardware beyond my ability to update, but the docking stations themselves routinely downloaded the latest system software from the cloud. I cracked my knuckles and pulled up the latest repository of code. While not an expert in this part of the program, my work with the predictive analytics team had occasioned a few toe dips in the water over the years. I also harbor an addiction to being a beginner, so I'm used to getting my bearings quickly. Whether it's how an electrical current passes through a circuit board or the steps of a throw in jiu jitsu, there's an essential series of steps common to every discipline. Once I started to work within that grain rather than against it, I stopped being one of those people who beat their heads against the wall. Of course, it took abnormal circumstance for me to reach that level of understanding: a lot of time to think things over. But here I am.

The section of code responsible for the forty five minute limit was marauding between plausible counterparts: the event listener for a bike being checked out and the count of elapsed time. Simply increasing the allowable window may have redeemed the abridged trip along the Hudson, but I wanted to improve things for the younger generation. By configuring the scale to the inverse of rider age, I hoped to penalize the old cronies who had gotten us into this mess in the first place. Fees would accrue to the middle aged man buns almost as soon as their feet touched the pedal; the additional obscurity of a check based on birthday also seemed likely to deter future snoopers. They would skip to a region they could more easily reason about, assuming age to be an intended restriction. No one asked why anymore, except when they were passed up for a promotion. Most of our meetings rarely devolved into any of the specifics of how we actually accomplished anything we did. Instead, we grazed within the domain of

issues accessible for the power point crowd: a concept unfortunately known as bikeshedding. Look it up on Wikipedia.

On my way out for the evening, the thunderclap of a cue ball breaking an admirably tight triangle echoed throughout the lobby. Shooting pool was our one respite from all the schmoozing, less of a concession on behalf of the bank so much as the inertia of the building, unwilling to pay the removal fee for the gargantuan billiards table.

“Oh man, it’s live fellas, Sam Roberts is in the building,” my friend Howard said, pulling me into a bear hug and the conspiratorial atmosphere of the leftover crew.

“Dude, Howard has been telling us all about your jump shot,” another friend exclaimed, “Let’s see it.”

For all the feelings of bliss that sinking a shot at just the right angle engendered, my mind was on the code deploying upstairs, fanning out from our hub across the stations of the city. When the complaints started pouring in that only the juvenile were escaping massive fines, I didn’t want to be one of the few employees left in the building.

“Guys, not tonight,” I said.

“He’s got a hot date or something,” Howard joked, as quick to protect me from the group think as he was to invite me into it. “It’s cool man, we’ll catch you around.”

“The jump shot,” someone else commented, “bet it doesn’t even exist.”

Sheepishly I pointed down to the box of spare parts in my arms - work being the only real excuse to leave the office - and headed home.

Dawn came later than usual the next morning, but still not late enough. I sent an email to my managers informing them I would be working from home, the rubicon necessary to complete the fat tire by the end of the day. A few hours later there was still

no response from HQ so the coast appeared clear. By noon I had both the wheels secured back on the frame, and the gears spinning reasonably well - at least when the bike was flipped upside down. As I sat on the seat tube and front fork, it was hard not to get jitters at Frankenstein coming to life. The only mishap in the surgery was that I couldn't find my Allen Wrench. Somewhere along the commute home, it must have slipped through one of the abrasions in the cardboard; there wouldn't be many shops open on a weekday morning where I could find a replacement. Smaller stores simply couldn't afford the heating costs when foot traffic was low, leaving only the largest atriums alive and selling. The two options on the West Side were either Columbus Circle or Battery Park. Batteries were already on my mind - part of the planned expansion for the next calendar year - so I walked down the two flights from my apartment to the street, and headed South.

My mittens formed a steeple as I rounded the corner of Chambers and Church. The pedestrian centerpiece of the neighborhood was the giant Oculus: an elliptical ribcage of a building reaching leviathan proportions. Alabaster, steel ribs gave the impression of a beached whale. With humanity's characteristic indifference to such a sight, the atrium below the Oculus formed the largest shopping center in the city. Eager consumers thrummed off a one-way symbiosis with nature, reminiscent of a swirling mass of plankton. Whales have always fascinated me, as have all creatures at the extent of their respective phylums. If you're from the generation that grew up with the American Museum of Natural History still open, I salute you: the blue whale there seemed cool. The museum itself limped on for a few years after the collapse of the last indigenous populations, but eventually too many of the curators walked. Unable to

ignore the fact that the industrialized world had invaded, raped, and indirectly frozen the peoples they boxed up into dioramas, the trustees left my era with nothing more than a boarded up grave that would have made Tutankhamun proud and wistful viewings of Night at the Museum and Night at the Museum 2.

Strolling down the Italian marble staircase, I scoured the ribcage for stores that might sell Allen wrenches. While the upper levels were filled with balconies circling an open air concourse, the lower levels of shops ringed a polished floor. The Oculus doubled as a train terminal in addition to a shopping center, serving as a nexus for not only the subways, but the PATH train to New Jersey. If I wanted to peer beyond the city walls, now was my chance; but of course I had errands to run. Back to School signs explained the frenzy, and I did my best to thread among the distressed youngsters and their parents towards a vague recollection of hardware store on the circumference of the mall. While I was skeptical of the influences of advertisers, I wasn't immune to them either, and among the countless mundane offerings, I couldn't help but perceive an optics store specializing in cameras, telescopes, and binoculars. Tantalized with the products I could see, and the vistas they might illuminate, I paused before the entrance, long enough to notice a cannabis dispensary adjacent to the shop. Widespread legalization was already five years old, an inevitable concession to public demand after all of the restrictive energy laws being passed, but I was old enough to remember that apathy hadn't always been so widespread. It was as if the mindset of Brooklyn had passed unfiltered into the more ambitious boroughs. Standing amidst the hopefuls was my sister Haley.

Natural light seeped through the glass panels overhead, blending with fluorescent displays. Through the dappled refractions, my sister loomed more distraught than usual, fidgeting mid-way through the line with her cell phone. I had no desire to step into that place so I waited patiently against the railing - wishing I had brought some bag of chips with which to appear more inconspicuous. Brotherly interventions such as these always render me uneasy; footing all the more uncertain when it's a weekday and both of us are absent from work and school.

"Hiya Hayles."

"Oh my God, you're following me."

"I'm looking for an Allen Wrench."

"Can we not tell Mom and Dad. You know it's for my anxiety."

"What's causing the anxiety Haley, why don't we start there?"

"You're supposed to be at work."

My arm shot out to seize the recent dispensation, but a firm grip stopped it in mid flight, and an even firmer voice asked, "Ma'am, is this man bothering you?"

"Yes," my sister stated coldly, and the grip tightened, "But he's my brother."

Gradually, the hand released my sleeve; the marks of each digit imprinted in blotchy feeling along my forearm. Punctures from the fingernails were on the point of bleeding, even through the cloth. A woman a few years older than me stepped into view, her hair a more vibrant shade of red than the corporal crimson I was trying not to picture. Apart from her frizzy hair, the wildness of her appearance was accentuated by cowboy boots and a broad Navajo print shawl. An ensemble right on the verge of street legal for lower Manhattan, complemented by an aura that clung to the coattails of another epoch. A

shorter girl tugged at the first woman's arm. She was younger too, about my age, and pointed curiously at me while murmuring: "Meaghan, isn't that one of the candidates?"

The expression of the frizzy haired lady morphed from one of aggression into one of inquisition, and she began to study my features as assiduously as I wished my physician did.

"Wait, what did she just say?" I said.

"Why are you not at work?" Meaghan asked. Less of a question than a declaration that she already had dirt on me. For the second time, I recounted my quest to find an Allen Wrench, falling victim to this woman's jurisdiction.

"Oh," she said, once I had finished - apparently satisfied with my banal excuse. Her features softened. "I'm Meaghan, and this is Caroline. Sorry to barge into the middle of family business, both of us have a bit of a pressure point for domestic violence."

"Well, maybe you shouldn't define your life according to that one bad thing that happened to you," I said.

Haley slapped me and dashed off with the cannabis.

"And actually appraise the situation before butting in," I concluded, watching my sister run away. The two women stood transfixed. Bundled in both of their arms were bags from a store I had never seen before, detailed with the minute logo of a jellyfish whose tentacles formed a double helix.

"Do you work for them?" I asked.

"No, just loading up on supplies," Meaghan said. "How are things at the bike share?"

“How do you know I’m working on a vehicle for them?”

“It’s a small space, those of us who care about the cold tend to associate with one another. At least when we’re not wrapped up in our own vendettas,” she smirked.

“Well, I’m close to a breakthrough on my own,” I said, “I don’t need to network, I just need an Allen Wrench.” When still they wouldn’t budge, I added, “You’re in climate transportation too?”

“Tangential,” Meaghan said, handing me a business card. “Someone will be reaching out if there’s a fit. C’mon Caroline, we have to head up to Chelsea.”

“I didn’t even say I wanted a job,” I said, turning the card over in my hands. But Meaghan and Caroline were already receding amidst the foot traffic. “Bye,” I offered, to the din of chatter and foot scuffs. Only when I had lost sight of them completely did I glance down at the business card. The one thing it stated was the only fact I already knew. A single name: Meaghan.

Confused, I flipped it over to the back, where in a rustic font were printed the words: “The Yellowstone Group.” Haley always had a keen eye for fonts, surmising in their serifs and serrations the character behind the forge. Now she was gone, and I was left alone under the Oculus - en route to an Allen Wrench for a company I had hacked, holding a business card for a group I barely knew.

## Chapter 4

Back within the closet of my apartment, the fluster of my chance encounters settled below the weight of my existing obligations. As an engineer, job offers come fairly often, constantly veiled behind the guise of “We’ll call you.” The phenomenon is akin to what normal people describe as falling in love with a stranger, only to forget about them ten minutes later. Wild associations about the promise of the West and the unlocking potential of DNA had swirled through my mind on the way out of the whale, but the walk back into the folds of the Village convinced me of the superiority of my current situation.

Surrounded by some of the last remaining quality bookstores, tailors, and restaurants in the city, I felt lucky to call this neighborhood home. The smell of wood fired pizza, so recently expelled from the brick oven, cut through the cold and the lingering doubt. Settling into my couch with a few slices of Joe’s Famous, I was set to work. By 3pm - that mystical hour - I had the fat tire wrenched down and rearing to go; all that remained was to take it out for a test drive. A dreaded rap at the door ensued. It was more insistent than the lackadaisical beat of my sister, yet I was still relieved it wasn’t Ray; at least this party knocked. More insistent banging followed on the heels of a shout: “We’re looking for Sam Roberts, is he in there?”

I opened the door and said, “You missed him by a hair’s breadth; he literally just headed out to one of the atrocious dive bars in the Lower East Side. You might start by looking for him there. God speed gentlemen.”

“Put a sock on it kid, we’re going to case the apartment, you hold still.” As they muscled through the doorway, I went to the kitchen to clean some dishes and to appear



as honest and humble as could be. In truth, I had been subsisting so concertedly on take out that I wasn't altogether sure whether I was going through the motions correctly. The officers prodded the bike curiously but quickly moved on to the bedroom, convinced this Sam Roberts character was naive enough to quiver there while his nonexistent roommate tidied up. Despite being cased, I couldn't take my eyes off the fat tire, my exuberance at its completion totally undiminished by the intruders. Hungrier for untracked terrain than standard bikes, it was criminal to leave it stranded on the dusty floor.

Most of the layers I owned were still on my body, having been too distracted by the goodness of the parmesan to remove them earlier. One notable exception was the prized pair of mittens, laying on the bed in the occupied room. Grabbing a set of unused oven mitts and thrusting them on, I made for the fat tire, flipped it into it's side, and ducked out onto the fire escape. Bookcases crashed down behind me as the police identified the real Sam Roberts. Without time for reflection, I mounted the bike and descended the three flights of the fire escape: a rare urban slope without switchbacks, barely within the limits of my dexterity. Low tire pressure absorbed the shock of the city pavement as I coasted into the alley behind Christopher Street Station.

Pedaling uptown was easier than it had been in months; I floated atop crusts of sidewalk snow capable of thwarting lesser riders. The elation lasted only a few blocks before my conscience clouded over the appearance of Manhattan's finest. My guess was that it resulted from another embezzling manager lobbing out the names of a few engineers as collateral. I wound my way uptown - more out of habit than any concrete idea of where one goes on the run. "Evading the Cops for Dummies", "The Idiot's Guide

To Crimes You Haven't Committed": these titles were yet to be published. For the life I was assembling lately, the instruction manual was missing from every book. Giving myself over to instinct, I avoided the avenues, where police cruisers represented a disproportionate number of total cars on the road. Broadway served as my Colorado, emptying from the dense peaks of downtown haunts into the meandering safety before midtown. Passing through the great canyons of the city: the Flatiron, Times Square, Columbus Circle - light and sound floated beside me in a warm current of anonymity.

Who are these guys? I thought, as several horseman began to gallop in my direction along the western edge of Central Park. One stage of the game was up; however inefficient the communication among police in this city, there was only one fat tire on the run. I respected equine enforcers of the law more than their automotive counterparts, but I would have still preferred they not assemble into a distinct cavalry hot on my tail. Scanning the horizon for a place to ditch the getaway bike, none seemed readily available. Whatever my predictions may have been for the first demo, a chase across the Sheep's Meadow was not among them. The rolling knolls of the park provided enough cover to sustain a break, every glance over my shoulder revealed the cops bobbing in and out of view - ocean dinghies lolling in the tide.

Traditional field spaces across the rest of the city had locked their gates for good; the rusting of basketball hoops and fraying of soccer nets giving rise to the impromptu sports of eccentrics. Their scattered groups lingered in the meadow tonight: huddled around bonfires and keeping the blood flowing through a series of bizarre lawn games - as undeterred as I was by the encroaching signs of dusk.

Yet the frivolities of others formed an obstacle course for the fat tire. Winding through the wickets of a croquet game and sliding beneath the silhouette of a volleyball net were flirtations with ejection and decapitation. Bunny hops over the burgeoning pastime of spike ball threatened to launch me to the moon. These timely evasions chipped at my lead, such that my legs were pumping furiously uphill upon reaching the northern edge of the Sheep's Meadow. Le Pain Quotidien marked the end of this section of the park, and I hoped it might serve as my 49th parallel, granting the immunity of a foreign land. Whinnying from the horses mingled with the early evening repartee of diners spreading brie leisurely over their bread: the Europeans were the only ones at home dwelling in the cold. My eyes frantically scanned the crowd for some wizened whisperer who might talk the steeds out of further pursuit. Cries of "Cheveux! Allons-y!" rang out among the leisurely, want to be, French - but no solutions were heard.

"Viva Napoleon!" I shouted, the only smattering in that tongue I knew.

Ground ice caved to pavement at the 72nd Street Cross Drive; diminished resistance nearly pitched my body over the handlebars. The mustard colored steps of Bethesda Terrace beckoned, and I dropped into the baroque chute only to see a couple about to be wedded loitering at the base of the sandstone stairs. Instinctively, I clutched the brakes, sending the bike sliding out from under me; I flew headlong into the air. As the world turned upside down, the bride and groom stared on in horror. The froth and spit of the horses mingled with the windblown spray of the fountain; the notes of the cello echoing from below the promenade ceased. The chase had reached its final crescendo.

By the time the granite ledge dug itself into my lower gums, I knew I had landed in a different world: one where the unbridled pursuit of marching orders dominated all traces of true horsemanship. A boot pressed itself into my face. My field of vision shrank to cobblestones and hooves. The last words I heard came from the officer who stooped down to examine the wreckage: "Is that an oven mitt?"

Several hours later, I regained consciousness; I couldn't see a thing.

"I'm going to beat the breaks off you son!" a voice said.

The room wasn't coming into focus quickly enough, but the sterile realization hit me that I lay in a building of the state, poorly ventilated and densely packed.

"Why?" I asked.

"Damnit, most people don't ask that. I don't know."

Circumstances of my admission to this grim holding cell were murky at best. I sifted through the potential wrongs I had done - of which there were many - but none justified ending up here, on the lower bunk of a New York City detention center.

So many hours at the bike share had been spent white-boarding the overlays of a utopian city's layout: countless hours allotted to rail stations and high rises. But we had never stopped to consider the transportation methods not down on any map: back rows of police cruisers, wheelchairs pushed down bleak hallways. This hidden network of travel characterized my recent past; the only thing worse than losing mobility was being confined to a sedentary state when you knew you could still walk. Never relinquish your grip on the wheel. Or handlebars.

"I'm going to beat the breaks off you son!"

“You already said that,” I shouted up to my bunkmate. A pair of beady eyes peered down over the edge of the bed, followed by a bicep slithering along the metal grating. The scents of urine and excrement were nauseating, and I tried to transport myself back to the happiest memory I could think of. When was that, exactly? At what time had there not been some messed up set of concerns lurking beneath the observable reality. Then I had it. Cozy afternoons petting my dog Claire in the half-light of a glass door that needed a good cleaning. My palms holding her paws, telling her how I was going to get into Middlebury so that I could stay close to home. She died while I was at school down in Boston: the first year I left. After that, I think I got pulled down further into the scene than I would have otherwise been.

Stenciled on the hairless arm before me now was an enormous rat, inked in a swampish blue-green. The rodent sprawled over a piece of cheese dangling within the maw of a mouse trap. My sweaty palms grasped at the steel bars in a vain attempt to steady myself.

"Heroin man. Heroin is what got me in here. I told myself I wouldn't touch the stuff again. You?"

“Did you know that black rats are invasive?” I said, “They’re actually not native to New York.” From everything I had read about survival in prison, this was the way to conduct oneself: never answer the question directly, set your own agenda.

“You’ll talk in time. All of you people born without problems find a way to create some.”

“Yea, yea.”

“Oh, and kid.”

“What?”

“It’s not a rat. It’s a vole.”

Drug related iconography filled my vision as I struggled to hold on to the reverie of that sunlit afternoon with my dog. Before I could receive any more upper bunk philosophizing though, the jail cell slid open and for the first time that week I was grateful for the interruption. One of the officers informed me that an anonymous source had posted my bail. Struggling to my feet was a reminder of the worn layers that had been on for close to thirty six hours: my collared shirt had the matted quality of a trampled flag, and a formerly clean shaven face bore the whiskers of a five o’clock shadow. Dismay was somewhat alleviated upon discovering that my room was not a true prison cell, but rather a ramshackle affair set up in one of the satellite stations adjacent to the park. Checking out of such a low security operation was a bit like checking out of a hotel: there’s a vague sense that you should stop by the front desk, but if someone’s credit card is already on file, no one really cares if you walk right out. I opted for the path of least resistance, but one of the officers called out at the last minute.

“Sam Roberts, would you come here just a moment.”

“Sure,” I said, the restless fight within me having emptied out somewhere between the meadow of sheep and the interrupted wedding.

“Notice for you,” he said, handing me a business card of a familiar weight and font. On this incarnation was printed one word: Hermann. Scrawled in pen adjacent to the moniker was a brief handwritten note. “Tough luck with the bike. Do come by if I can be

of further assistance. Preferably before Friday. We're at 12 Crosby." I flipped the card over; the only phrase printed on the back was: The Yellowstone Group.

Sunlight washed over my face along Central Park West, and I dug within the folds of my fleece for sunglasses nestled there since the day before. Traffic exhaust was a welcome upgrade from the dank, dewy cell. Despite my growing suspicion that the bank may have misinterpreted my code, I decided to drop by the office to let them know I was alright despite their best intentions to the contrary. While my bike was nowhere to be found, it had still performed admirably in the waning hours of my freedom, and that was cause for celebration. Equipped with the proper resources, I felt confident in my ability to recreate the success: it was time to get back to my desk.

The walk down steadily increased in cosmopolitan intensity: soggy newspapers clung to the soles of my shoes and wouldn't let go. A thin film of liquid rested perpetually atop the pavement, unrelenting even on clear days. Entering HQ from the North entrance on 42nd was a somewhat alien experience: the security guard - usually so determined to find endless variety in discussion - discreetly dialed the intercom upon my arrival. My keycard worked through the revolving doors but no degree of secondary swipes or repeat cries of "Open Sesame" would grant me passage into the elevator. When they finally did open, I was already sitting dejectedly on one of the lobby benches, and a representative from HR stepped out with my few belongings laying in somebody else's cardboard box. A photo of my dog and an ergonomic keyboard rested inside: all I had to show for my toilsome days here was that with which I entered.

"We think this is what is best for both parties, to move forward," the man bun clone said.

“What about the employee referrals already in the pipeline, those aren’t voided by my actions are they?”

“It’s safe to say we’re not looking to bring any of your hick friends down to the big city.”

“What about my stock vesting?”

“You made it through the one year cliff. Bravo! But we can prove misconduct, so that’s voided as well.”

“Who’s inheriting the adaptive vehicle?”

“Sam,” he said, taking off his glasses and putting some thought into it for the first time, “People want freedom, sure, but they crave security. The funding for your program is being scrapped for better insulation for the subway cars. Most of our key hires are on their way out to the MTA anyway. The writing’s been on the wall for months: you’re a dying breed.”

“Now is the time for all good men to come to the aid of their country,” I said, but he was already back in the elevator and ascending back up to the moral high ground of the steadily employed. He didn’t bother to take my key card, and when I checked out of the building, I found even my ability to exit had been revoked. The security guard came over to escort me onto the street. It was cold out there, but not as frigid as what I was leaving behind. The roar of the urban canyon was gone, reduced to the trickle of mid day traffic. With nothing more to wade against, I walked uneventfully back home.



## Chapter 5

I did what any recently unemployed engineer would do: drank ceremonial grade matcha at the finest cafes, left voicemails for my forgotten friends back home, and tried not to fret too much about the decisions my sister was making. For a few days I avoided all things mechanical and refused to touch a line of code. Witnessing the fat tire in action was akin to spotting a wild moose on the edge of the forest, somehow it was enough to take solace in the few allotted moments; I didn't need to go chasing it back into the thicket. There should have been a fire burning beneath me to realize the potential of a working prototype on my own, but there wasn't. The radiator had fought itself to death, and I was cold.

By Thursday I had barely left the apartment except for tea and pizza; enough time had elapsed to risk a visit to my sister's apartment. Shopkeepers in the Village clung to their storefronts with more vigor than those in other portions of the city. An equilibrium hung about the present, as if the more historical venues were determined to maintain a symmetry of existence around the fulcrum of the cooling event. On clear afternoons you could almost detect the reflective material twinkling in the atmosphere, mocking humanity's obsession with scale and control: an obsession I shared until I was fired earlier that week. Now it was time to adopt a new ideology.

Jefferson Market Library was more defeated than I, the hands of its clocktower frozen in place at 6am even though it was already growing late in the day. Achieving factual integrity twice in a twenty four hour period was still above average for this island.

I did my best to avoid the two docking stations between the Library and Washington Square Park. Streetlights mustered the strength to turn on, and no one asked me for a dollar at the Northwest entrance to the landmark: an anomaly I attributed to some sixth sense of the panhandlers for the unemployed. My route took a whimsical detour past the famous chess players of the Southwest tables. They sat scratching their heads, more perplexed as to what to do with themselves than the clock hands.

“He’s only here a few days a month, but when he does, he wins everything.”

“At least we learned something,” another grizzled man offered. “At least when he’s here we learn something.”

I had no idea who they were talking about, but another phantom was in keeping with the overall disappearing act. Bluegrass bands that used to frequent Washington Square had moved further South. Surrounded by their country brethren, I wondered if they would alter their rural ballads to tales of the big city. The fountain had long since dried up, and even the giant arch loomed against itself with the hollowness of two opposing elephant tusks, unable to ignore the quality of its own extinction. The very park that had provided inspiration for the creators of Curious George was now devoid of all inquiry. NYU dorms to the South still harbored those keeping up at least the appearance of study, and it was down on East 3rd street that I found the one responsible for sheltering my sister.

Consistent with the theme of the week, I was kept at bay in the lobby by the security guard. After several tense minutes of detainment, he eventually sent word that she wasn’t buzzing me up. When I explained my familial ties and causes for concern, he

just shrugged. So I walked down to the Angelika Film Center, hoping to catch a show. A placard in the front window decried that diminished crowds had reduced the center's hours of operation to strictly weekends. The cinematic lettering of the marquis itself had gone stagnant; the current billings scrawled across post it notes to keep costs down. I sat down on the front steps and looked out onto Houston, indifferent to the numbing sensation spreading up from my toes. This road was the last true thoroughfare. A homeless man sidled up to me, but didn't ask for change; he just wanted someone to sit with. To pass the time, we counted off the streets looking East. It had always been my ambition to master the grid below the numbers, and after two years I hadn't been faring well. Mercer, Broadway, Lafayette. Mercer, Broadway, Lafayette, Mulberry.

"No," the homeless man said.

"What do you mean no?" I said, "I didn't say anything you could disagree with."

"You missed Crosby."

"What is a Crosby? Who comes up with these?"

"Crosby is between Broadway and Lafayette. Very small street. But if you are counting the lanes you must include it."

Twelve Crosby: hidden in plain sight. An address so elusive that even writing it down only made it harder to remember. How did a group with such a pastoral name manage to secure real estate this coveted? I didn't like the sound of it, but I needed to use the restroom and there was a certain dignity about not utilizing a coffee shop solely for that purpose. The late afternoon sun struck the upper stories of the theater, illuminating the forest canopy of the scaffolding. Below tree line, I bade my unkempt

comrade farewell, and thanked him for his commitment to geospatial integrity. He handed me a copy of the Angelika's late summer schedule.

Crosby was narrower than its counterparts, and its tenants filled the remaining channel with flags borne proudly from windowsills. Gusts of late afternoon breeze ruffled the fabric with a patriotism I felt removed from. I was unsure of my footing until I came across a normal looking house amidst the kaleidoscope of ethnic and nationalist tenements. Its wooden frame belonged in Vermont, longing for a bucolic yard and fence; at Twelve Crosby it was nestled between twenty story high rises. A few of these scattered homesteads cropped up throughout the city, and I always wondered who lived in them.

I knocked three times for good measure, glowing in the reversal of disturbance. A mail slot slid open to reveal a pair of wild looking eyes peering from behind. From the far side of the door, a voice rattled off an incantation in a foreign tongue. The only response I could scrounge was: "I'm Sam Roberts."

The door eased inwards to reveal a carpeted mudroom; a man of indiscernible complexion peered up at me. His eyes were still remarkably wild whether they were framed by the mail slot or the leathered, tanned skin around his temples. He made no effort to open the secondary door, thereby offering access to the true interior of Twelve Crosby. Instead, he placed an outgoing call on the landline - a home phone being one of the few objects in the cramped chamber. It sat on a small stand beside a lamp fashioned from elk horn: its green shade colored the hue of casino felt.

"Mhhm" the man said into the receiver, followed by a response on the other end in the same language. "Mhhm," he said again, this time peering at me over the lip of the

receiver, jotting down instructions in a cloth bound notebook. For a moment he seemed confused, then nodded vigorously, then set down the phone with a final, climactic “Mhmm.” Forgetting his contentment in an instant, he abruptly began screaming and ushered me out as if he was a broom and I an uncooperative tumbleweed. I staggered back down the three steps from whence I came, while my host exited, locked up Twelve definitively, and ushered me into a parked car in front of the building. Now, normally my small town roots prevent me from doing anything so rash as hopping in the car with a stranger, but there was something trustworthy about the man’s nature: his placid temperament returned as quickly as it had flown off the handle. His commitment to integrity - even if that was an integrity that would result in my demise - was unassailable. He seemed simultaneously foreign to Manhattan, yet capable of reversing the direction of alienation if he saw fit. The same sensation emanated from his person that I feel upon loitering at the docks at dusk, watching the cargo come down the plank. Moments when the city inhabits the wider world, and to reckon that the reverse is true would be preposterous.

We wound our way silently up and West, navigating the breakers of Eighth Avenue. Radio was out of the question for this man: what on Earth would he listen to? Small talk seemed a similarly grave offense on his bearing, so I resolved to sit quietly. Were it not for the powers provisioning him, I would still be in a knockoff police station listening to soliloquies about problems for which I never faced temptation. As the neighborhoods transmogrified from Tribeca to the West Village, then onwards to Chelsea, my guide barely batted an eye at the staggering dichotomy of affluence and destitution around him. He turned left on 23rd St. as if it were his own private drive: which in a sense it

was. Along with Houston, it was one of the few two way streets in the city, and I commented to my companion on his predilection for wide open spaces.

“Mhhhm,” he said, and continued forward. At 10th & 23rd, he pulled right before a traffic control gate, and entered a series of numbers into an electronic keypad. Despite being next to the High Line, it was one of those blocks where no gaps exist between the buildings running in the North-South direction: a continuous expanse directly beside Manhattan’s gleaming example of urban renewal. As the car descended into the garage below street level, I longed for a moment to orient myself, but the driver showed no signs of slowing down; in fact he accelerated into the ninety degree turn at the base of the ramp. The final two feet before the cement wall witnessed the undertaking and conclusion of the braking process; pizza sloshing around my stomach threatened to see the light of day once more. I leapt out of the passenger seat and clutched onto a cylindrical column for support. Without missing a beat, the driver strode confidently across the parking garage toward the elevator. He beckoned me over, and - once I was inside - punched the button for the top floor.

## Chapter 6

The top floor was the twelfth floor, and it was an airplane hangar. At half the size of a football field, it must have been housed within at least three adjacent properties beyond our current one. It was home to a single plane: a Grumman American AA-5B Tiger.

Meaghan and Caroline waited near the elevator exit, unwilling to budge more than a few yards from their mounds of luggage, even when they saw me. Meaghan's assembly looked ready for a search and rescue mission, while Caroline's patterned satchels were more appropriate for a weekend in the Hamptons. Underneath the wing root of the Grumman - face obscured behind a welding mask and shower of sparks - stood a man whose khakis and loafers seemed incongruous with the task at hand.

"Ah, Samuel," he cried, removing the mask to reveal a mop of unruly black hair and designer glasses. He strode across the hangar and shook my hand vigorously.

"You must be Hermann?" I said, extending my hand.

"What do you make of the plane?" he asked.

"Didn't know they were still available for private use."

"Cost of everything, value of nothing," he said to me. Turning over to look at the girls: "Meaghan, don't tell me you've found us a cynic to round out our quartet."

"Oscar Wilde," I said.

"Now that's more like it," he beamed, slapping me on the back good-naturedly. "But Good heavens, you haven't brought any luggage? Brice what kind of racket are you running over there at Crosby?" Hermann walked over to the driver, who had been waiting obediently within the vicinity of the elevator; immediately the pair switched to the

man's native tongue. After a few minutes, Hermann returned to where I was standing awkwardly next to Meaghan and Caroline. His hands formed a steeple, much the same way I arranged my own when lost in thought. "Sam, I have to continue adjusting the fairing a bit if we're to put up any fight at all against this drag, but Meaghan and Brice will run through the details if you can find the time to join us."

Meaghan took a deep breath and started in. The Yellowstone Group was a privately held organization headquartered in Wyoming and New York, tasked with the mission of designing solutions for adapting to the cold. The Manhattan office was essentially just a lodge for members to sleep in while in town, the Wyoming branch was the real deal. She and Caroline were only in the city gathering supplies while Hermann was meeting with investors; the body of the operation was carried out in the union's least populous state. The site selection rested on the premise that cooler temperatures in Wyoming trended about five to ten years ahead of the coasts. They had assembled a group willing to risk something to combat the cold, and it was time to get back to the front lines.

"Where do I come into all of it?" I asked.

"For clarity, we've broken out into two distinct groups; the first tackles adaptation through the lens of Biology. You see, I know a thing or two about genetics and Caroline here is an aspiring vet."

"So I take it I'll be in the second one?" I said. "I couldn't tell a chloroplast from a caterpillar."

"Correct," Meaghan responded. "Hermann oversees The Built Environment with his friend Dave, who's already out there. Brice assists as needed."



The sparks across the hangar died down, and Hermann shouted out: “We’ll double what you made at the bank, and that’s just for working September 1st through the end of the year. That’s our projection for how long it will take for you to finish the perfect cold weather vehicle.”

So many questions. So many reasons I couldn’t just pack up and leave. An apartment. A sister in the city flailing to stay above water. Friends in the outer rim counting on me as their liaison to a brighter future. But I also no longer had a job, and if the money Hermann was talking about was legitimate, the only way I could afford to keep my foothold in New York would be to leave it behind, if only for a time. There was also the vengeance aspect of completing the adaptive vehicle on someone else’s dime. The cloistered week of brooding had done little to rid me of the bile from my last experience. Judging by the Grumman, this was an organization that took transportation seriously.

Caroline had kept quiet thus far, but Meaghan prodded her to come over and speak to her own decision to join The Yellowstone Group. Two years younger put her slightly closer in age to Haley than to me, and her intermediate blend of confidence and vulnerability left me disarmed. As a recent graduate of Columbia, she was taking a year off before applying to veterinary school, and she trusted that a stint with The Yellowstone Group would only make her that much more of a competitive applicant. With the collapse of factory farming in the wake of frozen corn and soy, becoming a vet carried the same degree of financial certainty as becoming a poet. I nodded in approval.

“Our research in Wyoming has to do with understanding species that have naturally adapted to winter conditions over millennia,” Caroline said. “If it’s going to get

that much colder, we're going to need to figure out a way to introduce these animals to the rest of the continent responsibly."

"Right," I said, not wanting to get into any more specifics that might suggest how ignorant I was on all topics outside my own discipline.

"Aha!" Hermann shouted from underneath the plane, "The last of the fatigue cracks seems to have healed nicely. All systems go!"

A half hour later found all four of us boarded into the Grumman; Brice removed a small makeshift ladder next to the wing after we were safely piled in. The girls' luggage was stored in a separate compartment underneath the aircraft, and Hermann promised me I could borrow some of his clothes until he placed some orders tailored to my size. "You wouldn't have occasion for your current wardrobe anyway," he said. "Gore-tex everything from here on out. For all else, I say it's worth having one of each in both Wyoming and New York."

I considered questioning how exactly his attitudes on personal consumption melded into his stated quest of remedying humanity's gluttony, but I reckoned I was in no position to split hairs, having accepted my seat in the private plane. We all fit snugly within the cockpit of the aircraft, and Hermann assured me that the sliding glass roof could be cracked open mid-flight if I needed any air.

"Bonus points for never taking him up on that," Meaghan said from the back seat.

"Is this your first time flying, Sam?" Caroline asked.

I never got a chance to get back to her on that, for there was a deafening roar as the engine kicked to life. Brice opened the far side of the hangar, providing an exit if the choking and sputtering front propellor could ever find its groove. Hermann handed out a

series of earmuffs to dampen the sound. An earpiece was embedded in the left side of each device; a convenience I welcomed though I sensed the women would have preferred to fly in peace: they had heard enough of whatever he was about to say before.

Out on the brittle planks of the High Line, Brice was walking backwards with orange, TSA-grade sabers: guiding us out into the early evening.

“Is this legal?” I asked into the ear piece.

“No one walks the High Line anymore,” Hermann said, easing the plane out into the last rays to grace the West Side. Broken foreign phrases crackled through the headset from the air traffic controller.

“It’s fine,” Hermann said, not bothering to translate for the rest of us. Behind my seat, Meaghan gulped and took a sleeping pill. Caroline matched my own alertness; she was looking back as the hangar doors closed behind us. A copse of withering Japanese maples scragged along either side of the High Line, framing our course to takeoff with an edge of good riddance. Hermann and Brice exchanged a serious look, and the foreigner scampered over to the back side of a rock. He knelt down to fiddle with the switches of a concealed control panel, and by the time he stood up the remainder of the course was bordered with shimmering green lights - transformed into a runway.

More chatter persisted until Hermann flipped a switch on the dashboard and all went quiet. Brice began jumping and shouting to get our attention but to no avail. The girls in the backseat couldn’t have seen his antics and I was still too new to protest as our pilot went casually through the motions. Gradually we picked up speed and the apartments and art galleries of Chelsea began hurtling by at an alarming rate. My

knuckles gripped the the side of the plane, for there was no armrest to latch onto. The entire fuselage began to quiver under the uptick in velocity, and it seemed at any minute we might be airborne, when all of a sudden Caroline yelled “STOP!”

A stray dog had wandered into the middle of the High Line from the dried out shrubs of a nearby garden. Hermann kept his speed unchecked, shouting into the earpiece that we were already behind schedule. Caroline responded with a series of expletives, but our pilot reminded her how many more animals would perish if we neglected the obligation to our work.

“Five minutes won’t make a difference!”

“Yes it will!”

I grimaced, preparing for the impact with this creature which had no interest in the urgency of our quest. With a flash of nylon and yoga pants, Caroline was in the front of the plane and we all began to pitch wildly. She blocked Hermann’s line of sight and wrenched down hard on the steering wheel. Branches splintered on all sides, and we could barely see out of the brush. Meaghan was awakened from her carefully dosed slumber and was screaming about what was going on. Hermann responded by enabling Brice’s earpiece again. That Northern dialect coursed through the cockpit - oblivious to the fact that it had been silenced for the majority of our takeoff. The fuselage grated against the pedestrian guard rails, yet somehow Hermann managed to balance the plane out under the direction of our air traffic controller. This wasn’t their first rodeo. Behind us, the stray pranced unharmed down the path, and the faint silhouette of Brice shook its head.

“We should have enough runway left for takeoff,” Hermann said, completely unfazed by the situation.

“For God’s sake, turn the thing around,” Meaghan shouted, but he pretended not to hear. We had checked some speed during the near collision, but the whining of the engine grew in intensity as we whipped past the Standard Beer Garden. Hermann opened up the cockpit slightly and threw a coffee cup out over the side at the inebriated dwellers of Lower Manhattan. “Better here than in Wyoming” he said with a shrug. Groans from the back seats crackled through the headset at his puerile behavior. The Whitney was fast approaching and our wheels were only tentatively wobbling off the ground; it seemed inconceivable that the Grumman was capable of achieving the necessary lift within the remaining meters.

“If this is it, Sam,” Hermann said, “just know that at least we took out an ostentatious exhibition and not the Museum of the American Indian or anything.” He was pulling up on the steering with all his grit, but the runners would not retract and the glass of the museum felt close enough to skim. Had it not been for that slight cant atop the attempted bastion of Modern Art, we probably would have hit it. But then we were airborne, drawing close enough to run our hands over its surface like pond water. Hermann was grinning from ear to ear as we cleared the canopy of rooftops. We were free.

Our craft made a glorious glide over the southern tip of Manhattan and around the Statue of Liberty, its torch enflamed in the setting sun. Hermann then brought us back up over the East River before completing the 270 and heading West for the main duration of the flight. I glanced between the hollow of his seat and Meaghan’s slumped

torso at the cradle of familiar neighborhoods one last time. Somewhere between the spires of midtown and rise of the financial district, Haley was battling it out with her own demons. I knew because that had been my arena as well. I wondered if she was putting her feet up after a long day or if she was taking a deep breath before the plunge into night. Breath fogged up my side of the cockpit as I uttered softly: "Hayles." No one could hear my plea above the constant vibrations of air travel. Still, I hoped that sophomore down in Greenwich Village felt something as I traced her initials through the mist of the plexiglass window.

## Chapter 7

The Grumman produced a steadying thrum once the ascent tapered off, much like the white noise of the fan I utilized most nights to fall asleep. For the first twenty minutes of the flight I gazed at my surroundings, shocked at the ease of air travel in its midst compared with the perils of the runway. Above the scattered clouds, I never would have imagined that patches of Earth would still be visible below. By the time I felt comfortable enough to unbuckle my seatbelt and lean over, we were already over the state of Pennsylvania: forests and farmland on either side of the mighty Allegheny. Gone was the chance of observing how New Jersey produced its power. Our pilot narrated aspects of the terrain below, but not to excess. Despite leading the group's Built Environment team, man made features interested Hermann less than the gentle gradations of the Poconos; long after we had crossed over Ohio and into Indiana, he continued to muse on the relationship of the watershed to the foothills with childlike wonder.

Dozing - the act of falling asleep involuntarily somewhere other than your bed - is an activity I have experienced so few times I could count them on one hand. I set forth its definition now to reassure myself I have gotten the gist of the matter right. But while this first flight should have been of no less import for me than it was for the Wright brothers, I chanced upon sleep for a few blissful hours, regaining consciousness somewhere over western Iowa. By then, the night's cloud cover had cleared completely, and the stars shone as brightly as they had back home in Vermont. Their sighting possessed something of a placebo; if you could but drag yourself away from the world's construction, the forgetting was just as vital to the viewing as the visibility.

Expired cornfields stretched on indefinitely under the moonlight, pierced by the occasional bonfire. Hermann stressed the dichotomy between the technical advances of Manhattan and the complete lack of traditional energy sources available to central and mountain time zones. Mitigation and adaptation were terms thrown around liberally within the context of climate, but not a whole lot of people were broaching the topic of failure. What flickered below was nothing short of the very primal state of man - defending himself against the unknowns of night with a fire and a horde of brothers.

The sight persisted across the Midwest. While we knew how lucky we were, we also had to admit that eventually - for any given vista - you've seen all there is to see. A phenomenon peculiar to cross country trips is that you witness sights which change your perspective, but you're forced to sit through another few hours just to be sure. This feeling usually hits en force around South Dakota. Acknowledging the plight inherent in the human condition, we maintained our cruising altitude all the same: for several hours, Hermann and I stewed among our thoughts. When we did speak again, the conversation turned to departures and arrivals. What - I asked him - had necessitated the visit to New York City beyond finding a candidate for the transportation role?

"I wanted to play chess in the park; its ragged savants are the only true competition. Then I showed up to a meeting with the investors wearing a hoodie."

"I guess I was curious as to what the purpose was, as opposed to what you wore."

"To be honest keeping the group afloat requires a great deal of running around Sam, much more than I would like. When I simply worked for myself, magic occurred with great frequency; now that my job is to pull the strings, that cadence has abated somewhat."



“You used to work alone?”

“Statistical Approaches to De-Mining Southeast Asia, you may have read it? That’s what put me on the map. Then I had a brief stint in geo-engineering, but it wasn’t for me. Our fathers and our fathers’ fathers had the war, and that answered for them the question of how to live out their days. For our generation, the situation is more opaque. Battlefields are always shifting and the barricades we must slip through are less of a physical manifestation than a blockage within our own minds. The most worthy causes are non-deterministic.”

“So how did you go from being a quant to... to, well wait - what are you again exactly? It didn’t say on your card.”

“Within certain parameters I’m the founder and creative lead of the group, and for smaller ventures, I help out where I can.”

“I’m not following.”

“If there are any ideas that spin out of The Yellowstone Group that seem particularly noteworthy, we can work out some independent funding options - some bridge capital.”

“Bridge capital?”

“In my other life, Sam, I’m a VC. You know, a venture capitalist? The term has a bad rap so I rarely use it. We are as misunderstood as a pack of gray wolves, but we regulate the ecosystem just the same. There are those in whom I invest and there are those to whom I must go for money. Anyway, we’re going over the Badlands if you want to take a look.”

Unbuckling my seatbelt, I looked in the back row at Meaghan and Caroline, both of whom were sound asleep. I was worried I would be out of whack for tomorrow, depending on what the itinerary held in store. Hopefully adrenaline would be enough of a fuel source until the next point I could curl up in a comfortable bed: there weren't any in sight at the moment. The remainder of the flight was devoid of further revelation; I used the time to work on appearing casual. This was the first time I had been West of the Hudson, to say nothing of the Mississippi. By the time the first rays of dawn appeared, the spires of the Teton Range were coming into view.

"Back in the days of commercial flight," Hermann explained, "they always said the best seat for this descent was on the right side of the plane. Consider yourself lucky you don't have much of a choice but to sit back and be exposed to a beautiful view."

A gravel strip dripped out out of the green and brown floor beside the mountains, but as Hermann eased the plane farther down, it appeared the gravel was in fact a riverbed, whose flow had been reduced by the encapsulation of water within the ice. He flipped several switches on the control panel, instigating a series of rotors and mechanical arms below the fuselage. An explanation crackled through the headset of how normally we would land farther up the valley, but this morning we were due for The Madison River. Another meeting of Hermann's loomed in Menlo Park, so he would be heading there right after dropping us off; it would be too risky to attempt a ground landing after the incident on the High Line. Meaghan roused from her slumber to add that she would be driving Caroline and I the remainder of the way from the Madison to the The Yellowstone Group's campus. Her final question for Hermann was if the van had enough fuel in it, but he just held up his hand, indicating that it was all under control.

The river sprang from its defeat into a robust streak of cobalt farther down the valley. Picking a spot to land among the rapids, Herman explained the meltwater was due to the region's geothermal activity. Warming waters soothed the soul in these boreal times, and by turns, the river turned green from the dissolved minerals. Splotches of falling water resounded in light slashes and spray across the dark surface with the chaos of a mathematician losing a battle against his chalkboard. When I said as much to Hermann he chuckled, and assured me that if that method of learning was of any concern, I could rest assured that the finest slate had been quarried for the boards adorning The Yellowstone Group.

Gusts of westerly wind rocked the Grumman in the eleventh hour, whistling out of the passes from the towering range to our right. Below the main body of the plane, newfound pontoons reflected the morning light, as eager to soften our descent into the river as any webbed feet ever were. For all the drama on the High Line, Hermann brought the plane down with the confidence of a pilot with tens of thousands of hours under his belt. We skimmed across a clear section of the Madison and the propellor died out just as we became ensconced within a bed of reeds. The cockpit cracked open and the fresh mountain air poured in. The aquatic plants were firm enough to stand on. We were home. We were in Wyoming.

## Chapter 8

The choice to give this experience a try rested firmly on the belief that there existed a clarity of purpose peculiar to mountaineers. As we unloaded the luggage from the Grumman, I began to feel it. A van waited on the banks of the Madison for the final leg of the trip. Wind whipped about our faces as we huddled towards it, threatening to tear Caroline's scarf from her neck. I needed warmer mittens.

My career thus far had been defined by senseless battles, and here among the elements I felt I had discovered a worthy foe. With a wave, Hermann bade us farewell and godspeed with the first two weeks of September. Neither of the girls looked back, but I couldn't help but watch the aircraft propellor down the river before ascending once more. Meaghan let the van idle and warm up while the three of us struggled to secure the bags on the roof with bright nylon roping. Nimble knotting eluded my nearly frostbitten hands, and I wondered how I would survive four months if my teeth were already chattering after four minutes. Alone in the back row, my luck continued to worsen over ambiguity with the seat buckle. It was equally distant from clipping into either the middle or window seat; some essential element was lacking to the apparatus. While the van jostled along the gravel road, I contented myself with tucking the strap across my torso without fastening it to any buckle in particular.

"Does anyone have to go to the bathroom?" Meaghan called out from the driver's seat, but both Caroline and I shook our heads. Bounces from the uneven surface were starting to induce nausea, and all other bodily concerns sat behind an upset stomach in the queue. Noticing my agitation, Caroline passed some ginger snap Girl Scout cookies

back to me, promising they would help. It could have been the satisfaction that comes from no longer being the newest member of the team, but she offered a small smile. For several miles I felt the anticipation of a moose, but we never saw one. It was a difficult vista to summarize: pristine forests of spruce and Douglas fir would blanket the surrounding area one second, then quickly vanish the next. They relinquished their hold to golden brown fields dotted with deciduous thickets. Tributaries of the Madison flanked the right side of the road, then changed their minds and journeyed alongside us from the left. Trout swam below the surface of the stream; the water was clear enough to discern the outline of each rock and stone along the bottom. What amazed me was the lack of ice on the moving water, fewer floes than the Hudson despite immense quantities of snow. Momentum truly was the last stand against the encroaching episode.

At the far end of the plain, nestled against a jutting defile, smoke drifted upwards from an encampment. A classification of smoke was strained in this region of vapors, but a malevolence clung to the particles its peers did not share. Darker than the wisps above the stream, more acrid than the whims of the vents, it stemmed from something I assumed this valley was devoid of: humans.

"Durkhan," Caroline muttered. I was so unused to someone anticipating what I was thinking, that for a moment the girl in the passenger seat seemed more of an anomaly than the difficult to pronounce settlement.

"What is Durkhan?" I asked.

"You and Hermann chatted about the plains cultures over the Midwest, didn't you?"

I offered an embarrassed look.

“Even I can’t sleep for that many hours straight,” she said. “Durkhan is the closest town to our campus, and we actually employ several of its inhabitants. Brice, whom you already know, is a native of there.”

“What nationality are they?”

“Mongolian,” Meaghan cut in. “They originally formed a very minor fraction of the Asians who completed the transcontinental railroad. Their role in the endeavor was quickly forgotten, but they have existed in the hidden valleys of Utah and Wyoming ever since. Experts in surviving adverse conditions, their gers and pastures have been informative in our work, particularly as they relate to rearing ruminants.”

I wished our road lead to Durkhan, but the gravel gave the settlement a wide berth. The closest sign I could divine to what occurred there came in the form of a small creek which emptied from that direction, coated along the sides with refuse and on top with an oily sheen. Our van began to climb the same spine whose folds sheltered the village, though the only pass permitting a road through opened much further South. Meaghan announced that this would be the final ascent before reaching campus. Switchbacks forced our van to crawl at a snail’s pace up the steep ravines; even then the swishing of the shifting luggage reached our ears from the roof. With each bend and kink, its weight threatened to topple us over, until finally we screeched to a halt at a turnout. The three of us got out to further cinch down our belongings. Neon yarn was draped everywhere, and the shape resembled far less the linear grid we had assembled than it did some botched Indo-European alphabet: tangled into impossible characters strewn amongst X’s, Y’s, and Z’s. Feathers protruded from a down vest, and glass vials pierced the paper bags I had seen the women carrying the week before. Perhaps most

disconcerting of all, oxygen tanks hung off the very edge of the aluminum ceiling: another turn and they likely would have toppled down into the gorge below.

“Since it’s only three of us, we can get away with cramming most of this gear in the back seat with Sam,” Meaghan explained.

“Thanks,” I said.

Piling back into the van, my eyes stung and I couldn’t figure out why. I rubbed my hand against my face, but there was nothing there, save for a sooty residue still left on my palm. The discharge from Durkhan didn’t seem nearly enough to account for such a strong particulate concentration in the air, but with the weight of the luggage pressing into my side, I didn’t exactly feel fondly enough towards my fellow passengers to engage in scientific banter. The final push was much more severe than other elevation changes along our course: topographic lines would have scrunched tightly together had any map existed of this place. Crevasses opened up on either side; deep gashes in the Earth dropped into nothingness. The river continued to hiss, it was so far down that I lurched when the tires began to rattle. Their chattering was not precipitated by a fall thankfully; it was the slight abrasion along the cattle guard of a bridge.

Three boys grinned at the entrance to the giant suspension, barely a full set of teeth among them. They hunched over a game resembling marbles, only in place of the usual spheres were knobby bones. A ringleader got up from the circle and planted himself firmly in front of the van, waving us to stop. In the contest between hurtling van and small child, I assumed we maintained the advantage, but to my surprise, Meaghan set her foot down on the brakes, churning up dust on an already sullied gatekeeper. When on prior occasion, our gravel road crisscrossed the Madison River, the junctures

consisted of little more than earthen berms and rickety boards. But this stretch across the gorge was the real thing, or at least it had been. Now the rusted frame hung suspend like a piñata, one solid strike away from annihilation.

Meaghan dug through her pockets and scrounged together a currency I didn't recognize.

"You're paying these guys?" I cried out, "they can't be more than twelve? Aren't we backed by some legit VC."

The girls sighed, responding by asking me to fork over my driver's license. I had to explain that a New York State ID is every bit the unique identifier. Beyond those I've already mentioned, various experiences had turned me off to owning a car. Grumbles came from up front, but they accepted it was all I had, and forwarded it along to the street urchins. The boys gathered round and made a note of our passage in their logbook. Unless I was imagining things, it wasn't my headshot they paused over. Stolen glances darted back and forth between Caroline's printed statistics and her physical appearance in the passenger seat. She stared straight ahead, no doubt having made her terms with the perils of performing obscure research in male dominated arenas long ago. Our van started up again - not a moment too soon - and the rascals receded in the rear view mirror. They hovered a mere inch from the ground as they bounced slightly on their haunches around their bony game. The bridge creaked and moaned as we passed over, but it held.

Exasperated by my questions before I could even ask them, Meaghan told of how the campus could employ some of the villagers, but not all of them. For men not old or strong or young enough to perform backbreaking physical labor, the internship of choice



was to maintain a section of the road. A minor nuisance for the group during a day of travel, but perhaps an asset in the long run for ensuring that the region remained secluded.

Once we put some distance from Durkhan and the bridge lurking under its shadow, the landscape transformed from a sooty, stifled still life into something entirely alive. Bald eagles soared far above the spits of sand jutting into the river. A light snow began to fall, the kind that sticks to what's already accumulated on the ground but melts upon contact with the road. Within the van, large bubbles distended from Caroline's mouth, echoing POPs while she fiddled with her pack of chewing gum. Every time she seemed on the verge of offering us some, she thought better of it and retracted her maroon knit gloves. Markers of distance from the Idaho border lessened on the side of the road, then dropped off completely. The Yellowstone Group existed in a valley of its own accounting, and I figured that if it could stop keeping track of its proximity to civilization, so could I. Mule deer stared politely from neighboring thickets, their ears larger and more attuned than the indifferent white tail of my home. Sunlight pooled in patchy blotches among the branches, just one of the dappled effects of an autumn devoid of leaves.

The women talked about their work in the front seat, mostly technical terms I couldn't put my finger on, and a preponderance of the word, "Gosh", which I wasn't used to hearing. Despite their familiarity with the big city, there was a striving wholesomeness about them that reminded me of wide midwestern streets. Places where corner barber shops were still marked by the red and blue spiraling tube thing, and grandparents taught their grandchildren not to take the Lord's name in vain.

Atop the escarpment, we broke through mild cloud cover, hemmed in by glossy obsidian on one side while on the other the world fell away. On the far side of the valley, the horse's tail of a waterfall cascaded into pure mist. The varying topography was both precarious and breathtaking, two things I was coming to believe only came in tandem. It was the kind of contemplative stretch capable of luring the moon into pure daylight, and I felt that every misunderstanding I had ever endured would wash into catharsis if only everyone I knew could see what I saw now. Our final descent steered towards a strand of stone buildings and wooden barns nestled beside a pale blue lake. I gave over the origins of my arrival to the snowcapped peaks and a band of orange sky.

## Chapter 9

Objects through the windshield are further than they appear, at least in Wyoming. It took us the remainder of the day to close the gap to campus: our arrival was shrouded in twilight. Shallow stone bowls of brushfire illuminated the final length of gravel, casting fountains of light upwards amidst the branches and boughs. It was a dazzling effect, suggesting at least one aesthete flitted among the researchers who only utilized the left side of their brain.

The Yellowstone Group consisted of two buildings on either side of a gurgling brook, connected by an arched, stone parapet. As part of the team tackling the built environment, I would be housed within the larger of the two structures: architected in the fashion of a nouveau ski lodge. Across the riparian divide, Caroline and Meaghan carried their luggage to the building dedicated to biological adaptation. I was envious of their more domestic accommodations: a traditional whitewashed home with green shutters.

My long term goal was to build the vehicle of the future, but left alone within the giant stone hall, I had no idea how to spend my first night. Arrivals are uncertain for me: I've only moved twice in my twenty some odd years. Groping through the dark - without cellular service - recast my definition of being left to one's own devices. The oaken entrance creaked shut behind me, its closing a reminder that the choice to leave New York was every bit the decision to arrive somewhere else. This fact had somehow been obscured over the last twenty four hours, consumed as I was with the flight. The austere interior was festooned with even more doors, all of which were closed, so I inched along

the edge of the wall towards the stairway - wary of hitting anything. On the second story, the first room on the right had a sign with the word Roberts scrawled upon it, and I stepped inside.

It was a beautifully decorated common room, with my bedding and personal lodging up a short flight of stairs. While the middle of the Built Environment Building reached three stories with a dizzying balcony, here on the North end of the lodge, my second floor atrium was the topmost level. Giant glass windows allowed the last hints of vanished light through, barely enough to discern the location of the light switches. With a flick, studio fixtures mounted on high overhead beams revealed the further accommodations at my disposal. While there was plenty of space, I had no belongings with which to spread out, so instead I rifled through the numerous closets. They contained arctic parkas and baggy snow pants. Nooks beside the marble kitchenette revealed additional gear, more than I could ever hope to use: cross country skis, alpine skis, snowshoes. Even an ice axe rested beside an avalanche beacon and probe. A guest bedroom was next to mine - identical in every regard - though I had no use then for its additional natural light and freshly pressed sheets. This was the mountainous paradise that had been promised, and Hermann seemed to have delivered on the funding necessary to make our search for climatic solutions enjoyable.

My private room faced the direction of the incoming road; the only tracks through the snow were those we had traced earlier. Aside from my own strained breaths at this altitude, the building was silent. For all the times I had lain awake at night in New York - unwillingly eavesdropping on the chatter - I wouldn't have minded a little more ambient noise now to keep me company. Uneasy with such undisturbed quarters, I headed back

down the stairs and over the stone bridge to see what was in store for the remainder of the night. Admittedly, I was also curious how we were situated for food. The lights were already turned on in the second floor of the Biology Home, and figures moved about, straightening up. Standing in the middle of the walkway en route, I couldn't help but gaze down at the melancholy expanse of the lake. A lanterned figure came fumbling up from its waters, carrying a host of fishing gear with his ears exposed to the wind. Between rod and reel, I wasn't sure how the newcomer managed to extend a glove in greeting, but we shook hands vigorously.

"The name's Dave," he said, accompanying a firm grip with a wolfish grin. He was much older than the rest of us; if not a father, he could have at least passed for an irresponsible uncle. But before I could explain who I was, Dave began to regale me of his day casting flies, from which he had only just returned. Evidently he found the sport fascinating, but with so many extreme conditions around, it was difficult to be intrigued by pulling small fish out of a shallow river. Meaghan loomed on the porch of the Biology Home, listening suspiciously to our conversation beneath the swinging lantern. The prevailing seriousness with which she had conducted the van ride became more pronounced with the advent of Dave's carefree traipsing. She trained a flashing light on us - its high powered beams washing out the rustic glow - and began to berate him for fishing so close to campus.

"We've gotta eat," he called out to her plaintively. "Your whole hypothesis doesn't need to hyperventilate every time I pull a few cutthroat out of the creek."

Her mane of orange hair was all the more fiery in this untamed region; it was hard not to be at least a little fearful. After she had detailed the importance of a completely

undisturbed control population, she slammed the door and left us to the stream's murmurs. Berries of orange mountain ash hung in the bushes on either side of the gully. Despite the harshness of the climate, the components of subsistence were there if you paused to look.

"Well, do they have you all settled?" he asked, once there was no one eavesdropping.

"Actually, I ended up settling myself," I said. "I'm not exactly sure what I should be working on."

"Oh c'mon, it's late," Dave said. "Let's eat, then you get some rest. There will be time enough tomorrow to get down to brass tacks."

As he double checked the rest of his flies, Dave explained that he was also housed in the Building of the Built Environment - in the central portion. His task was to produce a viable model of harnessing the geothermal heat trapped beneath the mantle. When I commented on how precarious it all sounded, he remarked, "To be honest, it isn't. The difficult part is in the exploration. Once you've got the steam in hand, it's like anything else."

I wasn't sure what the anything else entailed, but I assumed my hands would be full completing my own designs. We parted ways in the entrance of the lodge, where Dave told me he was going to drop off the trout to some of the sherpas so they could fry it up for a late dinner.

"The what?" I asked.

“The sherpas,” he said - as if it were the most natural thing in the world. “The Mongolians. The natives of Durkhan. Who do you think does all the real work around here?” he added with a chuckle.

“Speaking of real work,” I said, “Not that it has to be sorted out tonight - but do you have any idea where I’m supposed to set up shop to start on the vehicle?”

He shrugged, “Take whatever space is available. If you’ve got a common room, I would start with that.”

“You mean the one right next to my bedroom?”

“Sure! Why not?”

Not much of a commute, I thought. But even if my living and working spaces were within close proximity, anything beat the subway. I went back to my room. When I decided to lay down for a couple of minutes, I was out for the night. Enveloped in the absolute quiet and the quilted mattress, sensory impressions of the last twenty four hours sped through my mind, coating my thoughts in the trails of their exhaust. I saw the stray dog back on the High Line, staring blankly up at the oncoming Grumman, and I was horrified less by the behavior of the pilot than for my own indifference to it. Bewilderment, I hoped, would wane with the novelty of the situation. Through my dreams, the smell of trout wafted up from the floorboards, but after the fourth call of my name, the interruptions ceased, and I was left blissfully asleep.

The next morning dawned clear. I tiptoed down to the lobby to relish that fleeting feeling of being up and ahead of the freight train of the day. My suitcase from New York rested against the entranceway, along with a handwritten note describing how the salvaged pieces of my fat tire had been left in a crate further down the hall. Comfort

should have accompanied the sight of my trusted belongings, but there was something unnerving about seeing them inserted into such an unfamiliar setting. I questioned the unseen deliveryman's ability to cut and paste. Rifling through the duffel, it was as if someone had distilled the essentials of my life inside a single piece of luggage: I couldn't have done a better job myself. Lugging the bag up to the common room, I splayed out my notebooks, mechanical keyboard, photo of my dog, bike light, and even a small wooden frog carving with a ridged back. It made a croaking sound every time you moved a stick along its spine. I made another trip down for the green limbs of my bike; even the oven mitts made it out West.

Venturing to the opposite wing of the building, I peered for any signs of postage, but I couldn't imagine a public outfit venturing this far to campus. At the far end of the hall, the passageway opened up into a large cavity, spanning both floors. Unlike my own lodgings or the central rooms of the Built Environment Building, this chamber was sparsely decorated. A wooden sign nailed to one of the beams announced it to be: The Commuter Lounge. Moth eaten couches lined the the sides of the walls, strewn about with the haste reserved for a college dorm room. Slumped upon not even the main body of the couch but its extant divan, lay the slumbering figure of Brice. My mind tried to do the math: we had left Friday night and it was now Sunday morning. It seemed monstrous for even this well travelled Mongolian to have crossed the Continental Divide in so short a span. Convinced he was passed out, I inched away from him, but as my boot caught on the carpet, Brice's head shot up and I found myself staring into a pair of bloodshot eyes. Quivering with exhaustion, he raised his hand and pointed at me with almost biblical fervor. For a second I felt as though either lightning would smote me, or



the tablet of the ten commandments would break across my back, until - just as abruptly - his head slumped down again. He was awake, but barely. A groggy voice managed: "Ah, an early riser. That is good for the building of the vehicle. Yes, that is very good." Only then did his eyes open again, the sclera assuming a more appropriate shade of white.

"You can speak English?" I cried incredulously.

"Of course, the Mongolian is really to help Hermann practice. One does not make it very far in this country solely on one's native tongue."

"Why are you sleeping in this place? It's the worst room I've seen."

"Normally we commute every day from Durkhan," he said, "this is better than walking miles through the snow."

"How did you make it from New York so quickly?"

"I started driving right after you left. Previous record of 36 hours down to 35 hours and 27 minutes."

"We could use that kind of pace on this cold weather vehicle."

"Impossible. We have some connection as far as gasoline is concerned, but even our supply is dwindling."

"Well, if it had to be extracted, at least you made the most of it."

Twelve hours to Chicago had always been the barometer of making good time on the road - at least among the Eastern fraternities who imbued such journeys with the jeopardy of war stories. For Brice, that frantic pace had merely been the first lap of the course. Reports of vandalism and decay had always dissuaded me from undertaking the trip; even the short stretch of road from the Madison had confirmed this interior

suspicion. While I processed the arrival of my belongings and this eccentric, talented Mongolian - Brice got up and stretched. Within a few minutes, his eyes had completely lost their bloodshot quality and he began to move about with his usual vigilance. "Before setting up your shop, you should at least get to know the place," he said, "follow me."

Materializing upon the turn of the hour, Brice's fellow Durkhan natives now hurried about: cleaning, preparing food, and incessantly carrying boxes of equipment from one corner of the lodge to the other. Across the stone bridge, the two of us entered the Biology Home and found Meaghan and Caroline sipping tea and eating scones. The inside of the building was furnished with antique tables and chairs; the kitchen was stocked by someone who knew what they were doing. Unlike the stainless steel Viking in my common room, this oven was regularly put to use. I made a note to put in a request for salt and pepper for my own abode: one meager line item in the unwieldy ledger of growing up. I remember Caroline was wearing reading glasses that morning.

"How long have you been out here?" I asked.

"Just since graduation in May," she said, as Meaghan went into the other room to fetch some bagels and lox. Brice munched on a huckleberry scone while we waited.

"I never thought I'd be the type to leave New York," she said, "But I know once I'm settled there for good, I'll have been glad to have tried living somewhere else."

"I kind of doubt I'll ever go back," I said, gesturing to the beauty of the surroundings.

"But your sister is at NYU," Meaghan called from the kitchen. Travel between time zones may have been inconsequential to them, but I was still reeling from my first flight: I could have prattled on of nothing but the Grumman for days. Instead the women

wanted to discuss whether to take our bagels sandwiched or open faced, and I was left to figure out for myself the rules of this new world. While I knew my deadline was the completion of a working vehicle, it was harder to place a finger on when Meaghan and Caroline would know they crossed the finish line. I said as much to them, though their mouthfuls of scone remained unhurried. They responded that seeing was believing, and offered to take me on a tour of their hillside barns after breakfast. As he slurped down the last of his salmon, Brice rolled his eyes, indicating that this was his intention in bringing me over here all along.

The four of us climbed up wooden slats driven into the slope, weaving between patches of mud splattering and burping along the side of the trail. Wanderings closer to the phenomena were met with a stern grab from Brice. He explained that although these were of the more benign variety, any form of geothermal activity was still to be regarded as potentially potent. The mud formed as a result of melted snow interacting with steam, he said - escaping through fissures in the rock. Playful pots and belching globbs of water masked the true power of the asthenosphere lurking below. Diverting the subject away from my own naiveté - I asked if Dave was out fishing any portion of these same waters this morning, and Meaghan muttered that he was in all likelihood still asleep.

When the doors of the barn opened, we were greeted not by benign farm animals, but by an exhibition of test tubes, vials, radio collars, and telemetry monitors. Between the veterinarian and the geneticist, I wondered at the lack of individual specimens and marveled at the pulse kept on entire populations. Deeper into the barn, the roof rose in

the lofty manner of a cathedral, its eaves providing shelter for owls, hawks, and ptarmigan.

“These aren’t part of our studies,” Meaghan said, gesturing upwards, “It just sort of happened.”

“I see,” I said.

“Species loss is one of these big intractable problems” - her words bounced off the rafters - “it’s our job to make sure that wildlife can adapt to the onset of the cold. While your team has the luxury of bundling people up in warmer clothing, retrofitting their cars and homes, we enable adaptation within organisms at the molecular level. We’ve isolated a series of antifreeze proteins, originally found in vertebrae native to the tundra. These structures are responsible for binding to the first signs of ice, thereby preventing further crystallization.”

A transmitter in one of the more cluttered sections of the workbench began to chirp at intervals, sending Caroline sprinting towards it.

“Female 413 is within range,” she said, after checking the frequency against her records. Nipping my confusion at the bud, she walked me through the logistics of how she had spent the summer tracking, sedating, and radio collaring wolves. This was the first step in an attempt to better understand how their migratory patterns were being affected by cooler temperatures. Next up would be predicting further reactions to habitat fragmentation in the wake of human development. As I began to comment upon how impressed I was with their plan, Meaghan scowled at my notion that the strategy stopped there. Merely analysts these women were not: nothing short of altered base

pairs within the genetic code would suffice in ensuring their charges prowled into the next century.

They were fixated with the first winter of newborns, meticulously adjusting the growth rate of the young pups to be as robust as possible when the first solstice set in.

“I still don’t understand,” I said, “even if the wolves can adapt, don’t you need to bring everything forward at once. Their prey? Their competitors? The vegetation underlying it all?”

“We think of those components in terms of stored sunlight,” Meaghan said. Caroline grew agitated at the reductive thinking, and couldn’t help but interject.

“We’re not short on ideas. If we can reduce the rates of transpiration, we can create strains of vegetation that will hold water longer.”

To me it seemed like playing God, but then did I not also get out of bed for the sheer joy of creating things from scratch? Their work - at least - was alteration. I tried to comprehend the heliotropic arguments set forth: I had always thought it was only the real crackpots who argued against burning down the rainforest because the cure for penicillin was hiding under a mossy amazonian log - but the determination of the women to borrow lessons from untrodden hemispheres espoused an inherent compactness, the way spherical balls fit snugly within a glass jar. I said I could handle one more concept max before I needed a break, but the women pressed on: they didn’t receive many visitors.

Meaghan’s long winded reasoning lead me to remote tundras where daylight fluctuated radically between seasons. The geo-engineering fiasco may have altered temperature, but sunlight over the last few years had remained constant. The resulting

task before them was less akin to acrobatics as it was to juggling with one hand while keeping the other perfectly still. She sighed when she touched upon this aspect of the path forward, but she never mentioned the word impossible.

Caroline sat down on a stool and took a long swig from her Nalgene. It's always hard hearing the meaning of your job explained by someone more involved in the theory than the actual implementation. A long term vision is only as viable as what gets done today. We looked at each other as I let the weight of her task sink in - it was a taller order than I thought, more so when your boss goes missing among the clouds.

"We work our way down and then back up," Caroline said - as much in an attempt to steady herself as to illuminate me. "We break the problem down into small pieces" - Meaghan walked away to her labyrinth of charts - "then we hand off reports to your team. Maybe you can do us a favor and design a vehicle that won't produce so much roadkill."

Before I could come to the defense of what I hoped wouldn't be a car, Meaghan turned back to remind Caroline that carrion was a necessary part of downstream diets, and the two resumed a biological debate of which I understood little.

Brice went outside and lit a cigarette. Something about the way he pulled it off was very different from the cosmopolitan examples I had wafted through before. The smoke seemed to represent a true mulling. This morning he looked younger than he had back East, and after examining him for a second I realized that somewhere along the moonlit interstate he must have pulled in at a rest stop to shave. Carving about ten years of my estimation away, his actions served as a reminder that for all the magic of polypeptides

and amino acids, a razor could provide sufficient alteration of a man to the human eye. We were roughly the same age.

When he came back in, Meaghan and Caroline were still discussing the viability of wildlife corridors. Brice told me that this was all the two women ever talked about: whether to focus their conservation efforts at the many or the one. But as they went back to their morning routines, Meaghan seemed to be aglow in the power of shaping natural history, and Caroline still stuck in despair at how casually individuals were thrown aside in pursuit of that vision. “We’d better leave them to it,” he said, and I agreed wholeheartedly.

## Chapter 10

Brice and I shared a lunch of trout on the ground floor. If fish oil was the panacea it was claimed to be, we would both live to be a hundred; I didn't see too many upcoming changes to the menu. Once there was nothing before us but bones, we retired to my common room to set about repairing the fat tire bike. Even though our endeavors were early stage, and Dave had implored us not to rush, Brice was of the opinion that it was still within our best interests to have something demonstrable by the time Hermann returned from Menlo Park.

The young sherpa flipped a switch at the end of the kitchenette, resulting in one of the bare walls rotating to reveal a chalkboard of impeccable slate. Brice handed me a piece of chalk, and I began to walk him through my design process. Rolling my shoulders, I reflected on how grateful I was for a workshop by the fire, devoid of steam heat, with a Mongolian to listen without judgement. At the time of first construction, my ideas had seemed like a radically new proposal not just for biking, but for how to live in general: a bridge to a society where mankind floated atop the elements rather than wallowing in their combustion. But as I began to draw, my radical proposal really amounted to nothing more than fatter tires, with a series of downstream modifications for compatibility. It was dull enough to put someone to sleep. Once metrics began to annotate my sketch though, the watchful guardian within the sherpa came alive.

Barriers of language and culture were dissolved in a true engineer's discussion over those untarnished units of measurement which reign the world over. Brice had opinions on turning radius, PSI, and power to weight ratios: we could engage freely in



discourse without worrying about each party's capacity to offend. When we got to the oven mitts, he just laughed - saying that it was a real Durkhan move. Necessity being the mother of innovation, I mused on the combination of unruly law enforcement and unused kitchenware that served as the true catalyst behind adapting to the cold.

But to my dismay, trying on the mitts caused an unexpectedly negative connection in Brice's mind, and after a few minutes of sulking he was forced to admit the cause of his woe. The mitt, he opined, reminded him of the British concept of the driving glove, and then a whole sluice of colonial resentment began to pour out. Bicycles, or running machines, as translated from High German - had first been introduced to his people by the English. Tales from his ancestors abounded of Brits formulating a contest to see who could pedal all the way from the channel to the steppe. Recreation rolled into wrongdoing - in the eyes of the natives - when prizes were handed out among foreigners for what locals considered a daily commute. Having never left Durkhan, Brice could neither confirm or deny the veracity of the allegations, but it was apparent from his recent thirty five hour drive that the sherpa maintained a markedly different standard of daily average.

His tale wasn't over yet. Brice spoke of Europeans posing with the natives in the way westward Americans bore themselves beside trophies of big game. Palms upturned, Brice concluded that - right or wrong - he had always associated the bicycle as the vehicle of this colonial atrocity, more complicit in erasing a way of life than guns, germs, or steel. He wished me the best with the adaptive vehicle, but no, if these were the terms, he would not take part.

As would occur many times over the course of that autumn, I was utterly bewildered. I could not pinpoint how the situation had flipped so quickly: one second cruising around the present camaraderie, the next treading lightly over the past. Forays would continue alone down that very American concept of the road. So be it. Brice exited into the vast network of chambers within The Yellowstone Group, assisting with who knew what other clandestine undertaking. For all the funding and resources, I was back to working on the cold weather vehicle by myself. I did my best to unravel the double helix of a lost socratic dialogue into one long strand of a soliloquy.

One advantage of being in Wyoming was the diminished risk of noise complaints: I began to whack the wheel back into the true without concern for any ensuing racket. By mid afternoon, a prototype emerged that was roughly equivalent to what had gotten me into the mayhem of the Central Park chase. Breakthroughs. Always in the mid afternoon. As I reflected on that debacle, one improvement came to mind. Two wheels were inherently unstable; as we all know a bike at rest topples over without a nearby friend. In these conditions, the slightest pressure of the encroaching snow would be enough to bring the entire vehicle down. In deep powder that could spell the difference between staying alive and a farewell to arms. Once the cold smoke worked its way into the folds of your sleeves, it was impossible to rid the chill from your limbs. While there were no weddings to interrupt out here, I still wanted to keep things upright. I also didn't want to step onto the scene bearing a design which was a carbon copy of it's ancestor - regardless of the lack in overlap between the Wyoming contingent and the Central Park sunbathers. From whatever material, I would fashion a third wheel for stability.

Easier said than done. In a compound that contained everything, there were none to be found. Amidst all the myriad manners in which prior Cowboy Staters had negotiated the snowpack, no tire was left behind. I had to settle for an inner balance of the mind and a box of junk parts, then set out for my first demo. Wheeling the bike to the top of the nearest hill, I ensconced myself in the righteousness of those who extoll thrift for lack of better options. What I had to show was in the infant stage, but I had learned it is better to fail early and fail often with these moonshots, rather than letting things fester.

A moderate, but consistent grade lead down to the base of the lake. It would have been difficult to find any patch of terrain in Wyoming as gently rolling as the knolls of the Sheep's Meadow. The fat tire had proven sound once before; elevation did not change that. Kneeling down into the snow to polish off the grease and mud that had kicked onto the frame, I saw the first signs of a mob trickling out of the Built Environment Building. Fitting that Brice was unable to participate for cultural reasons in the assembly of the vehicle, but had received the blessing of his ancestors to rustle up a crowd of onlookers eager for gore. Growing throngs of Durkhan natives wished me well as a fellow voyager, but all managed to say in their own way how they wished my peregrinations were atop something other than the bike. Personal space was an unknown to the Mongolians; several of the more inquisitive spectators prodded the low pressure of the tires with sticks. Upon feeling the malleable rubber through the thinly worn cowhide of their gloves, the sherpas uttered a now familiar series of "Mhhhmms". One man even held his ear to the wheel rim, and swore he heard God within the spokes. My reference point for the afternoon went from one of driving the action forward, to now being borne aloft

by the tide of historical significance. It was a reversal. It was an upwelling. With all the uncertainty that a great swell casts upon the shore.

While I wasn't altogether sure it would work, I wanted to prove to Brice and the others that I wasn't some colonial bigot, so I had attached a small outrigger ski to the side of the bike, fashioned in the manner of the French Polynesians. If it looked like some last minute hack of an add on, that would be accurate. Settling onto the seat post, the frame of the bike swayed beneath my weight. I put my foot on one pedal, then the other, starting to picture the entire contraption as an extension of my own body. Below the slope, the sherpas began to chatter in a flurry of words I couldn't understand, save for one that rose above the cries of the crowd. "FLOAT, FLOAT, FLOAT! FLOAT! FLOAT!"

I took five down pedals each before enough momentum gathered to glide steadily down the grade. At points the tires swerved from side to side with the indecision of a shopping cart, at others they validated to the onlookers that I knew what I was doing. By turns, shoddily tied rope around the base of the outrigger came undone, and the ski shot off tangentially toward a lip of snow. Losing the appendage proved to be an asset, as the even weight distribution was more of a boon than the vague reassurances from Oceana. The pitch steepened to the point where shallow ridges gave way to convex slopes. My grip on the handlebars tightened as loose drifts of slough began to move out from under me. It seemed less that I was traveling over the surface so much as trapped in a current of already moving snow. Its consistency was more airy and crystalline than that of the East, providing porous openings for the frame to sink into. For all the calamity of my first trial, this episode ended in a slow, anticlimactic stop. My progress brought me

well beyond the crowds of villagers, but still short of the triumphant sweep down to Luna Lake.

Brice came running towards me, waving his hands wildly, but I couldn't comprehend the rush. He even took off his orange beanie and flung that around to try and get my attention. He was a far cry from his steady motions as an air traffic controller.

"Watch your slough!" he shouted, stopping twenty yards short of me.

"My what?"

It felt like getting hit by a car. A drift of snow pummeled me off the saddle, and both my torso and the bike got punched down the hill. Vibrations hummed all the way from the top of the ridge. Slough. I was pulled further down through a subnivean tunnel. Amidst bursts of light, I could see Brice breaststroking after me, having pitched himself into the torrent also. Ski jackets of several villagers blended with workwear tones to form a perimeter of muted color on the edge of the slide, but all we did was move farther from them. When everything became quiet and white, I knew we had lost against the tumult. Why had I not gulped down as much oxygen as I could before the cascade hit?

They say when you question why you're doing something to remind yourself of the reasons you got into it in the first place. I thought of the cold weather vehicle our future needed. Of the huddled masses on the underground, or the rural resolute trudging through snowdrifts to the nearest pharmacy. I thought of the diploma ceremony at MIT with the wind howling along the Charles River and the dean saying he could not wait to see what we would do next. Move to New York and work for a bank man, don't hold your breath. Then I was struck by all that followed: trapped in the mire of the prism. And

then there was what I had built, nothing original really but more of a sham amalgamation of existing solutions in a half hearted attempt to define myself. I had never baked anything in my life, and I would most likely be found frozen to death wearing oven mitts. I should have done better.

After some minutes of drifting in that cold, dark frame of my mind, light began to pour in from above. Stranger than any sensation I had already experienced that day, I felt like I was falling upwards. The villagers grabbed beneath my armpits and pulled from the shoulders. Above ground, the hillside was completely transformed. Replacing the smooth, powdery surface of the slope were crystallized eggs of ice. T-Rex eggs mind you, each one large and thick enough to knock a man unconscious. Once I could catch a full breath, my eyelids began to flutter, taking in the surroundings, and a cheer erupted from the crowd.

“FLOAT, FLOAT, FLOAT, FLOAT, FLOAT!” they cried. Brice made his way out of the throng and hugged me.

“This is the most embarrassed I’ve ever been in my life,” I said.

He assured me that their cries were in good taste. See in the mountains, he explained, the only shame is in not going for it. He congratulated me on my bravery. On the way back to the common room, pats on the back and encouraging shouts rained down upon me in a shower I felt I didn’t deserve. My knees were wobbly by the time I collapsed on the leather couches of the common room; my spirit was exhausted and confused. It seemed the fanfare was as much a result of my efforts as it was from my association with Brice, a local favorite among the natives of Durkhan. Now that I had failed miserably on the path of the colonials, I was hoping to gain his help.

Nursing my wounds was my only responsibility for the remainder of the day, but the locals had to prepare dinner. By the time I limped down to the entrance of the great hall, most of the villagers had already set the trays out, and those not on the cleaning crew were preparing to walk back to Durkhan before night fell. The commuter lounge was more full than I had previously seen it, evoking the same warmth one might encounter at Port Authority. The villagers concocted cheer nevertheless. Brice was among those cinching down his pack for the trek ahead, and I had to fight through the crowd in order to pull him aside.

“Hey man, I mean, I have this spare room and all. It seems kind of crazy for you to commute back and forth from Durkhan every day.”

“No, I couldn’t possibly,” he said, frowning slightly.

“It’s literally just going unused,” I said, “and... and it would be nice to have some camaraderie. We are going to work on this thing together.” I tried to say that last part emphatically.

He looked up and studied me with the same animalistic concentration he had cast in my direction upon first waking that morning. I wasn’t sure if he remembered the experience or if it was some automatic survival mechanism that kicked in involuntarily, like blinking. Living in the cold required strange rituals to calibrate the eyes.

“Ok, I will accept your offer,” he said, after a time. “You should know that in my years here no one has ever asked this of me before.”

“Years. I thought this was all rather new?”

“The biology part is new. The women are new. For my years here since the founding, it has been a world of men. A world of gasoline until we realized we were running out. The years of uncertainty were years of men.”

“What were the others like? The transportation fellows?”

“Oh they were great,” he said, his expression turning more optimistic after having stumbled upon some happy recollection. “They knew how an engine worked. They were smart and strong, capable of carrying-

“I think I get the idea,” I said.

“But they never invited me to live. Even though your vehicle failed today, even though you stand on the backs of pigs, I shall agree to help you.”

Once the logistics were settled, Brice agreed to return for good the next day after arranging his affairs in Durkhan. Alone in the common room that night, I thought about what he had said, about the world of men. As many an engineer has wondered since the dawn of our profession, where were the chicks? While women continued to delve deeply into the annals of medicine - a profession no less exacting - my realm: the realm of zeros and ones, of 3-D rendering and WD-40, was saturated with Y chromosomes. The only thing that came to mind - as I nursed my bruises and ballooned my lungs - was the difficulty of representing what we did to the outside world.

Unlike Caroline, I would never meet the animals I was trying to help. The lives the vehicle would impact - if it ever got done - were abstracted away, on the other side of the Continental Divide from our solitary spine. Isolation was intrinsically required for the focus that would build products at scale. This separation should have been a mark of a noble quest, but instead it only cleared room for apathy. What preacher would be



content to prerecord a sermon for his believers without ever seeing them face to face? If such a one ever existed, let us recruit him for the group! Immune to praise or pity, we proceed with our work, miscast by the world as manifestations of the robotic. How many times had I tried to communicate the triumphs and losses of seemingly galactic proportions only to be reduced to a child connecting lego blocks in the eyes of the person across the table? The piece of scrap metal which had promised catharsis only earlier today was now no longer worth wheeling up the stairs.

Someday, maybe, I would give all this up and try my hand at one of the more self congratulatory professions, where someone beyond a crowd of Mongolians would stand there and appreciate as I shouted, "Look at what I've done!" But that transformation, and that acceptance wasn't headed my way tonight. So I took one of the spare Kinematics books off the shelf and began to read - counting pages off. Progress in numerically indexed study came easier than actually creating something. Still, it felt like moving forward, towards a day and a society connected by what I would build. A day when I wasn't wandering around this vast continent alone.

## Chapter 11

After a light breakfast of corn flakes, almond milk, and some of the wild berries left in the refrigerator, I had to appreciate the hushed tones of a Wyoming morning. But if we were going to ramp up around this project, it needed a more succinct name. Markings still filled the chalkboard; I longed for a quicker cycle of iteration. Hermann had left the place covered in quills, and he had spent the better part of our flight over South Dakota extolling the virtues of writing with a proper pen. I pulled up a stool at the marble counter and began to transcribe whatever came to mind. Balancing my feet on the ledge of the chair, I tried not to touch the floor. My slippers were only three steps away, but walking around barefoot on the hardwood floor was about as unappealing as crossing a bed of hot coals. Buckling down, I stared down the barrel of a blank page and wrote the words: The Wanderer. As I said them aloud, the acoustics felt right; the spelling did not. Crossing it out, I rewrote: The Wandruhr. Our boss was flying back from Menlo Park after all.

Caroline walked into the common room and went straight for the gear closet. She jumped back when she saw I was already awake, claiming she hadn't meant to intrude; she was merely searching for an extra pair of skis. Despite being a Vermonter, I've always kept my distance from the sport. I had grown up tuning skis for a part time job, and the recreation had drained from the planks long before I ever clipped in. Something about a lift carrying me up a mountain always felt out of character with what winter recreation was supposed to be about: the ultimate trial against the elements. Even though I hadn't seen any lifts yet in Wyoming, the association stuck. It wasn't for me.

Caroline explained that she and Meaghan were going cross country skiing, which had more to do with endurance and exploration; she thought I'd like it. It was also the workout of a lifetime, she added. When I stated my desire to atrophy physically, letting growth occur primarily in the mind, Caroline grew exasperated and didn't bother trying to sell me on the sport any longer.

"I can't take too many more hours isolated alone with that woman," she said, and left me to my soggy bowl of corn flakes. I was grateful that I didn't have as overbearing a mentor as she did. In fact, I hadn't seen mine at all.

After two hours of puttering around the hall though, it appeared our predicaments were more intertwined than I thought. Words within the Kinematics book began to blur together - a sign I normally interpret as being time to go for a walk. But even that wasn't as simple as it sounded. It had snowed even more the night before, and it took some ingenuity simply to make it out the door. With the fat tire episode still fresh in my mind, I was growing more curious about established solutions to winter versatility. Options that hadn't already been evaluated included ice skates and snow shoes. I've always associated hockey with Canada, so I chose the latter. Despite being associated with a more contemplative crowd, these cold weather instruments had still benefited from technological advancements in recent years. A far cry from the old tennis racket model, the pair I carried was made of an ocean blue polymer to house the feet, separated from an aluminum exterior by synthetic webbing. Outside, I rested comfortably atop the same snow I had sunk into the day before. Fresh air was not an altogether bad thing: the recent settling having covered up the site of my takeoff and landing - not that there was too much space between them. At least Caroline hadn't brought up my catastrophic

exposé: an absence that seemed worthy of a small prayer as I followed the creek up into the foothills. It was a land of condensed memory.

One pair of boot tracks and one set of skis lead up from the Biology Home to the barns, where I supposed Meaghan kept her equipment. Plodding away through the wetter snow near the stream, I wondered what type of people the snowshoe founders had been. Whether they were simply content to wander off into the woods with their creation, or if they were celebrating an IPO with champagne like everyone else. Beyond the barns, two sets of ski tracks emerged: continuous grooves dotted on either side by the occasional pole plant in the snow. One set of tracks appeared more linear, while the other came in a series of V's, pushing off with more determination but less grace. Diverting from the riverbed, the trail climbed onto higher ground, where drier snow was easier to negotiate than the marine cement. Not wanting to cheat in a sport of opt-in suffering, I blazed my own trail along the existing ones - pausing from time to time to catch my breath and enjoy the alpine meadows. Purple aster clumped in thickets, safe from prying eyes of the campus eager for any hint of color. While I had brought a water bottle in my pack, the contents of my energy drink therein had frozen, and no amount of nestling the vessel within the folds of my jacket would bring it back to viscosity. Condensation confounded me as I began to work up a sweat, losing fluids I couldn't replace. Both my outer shell and fleece were partial culprits, so I tied them around my waist and surveyed the road I had taken thus far. Quick as I had been to judge the merits of style between the cross country skiers, the clomp of my snowshoes essentially demolished any flakes that were unlucky enough to come within their path. But I hadn't fallen yet, and if I turned around now, there would be little to show for my exertions.

Although this was only my second full day at the campus, the spirit of campfire tales each night was palpable. Brice hadn't been kidding when he mentioned that the cultural attribute prized above all else was how far one pushed into the void. Rearranging my inner layers so that the snowmelt bottle might thaw against my bare skin, I pressed on towards the edge of the mountain forest.

Once there, the cross country tracks barely stayed within sight of each other, taking liberties with all the possible divergent paths through the trees. Splitting apart for thickets at a time, they converged once more towards the parallel right when it seemed they might veer away towards infinity. I took the middle road between them - as if that accomplished something. While the topography was trending up in the aggregate, I began to stumble through a series of ravines. Along the base of these drops were trickles of unfrozen water. Large snowshoe proportions had been a boon over open country, but they were nothing but a nuisance as the terrain became more uncertain. Small pebbles lodged themselves around my ankles, as if I didn't have enough going on already.

Picking my way among the rubble steered me off the straight and narrow, and I had a difficult time picking out signs of life in the scree. Somewhere, the sun shone brightly at mid day, but only hints of throttled rays delved into the vale below this canopy. As I ascended a particularly earthy berm, I decided to take in the view from atop one last knoll and then turn around. A few steps later, the front toe of my giant snowshoe became trapped under a boulder and my left foot flew out of its covering. In a vain attempt to redistribute my weight, I sent the right one flying too. For such a setback, the ironic thing was that walking in my boots alone was actually not that bad. It may have

been easier. On the way back I would sling the snowshoes over one shoulder like a cavalier high schooler and strap them to my feet only when needed.

Air atop the knoll was decidedly warmer, though not purely as a result of my rapid exhalations. Redolent with a sulfury steam, it made my exposed skin feel clammy; both hot and cold at the same time. The misty dew settled in between the openings of my outer layers, nourishing the doubt that could grow at any moment when flustered in the mountains. The garments hanging around my waist were flung back on, but I left my gloves off, feeling that my hands were growing gangrenous within them.

Despite my desire to turn around, the transformation within the surrounding forest pulled me deeper. Over the hiss of vents pouring forth steam, I heard voices arguing heatedly among the hollows.

“Species that never were. The chance to create worlds that should already exist.” Meaghan’s squeaky shrill was familiar enough, but it was harder to pin down Caroline’s voice - it sounded hoarse and asthmatic.

“I didn’t come here to help you satisfy some weird fetish. I’m training to be a vet: I just need a, like, reasonable sounding work experience under my belt.”

I began to lower myself down into the next berm, clinging onto spare branches to prevent stumbling down the pitch. My hands became covered in a sappy substance: the trees in this part of the forest were actively oozing their contents into the soupy air. Between the two women - perched on an upright log with a small ribbon tied around its foot - was a bird I had never seen before. Meaghan peered over it, studying its wings intensely. Her red hair was tucked beneath the folds of an olive Tyrollean hat, her face flushed with exhilaration. She seemed descended from some Viking line, determined to

push the extent of the known world further into windswept seas. Caroline, meanwhile, looked on suspiciously, the emergency brake of her undergraduate education preventing her from getting too carried away with the extremes of the real world.

Oblivious to my presence, they circled around the log while I continued to inch closer to the clearing. I had seen many a species of fowl in my childhood, always at the mercy of human encroachment. Missing wings, spiritually broken outlooks. Clipped. Disoriented. This one had the wild eyed look of having been zapped by a power line.

“Coooooo,” the bird unfolded its wings while its eyes bulged wildly. The two women jumped back. Content that it had made its point, the creature re-nestled its feathers, held in a perpetual shrug atop the decaying log.

“It doesn’t belong here,” Caroline said, “it’s not a tourist.”

“Who are you to give sole province over nature to the Bering Strait?”

“You’re talking about playing with the shape of the continents. These are systems that have evolved over tens of thousands of years, achieving stability through the consensus of time.”

“You call the advance and retreat of the glaciers natural? They let the muskox through - the phantom toll booth! Prejudiced against those without the loose change of a shaggy winter coat! This moment, right here - you and I - this is a form of evolution. When women can correct the haughty whims of the past. Who are you to say otherwise?”

“We can’t just blindly act without knowing -”

“Time and again, evolution in the North was bankrupted by the rush and recession of the ice, resetting the balance of available biota to zero. Our understanding of

resiliency at temperate latitudes suffers as a result. And you would give up and do nothing? Don't let your degree fool you Caroline - those sweaty, peat filled bogs of the Equatorial jungles that graced your latte filled seminars may stretch continuously back to the Mesozoic, but they leave no room to fill in the landscape with the imagination. This ecology. This state... this is our blank canvas, and posterity will thank us for the painting."

Crested ibis swayed as she heard herself discussed in such sweeping terms; even fowl aren't above occasional flattery. The bird's ornate plumage ranged in hue from the pink of the flamingo to the delicate tincture of a cherry blossom in early spring. By far though, the Ibis's most distinctive feature was a blood red patch surrounding its eye. When the bird turned its head in my direction, I couldn't help but jump back, as if viewing an innocent bystander warped by conviction in a wrongful murder. During my fright, the snap of a broken twig gave my presence away.

"What the hell is he doing here!" Meaghan cried, before Caroline began to protest that I had been invited.

"This isn't your discipline," Meaghan said, draping Crested ibis beneath an olive cloak the same shade as her hat. "You should go back to working on your bike."

I watched the Ibis sway beneath its covering, and I wondered whether it cared to know of its perch at the center of a debate around what was natural. Or if - like the rest of us - it was mostly concerned with where its next meal was coming from. When I didn't budge, Meaghan reached towards the inside of her jacket and now it was my turn to act upon an evolutionary designed response: backing slowly away. I reminded myself that this was a research institute. It was for profit, granted, but even in Wyoming I didn't think



people actually carried weapons. Satisfied at the first signs of retreat, Meaghan moved her hand up the lapel of her coat, and merely brushed her unruly hair back underneath the felt tip of her hat. Caroline didn't say anything, but we made eye contact and it seemed like leaving was a good idea. The word please seemed to reach from her thoughts to mine; the only sound in the misty ravine was of the bird shifting its weight around the wooden circumference of its captive log.

Back on campus, I locked the door to the common room and ran a hot shower. As I let the water warm up, I searched for shampoo and shaving cream in the luggage Brice had brought. On my way back to the bathroom, the door to the gear closet was open, and I realized that I had completely forgotten the snowshoes deep within the forest. Oh well. Within the shower, I yanked the temperature knob as far towards the right as it would go. Welcome was the stinging sensation against my skin: at least it came from my own decisions rather than from the outstretched fingernails of the thorny thicket.

Gene manipulation was a black art. My impression of Wyoming as a research hub was that it gave us a head start in adapting to the cold, but what I had witnessed thus far was akin to blackmailing the race officials. There was something architected in Meaghan's manner, a will to shape the landscape rather than simply learn from it. I stayed beneath the jets for a long time. If I stooped just a tad, they covered me completely.

After enough solitude like that, I had to admit the possibility of my overreacting. The whole incident may have been nothing more than a talented scientist's nostalgia for her lost pet. Eccentric measures of course, but sinister behavior was harder to prove. For all Wyoming's reputation of wildlife, I was hoping to see some species more

endemic to the area when I calmed down enough to emerge from the shower. By the time I did rinse off, droplets evaporated from my skin, leaving a sheen of relief reinforced upon signs of Brice's arrival. The Durkhan native was in the midst of his move into my wing of the Built Environment Building. A pile of dirty laundry lay discarded by the side of the bed in his sleeping quarters. Our sterile campus was becoming a little more lived in. Drying off in my own bunk, I saw a plane descending through a light snow.

## Chapter 12

That afternoon Hermann invited me up to his study, the natural location being the towering third floor turret. When I asked how Menlo had been, he simply smiled sadly. It was one of the less enjoyable, but still necessary, parts of the job to deal with those people. At least he had been on their soil, rather than vice versa, which happened from time to time. He was always one for the grandiose generality; I pressed for more detail.

“They like to come out periodically and make sure their investments are going to pay out.”

“When’s the next time they’re visiting?”

“The week after this one,” he said, staring down towards the lake. Unlike my room, which looked up towards the mountains and back in the direction of the road, Hermann’s turret had views in every direction. He had landed the Grumman out on the surface of Luna, skidding to a stop above the ice. When I asked if I should have any tangible demonstrations ready for the investor visit, he told me they all knew I had only just arrived. The real pressure would be on Dave to prove that he had a viable expansion plan for geothermal: the most obvious blockage to The Yellowstone Group’s scale; volcanic activity being harder to distribute than architectural models or conservation plans. I had never really stopped to consider how this arm of the venture would radiate out towards the plains. Hermann seemed not at all bothered by it. Was coming of age in this industry learning to remain impassive in the face of variation among place? He explained it was more about pieces of the puzzle fitting together: validating that one component of the system could work interchangeably with any other.

Geothermal was, after all, little more than a spout for steam. Granted there were ways to procure steam by working against nature rather than with it, but the grand vision was to allow the rest of the system to take shape without having to constantly revisit the energy module. The rest of us would have access to power when we needed it, freeing us to think deeply about what it meant to live in a building, or how best to move from place to place.

There could be no denying that it felt good to have the mastermind back. A lot of the doubts that had crept up over the course of the previous two days were put to rest by the clarity of his vision. It wasn't so much that his words were fundamentally different than Dave's, as it was about the conviction behind them. Part of financing and leading projects, Hermann told me, was about knowing which corners to cut in order to hit deadlines. Don't sweat what happened with the bike yesterday, he said, it would have been crazy not to start with an existing solution: the drawing board isn't going anywhere. But if the money went away, there would be no adapting to the future, in style or otherwise. I shook my head vigorously, feeling as though I had peered into the anatomy of the world. As I rose to leave, he asked that most ubiquitous of questions, "Do you have any questions for me?"

"Nope, all good from this end," I said, thankful that there was some semblance of an even keel after so many plunges into the unknown. But on the way out the door, something about the subtle shift of temperature reminded me of the hollow.

"There is one thing," I said, heading back in.

“Oh, do tell! I love things,” he said, moving toward the fireplace and arranging the kindling with bits of newspaper. “Do you mind? I usually start one when I know it’s going to be a late night ahead.”

“Not at all,” I said, trying to sift through the order of information that would make the most sense; guessing at who, among the eccentric web of individuals involved, knew what. “Well, it sort of has to do with how the environment fits into what we’re working on,” I said, “see earlier today, I came across Meaghan and Caroline, and -”

Hermann was looking at me intently, but here by the warmth of the newly crackling fire, it was impossible to articulate just what had seemed out of place back in the forest.

“Go on,” he said.

“Well, they were talking about their plans,” - for some reason I couldn’t bring up the Ibis - “and they were going back and forth about which wildlife should be preserved.”

“I see,” Hermann said, walking over and adjusting the logs so that the flame would take more quickly. “Sam, for three years I searched for this place” - muttering to himself: Long time. Yupp, looong time - “of course I didn’t know it was here when I set out looking. We scoured British Columbia, Alberta, even parts of the Yukon Territory - stopping just short of the Alaskan border. What I wanted was something remote, but also - hemmed in to a certain extent. It was just me back then, and the Grumman I had bought with every last cent from de-mining Southeast Asia. Life had treated me kindly over the prior years, validating how models I cooked up in my studio could be applied to make it safer abroad. But I knew I could never work for anyone else again. So I flew and I flew, thoughts swirling around the cockpit of all this climate change that no one seemed capable of doing anything about. The West has this word called outfitter. No

counterpart in the East. That's what I wanted to be, the outfitter for the cold. Not AN outfitter for the cold, THE outfitter for the cold - or there would be no point in doing it. On my way back from one of the Canadian expeditions, I decided to fly lower than my usual cruising altitude, to skim across the tops of the trees. At that time I was also based out of New York - God, I hate that place - and I was in no particular rush to get back. Now, people will tell you that Spring in Wyoming is their least favorite time; mud season they call it. But it didn't feel at all like Spring then and I had no idea I was above Wyoming. A cold rain fell, and the snow geese descended into the lake by the thousands. I killed the engine as I didn't want to bother them, and just glided along, pretending I was one of the flock. When they descended into Luna I was powerless to refrain from joining them. Geese skim the surface with more grace than a machine will ever know, and amidst their cries was such a blissful white noise that for the first time I was able to truly focus. When I stood up out of the cockpit, I decided to call this place home."

I followed Hermann's gaze out to the Luna of the present. There was more ice now, and fewer geese honking - but the reflection lingered. Something about it called up to whatever flew overhead.

"Perhaps what I mean is, we can't begrudge Meaghan for trying to bring back the winged inspiration of her youth."

"No sir," I said, unsure I had ever felt anything as deeply as the call to home Hermann had experienced during that fledgling landing. I left him to his fire, ashamed at my own inability to find that degree of meaning in my work. When I returned to the common room, the space felt icy by comparison, and I walked over to the fireplace, determined to start something of my own volition.

When Brice came into my room later that night I still wanted to be alone with my thoughts of what I could do, but he insisted he had something for me.

“Sort of all set with personal possessions being handed to me by people without permission,” I said, but my irritation washed right over him. Instead he handed me a baseball cap. It was forest green, the exact shade of the Douglas firs surrounding our home. On the front was printed: The Yellowstone Group. Below it was an irregular shape: tendrils sticking out of a malformed amoeba. Whoever was responsible for the swag possessed hazy notions of graphic design. I thought back to the jellyfish adorning Meaghan’s purchase in the Oculus. Now that was a logo! It had drawn me into the occult inner workings of life itself. The one on the caps above our foreheads inspired the same fondness for nature as a mosquito filled swamp. Questioning Brice as to what outline of protozoa we bore, he laughed and said the logo was an overlay of an irregularly shaped pool. And not just any, the most famous one: Yellowstone’s Grand Prismatic Spring.

“Never heard of it,” I said.

“A dazzling example of geothermal activity,” Brice said, “a true delight.”

“You sound like the Chicago Sun Tribune,” I said - but his capacity for ignoring sarcasm was overwhelming.

“Most of the what we have around here are vents. Vents are all they are. But the Grand is as large as the largest swimming pool, boiling away like a cauldron with heat straight from the center of the Earth. Every color of the rainbow is represented within its waters. Jules Verne would give it props.”

“If the most fantastic thing about it are the colors, then why did The Yellowstone Group only shell out for a stencil in all white?” I asked.

“Is this the first company you’ve worked at?” he asked. “These questions you pose don’t have answers. Hermann picked them up in California. If you don’t like the caps, there are some t-shirts downstairs, but they only have extra larges left.”

“Perfect,” I said, imagining how ridiculous the oversized logo would look on a shirt big enough to be a dress. While it was already dark, it was too early to head to bed, especially after having passed out so suddenly the night before. Brice and I sat down for some quality time, watching the fire dance across the hearth, swapping stories about the villages we knew. It seemed like the peaceful night that should have carried on for hours after a harrowing day, but I knew there was one thing I had to do before I could settle in.

Not bothering to put on any extra layers, I bounded down the stairs and across the stone walkway to the edge of the Biology Home. There was too much exposed light from the kitchen so I hopped a low wall and slipped across the snowy ledge of grass, hoping the film of felt around my feet would buy me a minute before the cold started to seep through. I lobbed a snowball up to Caroline’s window, watching my first attempt collide with a thump against the wooden side of the building. The second one connected with the glass, producing a satisfying thunk. A shadow moved against the far wall of the room. Thirty seconds passed, then a minute, and when finally the glass paned window slid open she whispered: “You’re going to get frost bite standing out there all night.”

“We should talk,” I said, and even in the pale moonlight I could make out a raised eyebrow. “Brice is over too, he moved in with me. We’re just sitting around the fire.



Hanging.” I pointed to the billowing chimney for proof. She glanced back and forth between the smoke disappearing among the stars and my own terrestrial figure, firmly planted on the Earth.

“Fine, but I can only stay for a little while,” she said.

Despite the lateness of the hour, Caroline was still dressed in street clothes. She was far better than her mentor at keeping up appearances during this frigid autumn. Had she been dropped back in Manhattan with no more than a moment’s notice, she could have slipped off among the foot traffic without missing a beat. My own style was representative of my origins from the middle of nowhere, but I had done my best to pick up the subtle hints which accrue if you walk around too long in two major cities wearing sweatpants.

Wordlessly, we made our way over the bridge to the Built Environment Building. Her step faltered every third or fourth pace; I couldn’t tell if she was nervous or if that was just how some women walked.

“Sup,” Brice said, upon our entering the common room. He looked at me as if it had not been totally cleared that we were inviting members of the biology team over to chill. He grudgingly made room for Caroline on the couch while I settled into a large arm chair adjacent to the coffee table. Everyone looked at me to say something, and all I could think of was what I had made clear to Caroline already:

“We should talk,” I said.

“I’m here.”

“Fair.”

“Ready whenever you are.”

“Ok. What was with that Crested ibis today?”

Caroline seemed more at peace with the situation than I. Routine veterinary work, she said, involved coming into close proximity with all kinds of animals and experiences. Drawing blood samples was par for the course; she had long ago steeled herself against sightings of syringe and stool. Even the casual practitioner was off into the depths of health, pathology, and genetics.

“Let’s focus on that last one,” I said.

“Historically, genetics has been about understanding,” she said. “The first time I ever came to Yellowstone was to get a better sense of the gray wolves that had been reintroduced here. Only by observing mutations of the gene for hair color were we able to discover that wolves are in part influenced by the lineage of dogs: a divergence scientists had previously assumed was one way.

“I could have told you that,” Brice scoffed, putting his feet up on the coffee table. Caroline ignored him.

“That background comes in handy when you’re trying to dose a sedative properly, or debating whether or not a captive mother will eat Purina when you’ve got nothing else on hand.”

“Right.”

“But it also serves as a foundation. This summer,” she continued, “we pursued research in that vein, trying to figure out how the appetites of wolves and grizzlies had changed over time, and whether this predation was responsible for the decreased herd sizes we had been observing, or if the cause was the result of other factors.”

“And what did you find?” I asked.

“Oh,” she said, unbuttoning her cardigan as the fire began to pick up. “There are a million factors working against a definitive conclusion: snow covers tracks quickly, Hermann’s plane isn’t always available for use, and the maintenance crew is slow to repair the radio collars.” At this last part she shot a menacing look at Brice.

“So in terms of going from gene understanding to gene therapy,” I began, trying to broach the events of the day - but I never got the chance.

“I don’t know why you keep asking about the deep science. To be honest there are so many day to day hassles of just dealing with individual animals that are way harder. This is what I’m trying to tell you!”

Brice defended the maintenance crew for the slow progress of the radio collars. What performed well in the lab didn’t necessarily hold up during freezing and thawing, not to mention a battering among the talus. Spare parts rarely arrived on time, different frequencies had to be managed. Caroline heard none of it, and stared into the fire impassively. Despite her ambivalence to everything else about the setting, she asked if the newly minted hats came in a color aside from green. Brice said he would check. Perplexed, I got up to get some tea of that same tincture, offering both my guests a mug; they only asked if we had anything stronger.

By the time I returned, neither of the two had let the radio collars go. Amidst Caroline’s insults, she hurled the fact that Brice wasn’t even a full climate fellow, but only a mechanic.

“I am more than a mechanic,” he said, “And I will become a fellow when the vehicle works.”

“Well, then you better hope for a better accomplice than this guy,” she said, pointing towards me, “He still thinks he’s in the Botanical Gardens.”

“Lesson learned,” I said.

Caroline left our common room on the same muddled terms she had entered with. She was always in a vague hurry towards some unnamed task: the further questioning of which either indicated that we didn’t understand or were missing the point entirely. Brice and I sat in silence for a while. I ran the events of the previous half hour over once more; there was nothing I would take back. Efforts to entice my roommate to expand on his employment status resulted in a simple answer: he was barely getting paid enough to scrape by. Before going to bed, I felt the need to plan something. It’s an innate urge that gets me into trouble even when I’m craving solitude. But the Mongolian was newer to these quarters than I, and his old ones weren’t anything to rush back to. He looked out of sorts on the leather couch by the fire. He looked out of sorts everywhere - or almost everywhere.

We made a plan to visit Durkhan the next day. We would meet the members of his family as well as some of the local villagers: people who cared more about their fellow humans than their role in saving unseen troves of them. The thought of being away from campus for a full day left me uneasy, but the idea of staying wasn’t much more soothing. I was beginning to find that building the vehicle of the future was to acknowledge a present of contradictions: the West was more heavily funded than the East, I had been broken out of jail by a man trapped within an invisible cell, a girl who saw deeply into the workings of life was convinced I was wasting my time, and the only

one who could help a mission blocked for years by investment capital was the poorest person I knew. We would set out the next morning to discover his origins, across a snowy range we could barely navigate. We needed the someday version of ourselves to appear now, in a vehicle that didn't exist yet. But for the time being, we would walk.

## Chapter 13

If the city endlessly altered the variations of its obstructions, Wyoming's landscape was boundless in its capacity to remain still. Brice and I trudged off the edge of the map, and climbed a high ridge that would take us through a mountain pass to Durkhan. The pines along the defile were evenly spaced in the patches where they had room to grow. Alders and aspens in shades of cream and white; peeling trunks marked off the miles in stands and groves. While my acclimating feet longed for a checkered flag to signal a reprieve from the cold, Brice seemed perfectly content. That entire season in Wyoming he had on one layer less than everyone else. Some days two. We had risen before dawn, and after a few hours had still not felt the full brunt of the sunrise.

"This would be better in a vehicle," Brice eventually said, ascending to the top of a slight grade upon whose backside we might have gathered some momentum.

"Yea," I said, "Better in a vehicle, but still good."

He nodded his head and the large russet pom pom at the top of his beanie.

Squirrels dropped their acorns at the sight of this curious resident of the plains who had adopted the mountain glades as his home. Aside from his stylish headwear though, the rest of my roommate's attire spoke to the patched together salary he received from the group: a ripped hoodie, oil splattered jeans, and a headlamp for traveling through the less frequented hours. I wanted to talk with him about where my bike had gone wrong, and whether we were stumbling through average snow conditions or an arctic anomaly. But the young man just wanted to walk. Without road or motor to deter them, more wildlife graced our path. Tawny outlines of an elk herd bounded across the vista: a

yellowish gradient barely perceptible from the burnt grasses. Brice pointed out small logs felled by beaver, but we never saw the authors. Tracks and droppings from all species far outnumbered the actual sightings, even when we matched our movements to the crepuscular.

Sure footing became more sparse as the trail narrowed to a razor's edge at the top of the spine separating the two valleys. For a long time there was nothing but marbled rock and snow - the pattern reminding me of the famous cheesecakes revolving in the windows of New York diners. Distant avalanches rumbled throughout the entire range, slabs of upheaval whose dislodging caused me to be grateful for my minor bout of slough. My stomach rumbled too, but we were still an hour away from food, and having sighted elk running in the wild, I didn't think I could be quite so cavalier about ordering them off the menu. To subsist on a vegetarian diet in the mountains was to accept a preponderance of wild berries and canned fruits. To subsist on a vegetarian diet in the mountains was to give oneself over to the healing powers of Labrador tea. But trying to shake the thought of a hearty, carnivorous meal in the mountains was like trying to avoid thinking about elephants when someone keeps yelling "Elephants!" The thought was lodged more deeply than a lot of the things I should have been thinking about, and it took an even more ethereal crossing to shake me from my reverie. Mountain goats jumped across the narrow opening of sky above our heads; their hooves and pink bellies visible for only a second before they landed on the other side. It all occurred only ten feet away, but they were as indifferent to our grounded existence as I had been to the residents of Indiana on the flight over. Not long after the sighting, we cleared the apex of the range and emerged on the opposite slope. Deep crevasses in the Earth

extended much further down than our intended path. When I asked Brice if he had known anyone who had ever repelled into one, he shrugged: yearly there were members of the community who went out for the day to perform their routine chores and never came back. It was a fact of life, living in Durkhan.

All ten of the village's streets bustled at the base of the hillside below, belching out the the same sequence of soot as that first morning. The final fan of snow down to the trough was laced with minuscule black particles: the kind everyone blames on the Chinese for letting their cinders drift across the Pacific Ocean. But I could actually see the chimneys emitting this time. Unlike that refracted sunset over New Jersey, I was getting closer to the source of the distortion. On street level, the sheer volume of machines buzzing away was deafening: grinding down fibrous roots to mush, dismembering the flanks of tree stumps. The bespoke devices were patched together from spare parts, and I began to understand why the village was such a rich source of mechanical talent: everything that was, had been repaired and repurposed. Representing all shapes and colors, Durkhan's machinery ranged from the conical to the trapezoidal, boasted a palette of emergency flare pink to shipping container blue. Metals of the makeshift housing had been salvaged from an industrial past, and fitted into an uncertain future.

With the collapse of smelting, mining, and large scale refining operations, the villagers were forced to search from sun up to sun down for firewood to heat their cookstoves. Dreams of falling back onto a soft bed of charcoal were rarely fulfilled. Many of the residents swept their doorways to pass the time, smiling toothless grins as



Brice and I walked slowly through town. Those without an axe to grind nursed bottles of liquor instead, but my partner withheld judgement where I was only too eager to hurl my stowaway resentment. Brice had a wave or a nod for each person, refusing to berate those who happily made their home in a place he was so desperately trying to escape. When my revulsion worsened from aesthetic preference into a denser, concerted cough, I asked if we could make our way into the nearest building for a reprieve. Brice said that the average home would be no better, but the air quality in the cantina was tolerable. It wasn't far off. Keeping my eyes fixed on the ravaged, scraggly timberline in the bowl above the village, I tried not to let my anxiety show. For the first time in this state, I felt truly flustered, and the sensations my younger sister had so often described began to make sense from a protagonist's perspective.

An illicit filling station made getting a grip harder to do; I had never seen anything like it. Within the cooling climate, what scarce gasoline had been extracted was either for the very wealthy, or the very corrupt. Black market gallons of petrol were smuggled into the town via empty vodka bottles and relabeled for sale. They burped away atop rickety card tables, waiting to be plucked by incoming snowmobilers. My heart sank at hearing the buzzsaw roar of their treads - it was everything I was hoping to avoid in my designs of the Wandruhr. These were the first specimens of snowmobile I had ever encountered, and I wished I could erase the memory. Brice saw me taking mental notes and then tearing them up; he affirmed his commitment to building a better alternative.

We weren't the only ones wary of these mechanized monstrosities of winter transport. A wizened man with a giant oar began banging on both the engines and the men atop them until they took their reproachable convoy elsewhere. As the black

marketeers sped off, the crowd pointed and shouted at their savior. Chants of “The Ferryman” resounded through the air, and the man hopped back in his shopping cart and began to pad around the town center. His oar was wrapped in duct tape, providing traction against the cobblestones. He navigated the crowds with aplomb, pausing from his languid strokes to brandish his tool as a battering ram at anyone who threatened to purchase more fuel. The Ferryman was the only Mongolian to study my arrival on the scene with interest. My ego may have deceived me - but he seemed to offer a nod of fraternity before being overtaken by his throngs of supporters.

Opportunists emerged when the crowd hit full force. Grain vendors hawked and haggled, hauling their wares in burlap sacks streaked with charcoal. Bottles were shoved in our faces, admonishing us to “Drink, Drink, Drink, Drink, Drink.” I had no idea what liquid sloshed against my face, but it wasn’t aromatic. Brice pulled me out of the frenzy, warning to never stand still during my time in Durkhan. My senses were still running on overdrive; there had been more new information to absorb on that one intersection than in all the sprawling isosceles of Times Square. Amidst the squalor was a resilience to adapt to the cold by whatever means necessary, and I doubted whether my white collar colleagues shared that grit.

Brightly lit advertisements beckoned us toward a low laying structure. There was an abundance of color in the blinking suggestions of what society thought we should buy, and an overwhelming whiteness permeating what was actually for sale. Brushing past the rainbows of hypothetical, we nearly collided with the Ferryman streaking across our path one more time. Brice’s tight hold on my jacket was severed. But we were already stumbling forward - into the dim light of the cantina.

A pattern was beginning to emerge where I followed Brice into rooms of which I knew little. This one smelled of fish. Its light snuck in through slits and cracks in the tin wall. Hubcaps and plywood plastered the siding's gaps, doing their best to keep out the wind and smoke. Glasses clinked, clients bickered, and chants braided together to form the current of conversation. My companion spoke quickly to secure a spot within the ever-shifting queue, as I strained through the low visibility, hoping to chance upon the Rosetta Stone. Someday, when my hands weren't already full, I would have to convince Brice to teach me a few stock phrases of Mongolian. The foreign tongue left me stranded in the middle of an oval velodrome, whose linguists spit and spat in a race to get out what they had to say.

New acquaintances piled in more recently than we had, and an increasingly concerned server ushered our burgeoning party into the privacy of the back room. On the way, the recent arrivals exchanged hugs with Brice; I skirted between gaps in the tables and chairs. Several patrons paused their swinging at what I assumed was a piñata to let us pass. Once my eyes adjusted to the gloom, the outline shifted from a probable party favor to the beaten husk of a human being. The eerie part was less the violence itself so much as the compactness of the circumference it warranted. Fellow diners chewed thoughtfully on their trout no more than a few feet away. I pulled Brice aside to ask him what offense this man had committed, and he said he did not know - most likely related to a bad sale. In an economy which wouldn't last the winter without the firmness of a forthright handshake, Mongolians hated nothing so much as dealing under the table.

A smaller serving counter anchored the back room, reserved for clients who negotiated the threshold. Grainy television broadcasts bathed a group of men in the corner under a stunted light. They offered grave nods as we joined them and for a while no one said anything. Brice handled my order for me, not that differentiation was a big deal among the globs of yellowish paste which arrived at our table. Delineation existed only in the form of a red sauce or a green sauce, though both were slathered over the gelatinous entrée. The meal passed simply; payment became a shell game. Hands swirled, currency was pointed at, but somehow the motions fell perpetually short of a transaction. Eventually the owner came over to apologize for the waitress's insistence on payment. Those seated let out a collective chorus of "Mhhhmms." Now that money was off the table, we could get down to business.

Despite the size of the portions consumed, our associates were lean and wiry; their complexions housed an intelligence no less acute. On the swivel of a shilling, they switched from Mongolian incantations to the King's English. First off, they wanted to thank me for the generosity I had shown my "brother" by inviting him to live in the common room. For years, they had been waiting for an associate with humility, one with whom they could share their wisdom. I smiled gratefully, having no idea what form this wisdom would take, and waited for the village elders to work their way to the point.

Many had been the years in which Durkhan lay in the shadow of The Yellowstone Group. Its inhabitants eyed the gas guzzling introductions of the coastal peoples with unease - nervous about the rate at which imported infrastructure could transform the landscape. The only thing worse than the outsiders who came to profit, were those who came to help: mere drops in the oceans of greed and stupidity. Drops laced with sinister

molecules, like high fructose corn syrup in chewable multivitamins, or fluorine in general. For a second the men seemed to forget that I was invited here as the token exception; grips began to tighten around forks and knives - whitening the knuckles of even the most leathered skin. My feeling was that this excursion would have been less than sanctioned in the eyes of The Yellowstone Group - I was diverting from the architected experience.

Labrador tea was brought out to smooth over old ripples in the frozen consciousness of the villagers' pooled past. When I could stand the waiting and sipping no longer, I asked: "Guys, what are we doing here?"

The men looked taken aback by my abrupt manner. One of the elders even took a pair of eyeglasses out of his jacket pocket and adjusted them along the bridge of his nose: the ultimate power move. To my surprise they deferred the logic of their moral imperative to my young friend - all eyes at the table turned to Brice. My roommate held my gaze stoically, then started in:

"For many generations, my people have learned to navigate the steppe. We constructed our gers with portability in mind, and grazed horses over unfathomable leagues. We caught marmots, trained eagles, kept our cuffs rolled down and our gazes up. We never touch another man's wife or hat. And yet when The Yellowstone Group located in this region, do you think they consulted us about cold weather solutions? We were either cheap labor or a people to be saved - never a source of ideas. We've watched men fall below the ice, light themselves on fire, and get buried alive in their vain attempts to conquer the elements. In our hearts, we have known the solution for

generations. The elders have conferred, and you are the one we would like to share it with.

“Really?” I asked.

“For a price.”

“What’s the price?”

“Half your year’s pay.”

“That’s it?”

The villagers looked amongst themselves and grumbled. A hard bargain it may have been in the way of sheep’s milk, but I’d barely notice if half my salary went away - there wasn’t enough time to spend what I earned: I was always at work. Brice pleaded that the sum would be enough to establish a one room school in Durkhan, and privately he whispered that he had some ideas for his own share. Feeling somewhat blindsided by my salary becoming a matter of the public record, I pushed the conversation forward, asking more about what this solution was, and how we might go about implementing it. Unlike these villagers, whatever I made this Fall would be a small fraction of my true earning potential, and it was more important to get the big things right than it was to sweat over every last penny - or whatever iron disc passed for currency around here.

“We call it the \_\_\_\_\_,” Brice said. Truthfully I had no ability to fathom the word, but that didn’t stop him from explaining it. Inspiration for the \_\_\_\_\_ came more from the sea than the ground, in an ironic leap of imagination for a people of a landlocked country. But was Melville not always alluding to the vastness of the plains in his accounts of the sea? Why should the inverse not occur to those roaming the wavering grasslands.

“We are two thirds water!” Brice cried. He stuck his index finger into my chest as if I were Chief of the Interior. “Engineers dig holes into the ground, searching for answers. We were the ones who crossed the Ocean to arrive at this place!”

“Mhhmmmm,” the villagers said in unison. One by one, they shook my hand on their way out, wishing Brice and I luck in our endeavor. With slight bows, they dispersed among the crowds of the cantina. Some even took a parting right hook at the deathly salesman on their way out the door. Left alone at the table, my roommate encouraged me to pick at the remnants of my green paste. If this mush was a favor from the Mongolians, I could see why getting on their bad side was inadvisable. It would be nightfall by the time we returned to campus, so I tried to force down as much of the pounded root as my stomach would allow. Any action was worth attempting if it would compel my friend to be more concrete.

“If we leave now, we should make it back by dusk, right?” I asked.

“One stop we have to make before departing,” Brice said.

“What could be more important than getting back? Especially now that finishing the vehicle will give your village hope?”

Brice shrugged. “My sister.”

## Chapter 14

While the majority of the buildings in Durkhan were utilitarian in nature, the month of September had been characterized by exceptions to the rule. Thus, in a town distinctive for its destitution, I tried to take the marquis of a movie theater in stride - faltering only upon learning it screened primarily black and white films. Caches of lightbulbs around the perimeter of the marquis were pockmarked where the fuses had gone out, but those that endured burned on against the thickly settling fog. A young girl stood on a ladder, reaching out with a long magnetic rod to swap out the letters. Grappling with the titles and showtimes, the fruits of her labor reminded me of an apple picker at work in an orchard. But that version of Fall was long gone, replaced by a rustic sighting of Wyoming's only hipster.

"How's everything?" Brice asked his sister.

"Everything is great, except for what's missing. But I guess that's always. How are you?"

The rest was lost to me as the two broke out in amiable chatter. Syllables rose and fell like gulls on the sea, while I was left to guess at what aqueous inspiration the villagers saw in the snow where I had merely glimpsed defeat. It was also getting late, and I had reached my cultural quota for the day. I pulled Brice aside to tell him I would just meet him back at The Yellowstone Group if this business with the apple picker was going to take a while. His only response was that I should lose the scarf before we went inside; it was crucial that he meet with his sister before she did anything they would both regret, and the last thing he needed was her acerbic wit taking issue with my preppy



style. I teetered on the doorway, pulled between my obligations to the vehicle and the smell of warm huckleberry muffins wafting from a wicker basket. I joined them in the lobby and helped myself to one. A broken popcorn machine lay idle in the corner. Brice swore to me the day would soon come when he would fix it. The only readily available materials in Durkhan were flimsy, he said, and it was difficult to produce anything of quality.

“As long as we’re offering out halves of my salary willy nilly, we could always pledge the other portion for a nice steel kettle,” I said. The sister detected the satire but deflected it by emulating the loud POP the machine would make once it was working. After a few minutes of sibling banter, Brice began to grow stern in his line of questioning, and his sister stared coldly at him with her arms folded. Whatever news she had for him: she wasn’t parting with it easily. She pointed to me, asking a series of questions in Mongolian. I could do nothing but stand there, twiddling my thumbs to pass the time during an errand I didn’t want to be on in the first place. One sibling was adequate. After enough time passed as a deer in the headlights though, I could stand it no longer and formally introduced myself: “I’m sorry, but I didn’t get your name?”

“Gerel,” she said, offering her hand; the fingernails were chewed down to the bitter end. She looked a few years younger than my own sister, pursuing an economic path as equally unviable. If not separated by the Continental Divide, they might have been friends.

My hope was that getting the formalities out of the way would bring the gathering to a conclusion, but it only served as the breach necessary for her to suggest we all sit down. The seating options in the lobby were limited: two winged armchairs that had

seen better days and one rickety stool that belonged at a card table. After an interminably awkward period of everyone sizing each other up, Gerel uttered two phrases I couldn't decipher. Brice's jaw dropped from at least one of them. His eyes assumed the biblical quality I had witnessed once before.

"Dude, what did she say?" I asked.

"She doesn't like your scarf," he replied.

I shrugged.

"And she got into USC for film school."

"USC. Like, Los Angeles? Southern California?"

"That is the one."

Gerel looked on apprehensively as I told my friend that this sounded like a good thing, but he adopted the same grieving manner one might assume upon the death of a beloved pet. Relegated to a busted outlet, even the shadow of the popcorn machine cast a guilt trip in his sister's direction. Who ran a theater without popcorn? It reminded me of the dilapidated condition of my own apartment: everything neglected but the task at hand. To Gerel's credit, the film reels themselves were in pristine condition. Despite my earlier haste, I was actually getting stoked on the Durkhan film scene. It was refreshing to find someone in town with a vision that couldn't be programmed. But Brice wasn't just ambivalent about his sister's acceptance, he was angry.

"They only let you in because you will be the person from the middle of nowhere!" he shouted.

"Whoa, buddy," I said, but he was already making preparations to leave. He still managed to give Gerel a hug goodbye, and I gave the quick handshake of the farewell

that follows so quickly on the heels of the meeting. I had barely taken all my layers off and now I was bundling them up again. Brice barged through the doors on our way out of the theater, allowing gusts of chill air to disturb this last bastion of warmth. I stole a thumb's up sign at Gerel when he wasn't looking. Outside, the ladder still stood upright with the apple picker propped against it. I hoped the half finished title was not indicative of the girl's future. On the outskirts of town, neither Brice nor I had broached the perimeters of conversation. Between us hovered the unspoken prospect of the typical future in that smoky village: no one left. I was always pro "going for it" at that point in my life - but one aspect of the arrangement still troubled me. While Brice's apparel was on the verge of unraveling at any moment, his sister shone out against the drab backdrop of the village in her designer clothes.

"She got her hands on a sewing machine," he said. "I will give her that, she keeps up appearances." As we walked through the twilight, the contrast of the siblings paced with me. My sister had a similar knack for fashion, woven through the plastic polymers of my credit card more so than any ingenuity. Yet the desire was the same - to put on the best face for the day that one could, and even I couldn't knock that. Fashion as weakness, fashion as strength. My views on appearances bounced and reflected more in that clear night air than they had amid all the towers of glass.

"I was hoping to get her a job at The Yellowstone Group," he said, "we go through garments so quickly there: her knack for durability would endure."

We got the steep part out of the way early, and as the valley of Durkhan disappeared behind us, Brice's agitation abated as well. He handed me a thermos of hot chocolate; Gerel had packed it for us to keep our spirits up during the starlit trek.

Occasionally Brice would pause where two paths branched in the rock. I couldn't remember the forks from our earlier voyage, and it dawned on me that several of the fissures were strictly one way. My friend chose correctly every time, demanding perfection of himself. I was grateful for a guide in these nameless walls - where going for a stroll was not the simple matter it had been on the numbered grid.

On the other side of the striations, our campus glimmered next to the lake. Luna was only a slightly darker shade of blue than the navy shadows of the mountains, but its waters drew us down all the same. I asked Brice if a lodgepole fence up near the top of the ridge had been there earlier, or if I was starting to hallucinate. If it was the latter, I would be demanding a health inspection of the luncheon's green sauce. But Brice agreed that he had never seen the fence before either. His keener vision located a section of the enclosure that was still ongoing: half finished amidst the parked parameters of a backhoe and a pickup truck. There are only so many new sights one can absorb properly in a given day; rather than worry about what lay over the next range, I reflected on how differently the world had opened up before us with the most recent one.

Cast in the light of the ocean, I began to see the ledges and steps leading down to the bottom of the valley as wave sets rolling onto an expansive northern shore. As varied in depth as any sea, the plummet from peak to trough seemed capable of inducing the bends. Brice and I peeled the shells of our synthetic hoods up and over our heads for the final descent. A gale off the lake mingled with the last of the cavernous winds. Cinching down our layers necessitated exposed hands, every spare second of which threatened permanent damage. As to how we would navigate these frozen waters

in time, I could only hope that a full night's rest and a diet other than Durkhan's paste would furnish us with bright ideas and a little more specificity. Midnight had come and gone by the time we reached the Built Environment Building. If Sunset Boulevard lay around the corner, I didn't see the angle just then; we were becoming too used to traveling in the dark.

## Chapter 15

The administration had no idea we had ever been away; the construction of the fence was all anyone was talking about at The Yellowstone Group. Meaghan designed it to facilitate a control group for her experiments. The blockade would prevent two competing elk herds from grazing the same land and evading the same predators. We were catching up on the developments over a quiet breakfast in the Biology Home when Hermann interrupted us in a hasty attempt to locate a pair of missing binoculars.

“We can’t have everyone mating with everyone; we’re not running an investment bank here,” he said, blustering through.

Brice had been up since dawn preparing to share some ancestral lore with me, so it was just Caroline and I left at the table when Meaghan went off to assist in the focal hunt. Despite never appearing too thrilled when I hung around, Caroline was nevertheless the only person aggravated by my disappearance the day before. She was sorry for being so cross the other night; she knew she had a short fuse and was working on it. But as the construction of the fence indicated, even the validation of very simple hypotheses took more work than most people knew. I explained that I too had become frustrated with society’s fascination with buzz words - quite frankly it was appalling. I wasn’t used to people apologizing, so I contentedly picked away at my grapefruit, trying to prevent it from squirting either of us in the eye, and ruining a perfectly good morning.

Hermann obstructed our breakfast for the second time as he came bounding down the stairs with the leather strap of the binoculars bound around his neck. Giddy in the advent of an impending flight, he brushed past us at the table, deftly distributing another

pair of hats in his wake. While these iterations of the swag were yellow, they carried the same logo of the Grand Prismatic Spring and the familiar words: The Yellowstone Group. Both Caroline and I rested them on the kitchen table, but Hermann lingered by the door until we obligingly put them on. A small tuft of hair shot out of the back of mine, while Caroline adjusted the strap so that there was room for her ponytail.

“Great day, guys. Really great day,” Hermann said, alluding in his roundabout way to our compliance - and then was out the door. As we stared at each other’s Grand Prismatic Springs, Caroline took the opportunity to tell me a little bit more about why this area in particular was so crucial to Meghan’s research. Extremely hot temperatures around the boiling waters provided a home for bacteria known as *Thermus aquaticus*. This strain was a kingpin in the history DNA, lending itself to the enzymes behind polymerase chain reactions. PCR for short, this process allowed scientists to start with only a small segment of nucleotides and build it up into the endless complexity life required. In Caroline’s eyes, I glimpsed the same rush that I got describing vehicles that didn’t exist yet - the kind of pace that doesn’t slow down to acknowledge pretext or prior art. The joy that was in the finding out, rather than the knowing.

“If you guys hadn’t been able to get real estate here, are there any other hot springs you could have gotten *Thermus aquaticus* from?” I asked.

“A team of Japanese divers collected samples from the Marianas Trench,” she said, “but I’m not sure I’d really want to work there.”

The two women toiled in a remote part of a remote state, supplied by natural allies that allowed them to operate in even greater stealth. No need to order special solvents and arouse suspicion. No checks against a boundless creativity by the dams of the

supply chain. Even if the raw materials were never-ending though, I had doubts about how sophisticated the tooling could get when it was housed within a barn.

“Don’t let the exterior fool you,” Caroline said, “the machines you saw that day are state of the art. Made in house, back when Hermann had more time to assist us with fabrication. The corners of Meaghan’s lab are the corners of her world. Want to take another look?”

“Let’s go.”

Without the fluster of the first morning, my second tour of the barns allowed me to soak in the science behind what the women were doing. First there was “the soup” of spare nucleotides - out of which were fashioned the strands according to very definite blueprints.

Each experiment in the lab was still far from a fully realized organism, but the reactions were an encouraging starting point, Caroline explained. Their methods were not dissimilar from the strategy employed by corporations who derive their value from the patents they hold more than any product already on the market. The salient procedure was to identify a stretch of an animal’s genetic sequence that corresponded to a physical trait which was easy to reason about. It was no coincidence that Mendel had begun with traits as observable as flower color and the size of a pea. Surely I had heard of BRCA1, she said - the gene responsible for the suppression of tumors. Its identification was a result of the same applied process. Markers abounded as frequently as differences: black hair versus gray hair, the ability to digest grass, and on down the line. In this lab, she believed, were the answers not just for how one species would



adapt to the cold, but how all life would survive, period. Now if only the outside world would appreciate how much was required to get there. But I could tell Caroline didn't care at all what the outside world thought. By process of elimination, I hoped that meant my own opinion mattered.

Finally the implications were starting to dawn on me. While I couldn't condone the women's demeaning stance towards my realm of engineering, I had to acknowledge the difference in reach. We walked over to Meaghan's corner of the lab and paused by her microscope.

"She's spent so many more hours looking down onto her slice of nature than she has looking up at the mountains," Caroline said.

"I think she enjoys the reversal," I added.

"Lording it over all those tiny organisms."

"Someday we'll have to get you a telescope," I said, "a lens facing in the right direction." But she didn't seem to hear, instead bending over to examine the last slide left on the stage.

"Anything interesting down there?"

"Just pond water."

"Would that be powerful enough to glimpse any DNA?"

"When wrapped up into chromosomes, a coiled mass is visible, but this model isn't nearly strong enough to glimpse the nucleotides." She stood up, her lips pursed. "Don't mention any deficiencies in the equipment too loudly though. If Hermann overhears you, he'll go buy the most expensive option, then stop to think if we have a use for it."

"Has that happened before?"

“Yea, he splurged on an electron microscope, but we don’t keep that out.”

“And the excess bothers you?”

She paused to think. “I wouldn’t say bothers, it just... Look, out here it’s easy to fall into the trap of there being only one of everything, and it’s always the best. Back in school, you would hear of all of this amazing equipment for years before you actually got to use it. There’s something to be said for objects not just appearing out of thin air.”

We walked back to the entrance of the barn, and Caroline unclasped the latch, letting the sunlight stream in. The span down to the lake was as bucolic as ever; the view beat whatever white walls other researchers had to contemplate. Perhaps this interpretation was accentuated by the presence of a moose only ten feet from us, chewing thoughtfully on some shrubs beneath the snow. It raised its snout - whiskered and bearded with white tufts of the stuff - and cast a quizzical look in our direction. There was something unmistakably sad in the darkness of its fur and the gangly way it loped about. Like so many of the things I ended up building, it had a temperament out of place even in a setting where it should have been a natural. While I could have been content to watch the creature all day, Caroline lead us along the outer edge of the barn. “We don’t want to stare it down,” she said, “it’s best if we just ease out of its line of sight.”

The moose followed our movements as huckleberries fell from its mouth. It didn’t have any antlers, and I wasn’t sure if that was the byproduct of some unspeakable accident or merely a difference owing to gender. My question was quickly put to rest as two young calves sidled up the ridge - sticking close to Mom. Caroline and I were almost at the edge of the barn when the triad went on the move. To our dismay, they headed straight into the cover of the building that I had left unlatched. Caroline stared at

me as if I was the most incompetent person in the world, and my mind began to race at how - if at all - we might lure the moose away from the glittering trappings of technology and back into the plenitude of nature. While the aspiring veterinarian had her training to fall back on, my readings in the area were confined to the children's book: *If You Give a Moose a Muffin*, the sequel to the renowned: *If You Give a Mouse a Cookie*.

We were still prowling on the periphery when our wildlife powwow was disturbed by Meaghan sprinting up the hill. She was carrying a firearm, and her grip on the gun wasn't dainty. My morning strolls around the campus had strayed across disturbing volumes of shells littered in the powder, but I had never heard a shot fired. As Meaghan wielded the Weatherby over her shoulder, it seemed that was about to change. She barked at us to stand down, moving swiftly past our position. While Caroline usually had a ready fire response, she paused, and let the words fall flat in a way I might have done. After she passed us, Meghan slammed the door of the barn shut behind her. We braced our ears for the terrible sound of between one and three moose meeting their demise. It's really horrendous what you tell yourself in these situations to justify a lack of action: that any species that judges their mate based on the size of their antlers probably had it coming, that the herd was probably only seconds away from coming over and mauling me if they hadn't found something else to do, that ultimately they were just a member of the deer family. But then I thought of the three creatures poking around in the lab. A lab that was ostensibly created to understand how their own kind survived in these harsh conditions.

What was I doing here? A mediocre engineer at best, I had stumbled upon a niche that no one else cared about, and thus was able to earn a livable wage. The irony was

that the issue I had stumbled across was THE issue: one that made me want to lean over and whisper “Pssst” in the movie theater every time someone bawled their eyes out over the historical significance of the Metro Transit Museum or the love of their life moving to Philadelphia. For those who lived on the front lines, the issue of our time was clear. But I wasn’t doing a very good job of getting the word out by standing there. And I had never really spoken up in the theater, or over appetizers, or in any of the other countless settings in which the liberal elite expound upon their views before dancing the night away. I was in the lower decile of doing the standard thing, but if there was one thing I was unsurpassed at - it was ending up in these types of situations: standing between a scale obsessed visionary and a cow wandering on through.

Ignoring Caroline’s protests, I slipped in through the latch, and tried not to let the door thump too loudly behind me. It took a few seconds for the eyes to adjust, someone or something had killed the lights since I had last been inside. Gradually, monitors and bookshelves came into focus and the irregular shape of the microscope against the far window gave me a point to orient myself around. Not far from it, Meaghan crept into the interior of the barn - stalking her prey. I was expecting this to come down to a saving of equipment, with our rock star geneticist rushing in to salvage her experiments from the onslaught of the herd. But the moose had no interest in the mechanical, instead having wandered up a flight of stairs to a loft at the back of the barn. There was nothing for them to do up there, but they hadn’t realized that yet. Protruding snouts floated above the open air of the loft - it was almost as if they were trying to advertise how appealing their severed heads would look to a taxidermist. Meaghan dropped down to one knee, tearing open a box of rounds with her teeth and emptying a pair of cartridges into the

back of the barrel. She began to utter some chant or prayer. Not like the Mongolians - this one was WASPY - the kind of pagan, cultish ritual that a boarding school crew team might say to themselves before heading downriver. "God, grant me the strength to do that thing, which I think will define my fortitude, but is really an outlet for a massive budget expending itself upon a natural world that doesn't know or care I exist."

Click. The shells slid into place, and Meaghan adjusted her scope, thumbing down on the minute dial of the Weatherby. It was hard to imagine her in a Bass Pro Shop back in the city, asking where the firearms section was please. For once, I longed for the order of my former life: long security lines and pre flight checklists which would have deterred this mayhem. The moose didn't bother looking up; they were having the time of their life up in the loft.

The first shot fired and ricocheted off one of the wooden beams of the rafters. Dust fell to the floor as the moose scattered in all directions. None of them had been hit, but there was nowhere to hide. Their trespassing torsos tarried in full view - from the hanging dewlaps beneath their throats down to the the rear thighs. Ears swiveled like satellite dishes in the direction of the most recent blast, but the one place they weren't looking was at the Tyrollean hat - shielding the reloading woman. I began to sprint past the tables, my footfalls kicking up tufts of straw. Meaghan noticed my presence for the first time. I would have been content to distract her with a mere turn of the head - but to my dismay her entire shoulder pivoted alongside her gaze; the Weatherby now pointed squarely in my direction. I dodged low to the ground, but I kept running. When people asked me about what happened later - I smiled and laughed it all off - a ploy necessary to see things through to the end. But in that moment, the snarl of The Yellowstone

Group bared its teeth at me from behind the barrel of the rifle. As an engineer, I was of use, but as a person, I was target practice. Convinced of that reality, I laid my body on the line, and tackled the red head until I felt her skull hit the floor.

The world of rules: of covered health insurance, contributions to 401ks, and opportunities for personal growth - all of that was shattered in the second blast from the Weatherby. Pointed at my heart - if such an organ still existed - the barrel glanced upwards upon my collision with it, the shot rocketing skywards to puncture a hole in the roof. Broad daylight streamed in from above, and from the side Caroline and Hermann came rushing in. Moose hooved by the tangled mass of Meaghan and I, kicking up a melee of urinated straw into our faces. When they left the barn doors this time, they were gone for good. My tackle had sent Meaghan sprawling into a mass of circuitry, and I had gone in with her. Although I felt fine, she had struck her head on the corner of a table, and was muttering a slew of incomprehensible phrases as trickles of blood began to congeal to her already matted hair. "This is the culling of the herd," she said. "Only through death and rebirth does the long term population begin to stabilize." And then she passed out.

Hermann radioed down to a team of sherpas, who seemed to appear in the barn before he had even clicked off. They carried Meaghan out in a stretcher as if it were just another day. My last sight of them entailed one of the younger Mongolians trying on the olive hat; it didn't look bad. Dave, who I hadn't seen since the first evening, got down and helped me to my feet. Even though I had no visible signs of duress, he got underneath one of my shoulders and asked Caroline to stoop below the other one. I was grateful for him in that moment, refusing to lose his cool. A tall cylindrical white

beam had been dented by a stray shot - I had somehow missed that. Thankfully no living being had been hit. Outside, the moose tracks bolted up into the cover of the hills; the tramples from the sherpas and the wheels of the stretcher etched a path back towards the academy. Although that was the direction Dave and Caroline carried me in, when I could muster the energy to look at the girl pulling half my weight, our grim exchange bore the truth of a reality we both knew. There would be no turning back from this one.

## Chapter 16

The world had changed, but not for the reasons I thought. Not because I had tackled a senior member of The Yellowstone Group. Not because she had tried to shoot me. Not because she had been carrying a firearm even before there was a need for one. But because that funny looking white beam we hit was an electron microscope - the cost of which dwarfed the roof over our heads. Aside from chance encounters and brief, monitored exchanges - I didn't see much of Caroline over the next couple of weeks, which bummed me out. Our growing liaison was a matter of public concern in the wake of the moose.

For obvious reasons, I kept mostly to my common room, emerging solely for meals on the first floor of the Built Environment Building. After my experience in Durkhan, I kept closer tabs on the support staff who kept the place functioning. While their appearances ventured further from Brice's frugality than his sister's thrift - it came at a tremendous amount of effort behind the scenes. Most of the workers owned two unique sets of clothing at the maximum, but they always appeared presentable: wardrobes freshly cleaned and steamed. Another feature of the villagers that crystallized in the snow globe of my self imposed house arrest was their capacity to cluster. Only discrete sections of the labor force cohesively communicated. They formed pockets. Cooks rarely talked to cleaning staff; even within the culinary tribe, rifts formed between those who prepared the soup and those who garnished the pie.

A sedentary lifestyle gave me a better chance to get to know Dave, who shared my adopted tendency on a more full time basis. He claimed to be making good progress on



geothermal, but offered little in the way of concrete steps taken. Tangential topics sparked a glint in his eye akin to what adolescents exude upon carving their initials in drying cement. Dave was only too pleased to wile away the hours at the table with Brice and I. Topics ranged from the inner workings of voltage transformers to the art of tying flies. His enthusiasm for the latter far surpassed the former by an order of magnitude, and it struck me that behind the extremely talented engineer was a man who had chosen a career to facilitate a hobby. Our newly formed crew's appetite mysteriously grew in inverse proportion to the miles we didn't travel. We sifted through endless mounds of thick, flat noodles, only to come sliding down the back side of the meal into dumplings and cheese curds. The Mongolians seemed incapable of cooking in small quantities, preferring instead to stretch the appetite of the diners to the size of the portions they prepared. Exasperated at any leftovers, the balance of power in the small cafeteria was one of the diners proving themselves to the cooks - we seemed only a day away from the point when they would start tipping us for our services. While us younger engineers summoned a great deal of effort to get through our portions; they loved Dave for his appetite, and for his refusal to treat anyone differently whether they paid his salary or brought his bread.

One afternoon, he launched into the life stories of the insects who managed to eek out an existence in the cold, and how the trick in fishing was to match the fly to the appearance of the bug itself, or at least its larvae. Our mouths were too full to protest the depiction and its lack of propriety at mealtime; Dave interpreted our silence as a green light to proceed downriver. He had been putting pressure on Meaghan to try and alter the genetic structure of the Caddis fly. She was stalling him, pushing for the

settlement of a blue winged olive. “The Trout Route is our only hope for conserving this watershed,” he said, “the fishermen are the only ones with deep enough pockets to ante up against the real estate developers.”

“Real Estate Developers?” I asked, “who would want to develop all the way out here?”

“It’s happened before,” he said, “When I was working at Cal Tech, we used to have a place up at Mammoth Lakes. Our first season, there were only a few cabins; by the time we sold, it was essentially greater Los Angeles: toxins leached into streams that were all but dried up.” Dave’s demeanor was starting to fit together. What was the rush when there was nothing new under the sun? His razor sharp intellect had not dulled behind the varnish of So Cal chill, it had withdrawn to uncompromising waters. Cal Tech had always been one of our undergraduate rivals, but it seemed competition was one channel the aging engineer was content to leave unexplored.

By mixture of candlelight and LED, Brice and I waxed our free nights amidst the emitted material of transportation’s greatest minds. Through the sheer amassing of knowledge, we hoped to accomplish what we couldn’t through collaboration. I felt responsible for severed ties between the Biology Home and the Built Environment Building. Making the cold a pleasant place for millions would be a distant dream if we couldn’t coexist within our miniature community. Solitude was nice for the expansion of the brain, but it also left room for a ledge of doubt. A fine line spindled between extreme focus and madness; I was having a hard time falling asleep and staying asleep from lack of physical activity. The early hours of my waking dreams were filled with swirling dust devils of apparent wind, the limits of friction, and the shortsighted thinking which

wouldn't go away even in the mountains. One instant I'd be tromping through waist deep snow, the next sliding atop a slope of exposed shale: my subconscious self was equally inept at planning ahead. Short of a vehicle that would play dead like an opossum, I wasn't sure how we would deliver a solution capable of existing in the natural world. To me that seemed the only way to go on some days, laying dormant until the prying eye of expectation passed. Scribbling down nonsensical ideas between flicks of the light switch, I couldn't help but think that I was wasting these improvements on the vehicle; I needed them for myself.

October set in and it seemed we might implode within the prism of our unfulfilled ideas. On our current trajectory, the future was becoming less about something objectively better so much as learning to live with a different set of tradeoffs. But on the verge of such a catastrophe, a handwritten note slipped underneath the common room door: inviting Brice and I up to Hermann's study to chat. Our fears that one or both of us might be fired were quickly dispelled upon entering his homely atmosphere. Fire crackled at the same early stage of development as it had weeks before: Herman was perpetually in a state of beginning, always on the precipice of a self inflicted blaze. While I had prepared an apology for my carelessness around the barn door - in a conversational judo move - Hermann ended up being the one to say sorry.

While of course he wished that firearms weren't involved, he wanted us to know that he approved of the spirit with which we had taken the law into our own hands. We stood no chance of walking forward towards destiny if we refused to stand still for what we believed was right. Our founder possessed the quality of zooming out while speaking: of bringing us and everything we had ever done with him to the atmosphere.

From this view, it was so incredibly clear that there was no such thing as a mistake in the sacred journey to carve out a home for ourselves on this pale blue dot. Hermann said that the proper way to live towards our fellow creatures on the globe had long been a topic of concern for him. More nights had elapsed than he could count when the last of the firewood had exhausted itself without his stumbling across anything definitive. Ultimately, it came down to clarity of conviction, and how far you were willing to go in order to bring that conviction into a manifestation of reality. We had proven worthy of the first half, but he was growing concerned that the Fall was wearing on and we still didn't have much to show regarding the second. He repeated that he was far less concerned over the rift with Meaghan than he was over not having anything to show. His tone implied he had fallen into the breach also, and I couldn't help but ask why she was mad at him too. Hermann fretted a bit and and stoked the logs to avoid answering immediately. Mostly sources of funding, he said eventually. She hadn't totally silenced her inner voice calling out for the prestige of the group's backers, while he was of the much simpler opinion that so long as he retained total creative control, money talked.

"Is The Yellowstone Group doing alright financially?" I asked. "Like, do we have enough runway to make sure that everyone gets paid."

"More than enough," he said, "more than you and Brice will ever need to live. The round we're looking at raising is much more about expansion than it is about keeping the lights on."

"Expansion?"

"Sure, I mean we've talked about this: it's where things are headed. We provide the tools for the cold weather, but it's not enough if we're peddling them on the side of a

dusty road; we need to control the distribution. Let me worry about that. What I need you and Brice to focus on is getting the adaptive prototype working, and I called you up here to see how I can help.”

Brice and I looked at each other; we knew what we needed. “We’d love to have a proper space in which to build,” he said.

“Well did you have anywhere in mind?”

I cut in: “The common room is great and all - I mean really wonderfully decorated, but we need a place where we have the freedom to destroy as well as to create. What do you think about the docks down by Luna?”

“Sure, but kind of a strange location?”

“Just... trust us, we don’t need much. Some siding to block the wind and a roof over our heads. Brice and I will lug everything else down ourselves.”

He paused to consider our request. We were already in the middle of nowhere and were asking for a setup even further removed. I thought we had a little further to go.

“Well, I guess I can’t very well turn you boys down after I offered to help,” he said, and looked out the window. “No geese out there today, Sam. I do believe they have left us for good. Maybe they ran off with the moose. No, I can’t turn you boys down, that would make me a hypocrite: Meaghan might not miss the next time she takes aim! Especially if I refuse this grant from the state. Yes, the more I think about it, the more I like your idea. A little space to let everyone breathe easy; let’s get you boys down to the docks. How does the day after tomorrow sound?”

We both nodded vigorously. Most people's gut definition of change is someday, but when Hermann got behind your idea, the ball was already rolling by the time you left the room.

"Do we owe you anything for the electron microscope?" Brice asked on our way towards the door.

"Look man," Hermann said, "there will be a lot of times in your career, when you'll be down a few mil, and that's when you really find out who you are."

Neither of us clarified whether that meant we owed him the money or not. Throughout this whole trial, what gave me courage was that Brice and I began to be viewed as a collective entity in the eyes of The Yellowstone Group. Our duo would either get the craft to float above the crust, or else sink publicly into humiliation. Either way, the important thing was that we were now in control of our own fate, money would have to take a backseat to that. We spent the latter part of that day and all of the next pouring through the vast troves of information Brice had assembled from the village archives. At its core, the mythic conception was an ice boat - a catamaran design with two hulls, separated by canvas and topped with a traditional sail. The key difference from an entirely aquatic model were the runners along the base, akin to giant ice skates. We needed to provide not only for the frozen waters of the mountain tarns but also the variable degrees of snow - so we began to test the isolated component of the runner independently of the entire system.

We walked to the same bank where my bike had failed. Animal tracks perforated the snow, as dense as if they crisscrossed a livestock stall. Brice speculated the prints belonged to ground squirrels and ermine. It was getting late enough in the fall that

whitebark pine were shedding their cones; the melee had ensued to see who would harvest the seeds. We found an unbroken stretch of marginalia along the edge of winter's annotated sheet, and set about conducting our tests. There was something vital about a fresh stretch of snow.

The ski runner trounced the tire, though it was unwieldy along grades which were not strictly downhill. Brice lit a cigarette; where he concealed them within his scant layers I confess I do not know. He seemed to be considering my initiation into a deeper ring of tribal knowledge. After the third smoke, he spoke up about the passageway into the inner sanctum. Skins, he said - originally made from seal skins - were meant to allow travel in one direction while preventing it in the other. Glide one way, then grip. When I raised my concerns as to the unconscionability of using such an instrument, he assured me that skins today were not made from their namesake, but rather a mohair nylon blend. Still, I had doubts about the goat part, having never been completely sure if the animals who offered their wool came away unscathed. Brice assured me that the Angora were alive and well; they found the shearing process quite pleasant. No one wanted a layer when they didn't need it, he said - gesturing to his own jean jacket. Catching a hint of acceptance crease my numbing face, he radioed to one of the proximate sherpas to rummage through the storage closets and see if there were any extra skins.

After we conducted another round of tests with the mohair additions, we agreed to stow them for the upcoming voyage without setting them as the default. We'd worry about not going back when we reached a standstill, and not a moment before. For a time we experimented with a thinner ski, almost bordering on the attenuated shape of

the skate, but found the instability wasn't worth the shave. Brice grinned as the thicker model of his ancestors stood the test of time, performing well against any of the more recent innovations. The ice boat had been designed to withstand the frozen rivers of a lost empire; our current cooling conditions required we reach back further into the past for precedent than the excavations required by the tampering of traditional civil liberties. Not since the reign of the Great Khans had so few been called upon to span a distance so great.

Sherpa after sherpa appeared over the course of that first afternoon to check in with Brice about hauling spare parts over from Durkhan. Two lists were growing simultaneously: one of supplies that could be found near at hand, and another of that which would have to be custom ordered. If this were the laundry list for just the gliding component of the Wandruhr, I didn't want to know what would go into realizing the completed craft. Having cherry picked the parts of the past we found amenable, our camp swiftly developed a new ideology: centered around the notion that any attachment to a pre-existing mode of travel, however efficient, would only inhibit our progress going forward. We clocked every known model of ski wax objectively. We stress tested every bit of binding from nylon rope to calico thread. The slate chalkboard filled with our figures and sums. A slush strewn carpet and overflowing markings on the wall spoke to our frenzied pace. With renewed purpose, I entered the barns for the first time since the debacle to get supplies. Though I didn't talk with Meaghan, I tried to establish that my team's mission was in no way thrown off by the events of late September. Width, length, shape, weight, shear force: no dimension escaped our notice, no improvement lay beyond our grasp. The tricky part was the reallocation of powder via the wind drifts. A



consistent snowpack was quickly dispersed, resulting in loaded embankments between patches of bare ground. Underfoot measurements for the skis ranged from 90 to 135 mm, running the gamut from a more agile turning radius to superior float. At the end of the day, we settled on 130, my own catastrophe sinking into the craft still weighing heavily on our minds. The wind would have its work cut out for it exposing rocks as the snow continued to fall.

I had already brushed my teeth, and my eyes were beginning to droop by the time Brice knocked on my bedroom door to mention that he had some lingering concerns about the runner's core. While I was happy with the spring we were getting out of the poplar, he was kept awake by rhizome visions of bamboo. My roommate vowed to wander the stalls of the lesser travelled Durkhan markets until the wood was found. I eased the door gently closed on him, whispering that it sounded like a fine idea.

Swinging hammers and grinding buzz saws woke me the next morning as housing sprang up around the frozen docks at the base of Luna. I didn't anticipate our fulfilled request would cause such a racket: a concentrated procession of villagers streamed from the dingy commuter lounge down towards the lake. Their potential energy released quite quickly when their pride and reputation coupled with the working of the vehicle. Hermann flitted about too, unable to refrain from a marshaling of any kind. The high collar of his jacket and the frenetic amble of his gait distinguished him from the small crowd even from a quarter mile downhill. Caroline existed in this period mainly in quizzical glances over the shoulder and sightings right before the bends of hallways. She had her own commutes, her own vendettas of which we appreciated neither the complexities nor the banalities. For all our sourcing of supplies and scuttling about, her

arena was of the barns and of the mind - both of which shuttered behind closed doors. Beyond the barricades, I pictured her shaking her head at the craziness we had gotten ourselves into, but I knew she was glad we were following through on our plans.

On the morning of the third day, Brice was up and out the door before I could rub the sleep from my eyes. I grabbed a ceramic to go mug - or at least it was now - and chased after him. A portable space heater was up and running in the newly minted shed. An industrial fan pointed at two large pontoons in the center of the room, drying into a freshly painted red. Brice lay on his back beneath the second hull, putting some finishing touches on the fiberglass to cover up the rust. His look of concentration was so complete that I very carefully eased the door closed behind me - not wanting to break the flow.

"Good morning, Sam," he said. "So nice of you to join us."

"No grass grows under your feet," I said.

"No grass grows anywhere," he replied, standing up to appreciate his handiwork. A roll of canvas netting leaned against the wall, and a tangle of aluminum poles lay scattered like twigs over the majority of the floor. Many an hour separated us from the present jumble and the completed Wandruhr. The fourth wall of our shed was built around the dock, and while the plexiglass allowed sunlight to glint off the lake, the flapping of its seal permitted a fair amount of cold air too. It was the cost of commencing before the glue had even dried, Brice said. Secretly, we both knew it was an acceptable tradeoff for the functionality of a garage door.

A light tapping echoed throughout the shed, so I went over to examine the glass. But even the loose fittings of our walls went about their inefficiencies silently. The

tapping continued; neither Brice nor I could locate the source. We paced about until the sound became more definite, pausing above the small span of work area covering lake water. Beneath our feet, we could feel the tapping's vibrations directly, and through the clouded reflections we discerned the outline of an ice axe handle poking up against the surface of the frozen floor. It was the strangest door bell I had ever encountered.

Our worthy leader was trapped below the ice, though not suffocating just yet. He was regaled in a full cold water wet suite and scuba mask. Anxious to break him free and back into open air, I kicked with my heel a foot away from his head. These attempts produced little more than hairline cracks, and the tapping ratcheted up its intensity. Brice strode over with a hammer and bludgeoned the ice until it cracked. Fractures emerged, one of which was wide enough for Hermann to shoot up out of, flopping down onto terra firma like a writhing walrus.

"Place isn't bad!" he said, after ripping off his diving mask and jettisoning a depleted oxygen tank. "Looks designed exactly to the spec."

"What were you doing down there?" I asked.

"Swimming," he said nonchalantly. "I have some books for you both. By the time I lugged them down the stairs I knew I didn't want to drag them overland, so I went below."

Before I could ask him any more questions, he pulled his mask back on and barrel rolled beneath the surface once more. Brice and I peered into the cauldron we had helped create. While it was a sizable shed, it wasn't so big that we could have gone back to concentrating with this gash in the ice suggesting the underwater machinations. After several tense minutes of thrashing about, what broke through the water again was

not Hermann's head, but a large wooden trunk. Its latch barely poked above the surface, and it took both Brice and I's full strength - unevenly distributed as it was - to heave it upon the solid planks of the dock. A faint silhouette disappeared between the waters of the wooden beams, slipping wordlessly out of sight. Not even an oxygen bubble gave away the circumstances of Hermann's retreat from his tomes. Our teeth chattered for several minutes as we tried to balance the advent of the literary arts and plain old work.

"Does that portable heater have a higher setting?" I asked.

"Was thinking the same thing," Brice said.

The ritual repeated itself twice more over the course of the sun's penultimate hour of reign - comings and goings which furnished our modest shed with a worthy collection. After the last chest had been hauled ashore, Hermann welcomed the permanence of dry land for good. We unclasped the trunks to reveal the many volumes of books: ideal candidates for the rows of empty shelves lining the drywall. True to his mantras of inspiration, Hermann furnished our Alexandria with history's great trials upon the open sea: from the epics of Homer and Melville, to the accounts of Cousteau and Verne. Among these Hellenic oars and whaling ships, beside these spectral divers and submarine captains, we hoped to make our own mark upon the watery abyss, albeit in its presently frozen form. Hermann leafed through his dog eared education, chuckling at how decidedly it had influenced the course of his own life.

"How did you get under in the first place?" I asked.

“Gap of open water from the vents,” he said, “whole valley is teeming with them; they make for decent dive sites. Maybe when this whole cold front blows over I’ll make it down to the Great Barrier Reef. One day at a time.”

With some final ramblings about a bleaching both physical and spiritual, Hermann bid us good day and resolute reading. By the time he was halfway up the hill, a thin layer of translucent ice had formed across the opening beside the dock: so persistent was nature in its erasure of the momentary triumphs. Alone with our materials and ideas, Brice and I began to unroll the canvas that would bear us aloft. We kept it taut, trying to gauge whether it would support the two of us laying flat across. Caroline poked her head in and said she would be doing a little gardening outside of the shed, taking advantage of the concentrated sunlight against the warm siding. She was quick to add that our structure stood within sight of her view from the barns, and she couldn’t concentrate amidst such an obstruction to an unspoiled vista. Caught as we were within the netting, we couldn’t scramble quickly enough to respond to the news and the nagging. But Caroline wasn’t phased, she would be planting some persimmon and centaurea to give the shed more of a cottage feel. So long as the roots didn’t delve below the shallow foundation and pickpocket our tools, I figured it was fine.

“They’d be lucky to break through the permafrost anyway,” she said - anticipating my thoughts before I’d voiced them aloud. And then she left. As Brice thanked Caroline for her aesthetic improvements, she called back that she was listing the garden supplies under our division’s expenses. Whatever stalemate existed between her and I had not been extended to my friend. We consoled ourselves atop the gentle swaying of the synthetically stitched mesh, dreaming of placid Caribbean seas. Leaving barely enough

time to airbrush hints of sandalwood upon an imagined breeze - the canvas tore under our combined load, sending us straight to the permafrost Caroline had warned of. It didn't budge. Along our shoulders and thighs bloomed bruises the shade of a Wyoming twilight. Consensus moved towards constructing a dedicated cockpit in place of a flimsy open air surface. Laissez-faire latitudes lay below, and if we didn't adapt fast, we would be as dead in the water as a trout in the Madison - expending a tremendous amount of energy only to remain still. By the time we broke for the night, we had the beginnings of a cockpit we could sit in, but neither of us volunteered to go first. If we had learned anything that day, it was to let the glue dry.

Our helm hung suspended menacingly between the two hulls of the catamaran, both of which were separated from direct contact with the ground via a pair of skis. The final question was how to power it; we had been so focused on avoiding stagnation that we had forgotten about moving forward.

## Chapter 17

Brice would have none of it when I brought up the snowmobile treads from my sightings in Durkhan. I wasn't proposing we use gasoline to power them, I was just trying to weigh what we had dreamed up already against an example drawn from the known. Secretly, the Wandruhr had always been a kind of space explorer in my mind, roving across the surface of Mars. Powered by an armadillo shield of solar panels, chugging on with the inevitability of the military industrial complex. Meanwhile my partner in crime had taken the nautical metaphor and sailed off with it. The purity of the ascent was an aspect of mountaineering that I was coming to realize ran in a virulent strain among the Mongolians. If the ground and ice were too solid for a propellor, his mutiny would make use of the sail. I resisted this idea bitterly - being a native of Vermont - sailing always represented the privileged snobs who gave New England a bad name. After sketching numerous iterations of our distinct visions on the chalkboard, we were still at an impasse. At wit's end, we trudged up the stairs to the third floor, in search of our very own Solomon.

Thankfully, the sage of Teton Valley needed very little prodding to wax about what it meant - in the strictest sense of the word - to achieve motion. With the meandering bends of an oxbowed river, we listened to his take on Bernoulli and Heisenberg. About the wonders of achieving lift; about what was sacrificed when velocity was known. To my point, Hermann acknowledged the success of the martian rovers in traversing reliably on solar. By comparison, examples abounded of sunken ships and wrecked ocean liners. From the Pequod to the Titanic, he skiffed effortlessly between the

fantastically fictional and the film adaptations of the fatal. By the third hour though, the monologue had devolved into a tangent about some inaccuracies pertaining to the Nile in an Agatha Christie novel; it was time to cut him off. The metaphors of Hermann's watery world would never completely fit within the timeline of our ark; the deluge was coming and we needed to act fast.

"So what do you actually think we should go with," I asked. "One word: solar or sail?"

"Brice is right," he said. "It needs a sail."

I couldn't believe it. "Based on what criteria? That this is the correct modification given our current structure?"

"No," Hermann said, "because some investors are landing in an hour and I'm pretty sure I have an old windsurfer kicking around somewhere."

"What?" both Brice and I cried. We could have used the entire morning getting ready if we had known.

"They only texted me while we were chatting," he said. "They do this sometimes. Just kind of show up."

The sail itself lay crumpled in an old attic above the commuter lounge. To fumble through the junk was to embark on an archeological dig through the attempts of the past. Camera equipment had been used to document the rates of warming, then cooling. The negatives depicted the retreat of the glaciers and advance of the moraines; the positives were nowhere to be found. A fan blade sprawled further back within the gloom; it seemed more appropriate to the bayou than the steppe. Lastly, thrown on top



of the jumble was the scuba equipment which had found a second life as recently as yesterday. Who said hoarding was a disease?

Brice and I lifted the windsurfer sail out of the erstwhile attempts and carried it down to the shed. We had etched enough tracks back and forth from campus that we were able to walk the path in sneakers. The sunrise was running late, exasperated upon reprising the role of the day's phenomenon. We blew warmth into our hands with raspy, asthmatic breath, and waited for the orb upon which life at any degree depended. It reluctantly cleared the ridge on the other side of the lake. Our toes were cold. For a time there was no sound but the occasional rustle of disoriented leaves and the hurried flurry of a Clark's nutcracker. We were at the point of nodding off when car tires scratched up the gravel road towards campus. It had been over a month since I had seen or heard an automobile: the van we road in on had lain dormant in its parking spot, sheathed beneath a coating of snow. This new arrival was an abomination to the stillness. Gasoline truly was the bane of our existence in those months, and I would have conceded the point to Brice had he not been so smug from our earlier debate.

We threw open the door to our workshop with the territorial fury of grizzlies returning to den. With such a short window for modifications, our main task was to fasten the sail to the rest of the craft, and hope for the best. Steering reasonably well was a bonus, but not necessarily required under our imposed deadline. Despite my bravado up on the third floor, I didn't have the faintest clue how to sail - and come to think of it - I would have been equally perplexed by a solar paneled rover. For as often as I threw around the terms wind and solar, I was a child of the fossil fuel generation with a recessive predilection for using my own two feet. Now that was about to change.

We couldn't find much room to mount the sail directly on the cockpit. To attach it to either side of the crossbar was to invite instability aboard. Adding a third runner in front would give us some room to maneuver, and somewhere within the annals of notable physicists, I hoped there was a chapter on the importance of seeing where one was going. We hadn't made it that far in our reading yet, but the principle seemed sound enough. Brice was already fashioning a smaller ski from one of our splintered trials. The shard could serve as an adequate steering device with proper sanding and waxing, but who had the time? The radio crackled to life and a band of sherpas appeared. They would help us bring our design to life, or at least watch as we died trying.

"Don't take off too much weight," Brice shouted at a younger villager who looked suspiciously like one of the bridge urchins, "we want to stay on the ground."

"Speak for yourself," the urchin said, but obeyed with a more conservative sidecut. Epoxy dictated the smell of the entire shed, and we kicked the door open to let in some fresh air. The portable heater groaned at our indifference, but as someone once said, if you optimize for everything you're bound to be unhappy - we were responsible for economy of motion, not thermodynamics. Beyond that suspicion, we had no idea by what metrics the Board would evaluate our performance. It was a last ditch effort; spare hands mingled with frostbitten ligaments to help hold the saddles and housing together. A lodge pole pine was the best we could do for a mast on such short notice, and I began to keep a running list in my notebook of all the improvements we would make when we had more time. Caroline poked her head in to let us know that the investors were lining up on the hill above the lake for the demo.

“We’ll be ready in just a minute,” I called out. She had walked in at an inopportune time. I wasn’t as handy with boats as I was with bikes, so I had been reduced to merely holding a section of sail - more for ceremonial than utilitarian purposes.

“Don’t mess this up,” she said, “this isn’t just about funding for your little experiments. We’re all in the same boat here. We need the money too.”

“Boat, baha, boat,” one of the sherpas chuckled until she looked at him long enough that he stopped. Icy glances, apparently, needed no translation. A team of villagers raised the plexiglass front of the shed, exposing our workshop to the open air. The same pit formed in my stomach as I used to get on the first day of school - the chugging of the garage door signaling the exit from the cocoon into the bare knuckled contest with one’s peers. But this morning, at least, I had Brice, and the small band who deemed themselves part of our cockpit crew. To be a sherpa was to pull from the experience what you put into it, in addition to the nominal wages involved. Some were content to merely clock in and clock out, dispensing cold soup, while others would have ridden in the cockpit all the way to The Hudson Bay if there was room.

Brice and I pushed the Wandruhr forward by the exposed ends of its crossbars. With each step, we tried to reassure ourselves that we belonged on the ice. Atop a knoll adjacent to the lake - Meaghan, Caroline, and Hermann stood beside the recently arrived financiers. Their tortoise shell glasses and micro puff vests spoke of a relationship with the mountains gleaned from coffee table books and creekside condominiums; the gossamer strands of their subjectivity hung suspended in the still air. The Wandruhr would perform how it would perform, and our fate at this late hour depended equally on the narratives and expectations set in place by Hermann as it did

on the top speed we managed to record. Steam billowed from the small stand of onlookers - Brice and I had pushed far enough away that they resembled a small sentinel of bison. During a last minute inspection, a few villagers brought out life jackets, helmets, and goggles for us to add to our repertoire of outerwear. The tangerine nylon of the life vest brought home the breadth of elements we sought to conquer, and the resulting scope of contingencies planned for. Research had shown that at least three inches of ice thickness was required for this type of vessel, but we didn't have enough time to go walking around Luna Lake with a ruler. My wooden toes were numb enough to ensure that the ice underfoot was solid.

Brice and I gave each other a fist pound before settling into our starting positions. Once aboard the craft, he would manage the handling of the sail while I would man the tiller. We raised one arm apiece towards the coaches knoll, and a salute from Hermann signaled it was time to go. Working our way up to a sprint, we kicked off against the ice. Our sneakers slid against the surface, but the boat picked up enough speed for us to hop in it without looking back. The momentum of our kickstart abated slightly as we got used to the body mechanics of crouching within the cockpit; Brice fumbled with the sail. For all of the adjustments we had made, this was our first time actually sitting inside the craft, which in hindsight was a mistake. A remembered history of wind came back to my friend slowly, and all I could do was hold the tiller straight as we slid pitifully to a stop. Up on the knoll, the investors grew restless, and I saw Hermann dive into pitch mode, his hands gesticulating wildly - without dulling the flash of his smile.

"Now, would be a good time, Brice," I whispered. But he could do nothing but stare off, his eyes watching the wind prick the spruce boughs along the banks of the lake.

He closed his eyes, and let out some slack in the rope, allowing the sail to ease laterally over the right edge of the Wandruhr. Abruptly, he caught a draft of downwind and we were off with a start. A small cheer went up from the knoll, but then there was no time to look up as my abilities at the tiller were called on sooner than expected. The apparatus felt stuck in place - a chisel in the ice. My wrists balked at the task; their primary exertion was upon a keyboard. Our course deviated from our intended path aimed at the center of the lake, bending instead towards coach's knoll. The investors raised the same cry of alarm usually reserved for a faulty espresso machine as our contraption hurtled towards them. Now it was Brice's turn to admonish me.

"Get us out of here!" he yelled, as I yanked down on the tiller. When nothing changed, I threw my entire body weight upon it. After the fourth flop, at last I felt the runner engage. Sparks flew across the ice, bouncing with the infernal sorcery of skipped stones. An unfortunate aspect of a front runner was that these byproducts of friction flew over and around our heads. Without the last minute headgear provided by the sherpas, we would have lost all visibility. Amidst the fray, our craft held to an impossibly parabolic U-Turn. As we shot out of the tail end of this sweeping arc, Brice's recollections increased in their fury, and we tacked upwind without missing a beat. While we had gone over the underlying physics countless times, my understanding of apparent wind lagged behind the forward propulsion rocketing us forward. Rather than merely scooping up the gusts as we had at the beginning of our run, this technique operated with the same space age dynamics of an aeroplane wing. Since the air took longer to rush around the elongated side of the sail, high pressure on the opposite face pushed directly into the surface of the foil. Meanwhile we benefited from this squabble via lift.

It worked so well that the Wandruhr would lose contact with the ground for two, three seconds at a time - rendering my adjustments to the tiller utterly useless. We were into unknown stretches of the lake before either Brice or I had time to fully process the fact. Our runners carved three railroad tracks into the ice as I rolled the tiller around, aiming to elongate the path we took across the middle so I had more time to react. Below the surface, molecules of trapped oxygen possessed the luminous quality of cirrus clouds dipped into the first rays of dawn. Cotton balls of cumulus dabbed across the sky overhead. Their reflections lingered in the ice; we could have leaned over and skimmed up a handful if only the mirror were not so rigid. There was nowhere to hide amidst these clear elements, each ephemeral glance revealing the millisecond indecision I was usually adept at masking when I knew the self reckoning was coming in the bathroom mirror.

We charged hard until the campus was a distant spot in the rear view horizon. Surrounded by the still ice and the serrated ring of the mountains, it was difficult to orient ourselves. One of the only recognizable landmarks was the silhouette of the fence on top of the Northern ridge. Valleys and canyons punctuated the peaks of the mountains - pretty up to a point, then as repetitive as tiled wallpaper. The monotony, however beautiful, made it difficult to gauge our speed aside from how it felt: fast and partly out of control. Eventually, smooth reflections under the rudders gave way to choppiness as the far shore scrunched into view. For the first time, we could see in detail how glaciers descended from the mountains and calved off to dissipate among their more horizontal incarnations. The cirque bellowed out into an amphitheater, and were it not for the jagged abrasions it would have been magnificent to initiate a banked

turn. Deposits of firn - intermediate between snow and ice - formed a lunar track over which we wobbled. Among the craters, my arms ached as each jab of the tiller spelled the difference between setting the land speed record and descending into a gut wrenching pothole. As the obstacles rose in intensity, some were punctuated by strands of open water where the giant glacial calves had fractured the sheen. These were the outlands, unaccustomed to appraisal by human eyes.

“We need to turn around!” I shouted.

“There isn’t enough space for a full roundabout,” Brice yelled back. “Left or right!”

Neither direction looked savory. On the left: land ho! On the right: vast stretches of open water before the foot of the glacier. There comes a time in every driver’s life when the dilemma arises over whether to save the vehicle or oneself. If we made for the shore, there was a slight chance we could avoid a collision with the spruce - salvaging everything. If we kept to the open water, Brice and I could safely eject, falling back on our life jackets - but the Wandruhr would collide against the glacier with the abruptness of a brick wall.

“I need that money, Sam,” Brice whispered to me. The force of his desire cutting above the wind.

“I know.”

We elected for an emergency landing on the banks of Luna, and for the second time, sparks began to shoot up as we tested the limits of our perimeters. The ski runners compressed into the turn, and elongated out of it, leaving us with the exhilarating rush of actually picking up speed. The Wandruhr thrummed with the contentment of an animal stretching its hind legs, sending us towards the north slope at

the extent of the watery flats. My steering of the tiller was at best a suggestion of which direction the mothership should go. Resistance was the medium of control; without it, our approach of the thicket was as unruly as a runaway freight train. With the lift we had accumulated, we were actually outrunning the wind. Brice fought with the mast to try and point it at a more manageable angle of attack, but the sheer forces bearing down on us were great, and maneuverability was lacking right when we needed it most. We left the lake for bare ground.

“Branches, branches!” I yelled, as coniferous overlays blocked certain tranches of our path. Interlocking limbs formed an impenetrable coat of arms; to remain unscathed we needed to duck and hop simultaneously, but we hadn’t made anything that could do that. As we entered the trees, the best alternative was to huddle inside the cockpit, hoping to survive the impending crash inside the fiberglass.

“Wanted to say my man, if this is it, I was really impressed by your tacking upwind back there. That was livid,” I said.

“I’m sorry it didn’t pan out Sam,” Brice said.

Thunderous claps rained down on all sides, and one of the runners shot up into the air as it connected with the land mine of a severed tree stump. Obliquely, we steamed onwards, and the two of us leaned into the left side to try and keep the remaining points grounded. We cleared the initial band of forest; shocked at our fortune in slanting out of the dense cluster of vegetation. The next drop was into the leaky faucet of a riverbed, its opening not wide enough to house us completely. We barreled forward with the chassis shoveling against an earthen berm: the runners intermittently catching furrows of ice and dirt. Stones studded the path, and piece by piece, the Wandruhr began to chip



away. We lost the front runner to a log, then the mast to a fallen trunk which hung perpendicularly above our heads. Finally, a chunk of the cockpit itself tore off upon impact with a boulder, leaving our torsos completely exposed. We clutched the warmth within ourselves as the walls of the riverbed rose on either side to form a canyon. Granite obelisks towered over us, even as the riverbed flattened out. With nothing left of ours to snatch at, the impediments gradually petered away, leaving us with beads of perspiration and a tentative relief. When we cleared the last layer of sediment, Brice and I high fived over the deposit's dissipation. Our runway had slid into a smooth, frosted table top.

When the last of the sparks died out from our screeching, we had a chance to look around. All the battering had taken a toll, and even though I had moved only five steps during takeoff, I was exhausted. While I examined the bruises along my elbow and checked for broken bones, Brice got out of the Wandruhr and surveyed this forgotten ravine in the interior of the world. Getting out to join him, an eerie feeling permeated the pockets of black ice in the middle of the riverbed.

"Look below," he said softly.

I grew concerned. Usually when something caught my friend's attention, his excitement was uncontrollable. My advice to future collaborators with this gifted mechanic is that the more quietly he brings something to your attention, the more worried you should be. I don't know what I was expecting. Maybe the glimmering reflections of a brown trout, or the deathly etchings of a cutthroat, but even the blood orange markings of that doomed fish were no match for what I saw.

Impossibly - lining not only the ice beneath our feet, but the entire distance of the ravine - were swaths of garbage. Yellow jerry cans, green strips of garden hose, and the spectral white of styrofoam cups were among the dormant culprits forming a rainbow of refuse. But all the way out here? This wasn't even a thoroughfare between Durkhan and The Yellowstone Group. It was an overlooked conduit. A virtual unknown. Brice took off his mitten and knocked against the surface of the ice, but no one answered the door. Well beyond the requisite three inches for safe travel, the block appeared frozen at least five meters down. The garbage itself lay immobilized within its tomb, more inert than any pharaoh.

With no formal tools for documentation, we committed the haunting images to the confines of memory, and set about saving our own skins before night fell. We gathered segments of the crossbar that had fractured off and fashioned a kind of hearse with which to carry out the skeleton of the Wandruhr's cockpit. Silent save for the unanswerable questions, we exited in a solemn procession from that tainted natural cathedral. Back at the end of Luna Lake, we had made a decision to preserve half of ourselves rather than face the total destruction of our vehicle. What we hadn't planned on was the complete funeral of our conception of the land as undisturbed - a frame of reference I had unknowingly carried my entire life regarding the American West. While I was a product of the city, the knowledge of wild places' existence had been as useful a point of reference as any Northern Star. Now we had ventured farther than anyone we knew and had not even scratched the surface of what went wrong. Dust was absent from the cold air on the long walk back to campus; it was clear enough to see the finish line in everything and nothing. Quite frankly I was frustrated that the goals I set for

myself were so much more ridiculous than everyone else's, and even their successes amounted to nothing. I would have loved to commiserate with my copilot, but even though Brice's English was always improving, it was still a long ways from a true heart to heart.

We had danced for the investors, proving we could go fast if the carrot of approval was dangled appropriately close to the fronts of our faces. Chromatic sunspots scattered before my field of vision like confetti from someone else's celebration at how naive I had been. This remote state of Wyoming was part of a larger plan, but whether we were the prologue or the footnote in such a draft remained unseen. When the outline of the weathervane atop the Biology Home crowded into existence, we dropped the cockpit on the ice. Amidst the remains of a smeared sunset, Brice and I decided to come back for it another day.

## Chapter 18

“Roberts, you’re a good kid. And a smart kid. But one of these days you’re going to have to learn some control.”

“Sir,” I said.

“Bringing back an intact vehicle... even for the sake of variety, seems like a goal you might set your sights on.”

“I’m trying, it’s partly that... we didn’t have much time.”

“You’re right. You guys still owned it. The investors loved the demo, I just know you’re capable of better. Now go on, get out of here. You don’t want to be in this office when all the legal stuff kicks off.”

“Legal stuff?”

“For the next round. Your prototype yesterday assured participation from all our prior investors. Now it’s time to go about hooking some of the bigger fish.”

So it had been a success - at least for the people not directly involved. I plodded back down to the common room, where my roommate still hadn’t gotten out of bed. His aerodynamic attire the day before had cost him, sacrificing padding from the beating along the riverbed. Brice’s One Layer Policy was as martial as any rule enacted by the People’s Republic to his homeland’s South, and it was similarly effective. My attempt at a Get Well Soon gesture was nearing the ten minute mark when the quick mix batter still refused to rise to its rightful height as a tray of blueberry muffins. Experts in yeast and fermentation were only a short walk away, but who knew how they would react to even a benign request. Memories of Gerel’s batch came wafting back also, yet I couldn’t

imagine going to her for help either. An hour later, I had a cement-like consistency, so I carried the tray of goopy treats into Brice's room. For a long time, he didn't say anything. My guess is that he was replaying the events of the day before in the same slow motion reel that I was.

"It's good to see an oven mitt being used as an oven mitt," he said finally, gesturing to my covered arm. We both laughed. Leaving the tray of muffins on a chair beside his bed, I retreated back into the atrium of our shared quarters, and let the morning unfold at its own pace, content to wriggle my toes and just make sure they were still there. When I looked out the windows, it had turned cloudy. Eventually I lit a fire, and hours passed in peaceful meditation. I had given myself the allowance of not stressing about what I had seen beneath the ice until my body had healed. Only so many stones could be turned over in relentless succession.

By mid afternoon, I turned on a reading lamp and began to peruse some of the fiction which Hermann had left down at the shed. Flipping through the novels was the first time I had read something other than technical documentation in a long time. When I had reached a point in the prose where I felt that someone could walk by it on the coffee table and discern the bookmark at a reasonable distance through the pages, I went downstairs to see what was bubbling away in the cafeteria. On the ground floor was only silence; the staff had gone home early for the evening, having woken up at the crack of dawn to prepare a going away brunch for the investors. (I would have sent them off with fireworks if they promised not to visit again any time soon.) Cartons of leftovers were packed into oyster pails and plastic containers. I found a few marked "Sam & Brice" and carried them up to the common room's kitchenette to warm up.

Holding on to one's roots is a difficult enterprise in the climate sector, and the craft services arm of The Yellowstone Group was no exception. Even the couple degree temperature slide into mid autumn had made it difficult for the Mongolians to continue serving their nation's traditional fare. Limited by the prepackaged resources which arrived in fits and spurts from Salt Lake, the chefs reverted to the time tested slew of recipes they knew engineers devoured. Tonight was no exception, and as I poured the contents of the first container out into a faux porcelain bowl, the smell of chicken tikka masala began to waft through the room. Followed by a bed of rice and garlic naan, a lack of authenticity had never tasted so good.

Surrounded by empty dishes and bathed in a fluorescent light, the faint feeling of guilt crept in that accompanies consuming take-out alone. Returning to my reading felt claustrophobic; I hadn't left the building all day. I was becoming a bull in a china shop, surrounded by materials borne of an architecture that was destined to break.

Forget the cold and the complications - I thought upon further reflection; I needed to preserve my sanity. Stepping into the moonlight, I found the clouds had cleared to reveal a panorama both soft and forgiving. I walked up the western side of the stream; from this angle, countless inlets and gullies fed down from hidden notches to contribute to the main current. Veering away from the glowing lights in the barns, I followed one of these tributaries on a whim. Hopping over it from left to right was gleefully addicting; I found an honest thrill in jumping across a moving body of water, however paintbrush thin: a more restorative experience than all my hours recuperating indoors. Unlike the symphony of larger streams, within this trickle every bubble could be heard. Each bend in the brook was a handshake between water and land over how things would go. I

wondered if the particles carried downstream ever regretted which pathway bore them into open water - blamed the imperfections of their existence on the molecule to the left or the right that wouldn't get out of the way. It was not an impossible notion in these parts, when one false step could result in ending up on the opposite side of the Continental Divide. Mercury was going into retrograde again, and I started to care less and less about getting my ankles wet through the cuffs of my jeans. It felt like somebody else's life, walking aimlessly like that. Even for ten minutes, the time had the quality of being borrowed, and I wondered at the breadth of experience gone missing from my generation's résumés - on loan to an unknown gallery. Fun had always carried the ring of tourism about it, an excuse only valid upon the arrival of visitors. But no one ever arrived out here, and come to think of it - I had never really hosted back in New York either.

Further up the inlet, steam began to drift off the falling torrents, and I got the suspicion I was stumbling upon one of those latent pockets of geothermal activity everyone always spoke of. Dave had explained that they used to be plentiful when groundwater melted down to meet the upwelling, but now the vents were having a hard time breaking through the permafrost. It was dangerous to go looking for them, he and Brice said - unstable ground in the remaining patches formed sinkholes. I had my own theories. What if the Earth had simply gotten tired of giving off heat? These could have been the death throes. The vents increased in number until I felt like I was wading through a river of fog and my hypothesis was voided beyond doubt. Tracks along the footpath grew slippery, splitting into terraces as the uphill grade grew more severe. Lunging up each step, the treble of wooden planks mingled with the pops and hisses of

the fizzling water. Vegetation in the vicinity exploded with color: cherry blossoms crept out of the gaps in stone ledges, persimmon trees dangled their fruit over the brook, swaying like ornamental lanterns. Several flowers fell and plopped into the pools creeping along the roots, bobbing in place for a few seconds before heading downstream. Where had I seen those fruits before? Closing my eyes, I began to hum - a melody even I didn't know. After so many pines and conifers I felt as though I had stumbled unawares into a zen garden, transported from another continent where the moon presided over a kingdom in miniature and the harvest was a time of plenty.

Fixated on the natural wonder, I almost didn't hear the faint sound of sobbing coming from deeper within the grove. My hand brushed aside the branches, stained violet from saturated petals. Within the earthy hollow, Caroline sat on a wooden bench, framed against a matting of leaves. When she saw me, she stared quizzically for a few moments, and then patted the empty seat beside her. Sparse stones dotted my way to her, and I lifted one foot after the other to match their irregular spacing. Her sobbing hung in the air like another note in the night's mystical chorus. Given the rarity of stolen settings like this, she would have been within her rights to question why I wasn't also in tears. The spot we found ourselves in stood out in such stark contrast to the usual bleached escapes available to our kind.

Wordlessly we got up and walked among the inky black pools beneath the shade of the bower. Ladled into crisp blotches, the deep waters streaked with flashes of phosphoric light. Hues beyond what I thought existed danced and flickered among the depths. Caroline stopped crying, or rather, her crying left her to settle into a more environmental melancholy. I felt a sharp fingernail brush against my jaw, but it was only



the light stroke of a branch she had been holding back - released a second too soon. Lily pads dotted the obscure pools where lethargic thermal blips kept the cauldrons warm but still. Orbs of light globbed upwards in slow motion bursts and decelerations. Among the reeds, the bill of the Crested ibis poked out, its formerly blood red eye patch now relaxed into a quieter tincture. We paused, watching the bird wade across this mysterious pocket of a valley not short on secrets. Caroline and I looked at each other; her conspiratorial air revealed that Ibis's sojourn here was not totally sanctioned. I had wondered if she had supported me with the moose, but now I knew: we were both champions of the individual.

"Sorry about back there," she said. "Some nights I can't stop thinking about it. I mean, it ruined their lives."

There were too many people with ruined lives that we both knew, but despite the intensity of our current experience, I didn't overestimate the effect it had on this strong willed girl; her broken smile was the kind reserved for rifts closer to home. Crested ibis flapped its wings and flew up into the Japanese maple above our heads - this seemed as good a place as any to stop. We found a moss covered log to sit on: decaying, but still sturdy enough to support our combined weight. Sitting in silence, we let our legs swing only a foot off the ground, but it felt like we were airborne. Every time I tried to inch just a little closer to Caroline, Ibis rustled his wing and cast a knowing stare in my direction. "Don't act wise beyond your years," it seemed to say. "Just listen."

So that's what I did. We watched the colors below us in the water fold over from sea foam to fuchsia, then dissolve into gunpowder blasts of orange. I wish I had known about this place earlier in the Fall - many a night would have benefited from a quiet

setting to digest the changes. But the person next to me was one of solitude, and I figured it was for the best that I hadn't wandered in here until the Harvest Moon. She must have noticed me staring up at it, because Caroline said:

"I wish we had gotten a different moon."

"The what?"

"People forget that we're not the only planet with a moon. Jupiter has a few. Saturn may have some as well."

"What's wrong with our moon?"

"I don't like it. It doesn't have any personality."

"Well, which one do you want?"

"Ganymede," she said, as if that settled it.

Our winged chaperone seemed more content to prune her feathers than to eavesdrop on us, so I hazarded a personal question.

"How does someone come to hate the moon?"

She looked at me and brushed her hair. A searching stare from Caroline left me with the vague sensation that I was running late.

"We used to have this country home in Western Massachusetts," she said. "Going there was always my favorite thing to do. And also to look forward to. Especially when we were really young, Fall was a magical time of year to be up there."

"My favorite season too," I said.

"Raking leaves," Caroline continued, "getting lost in a cornfield maze. My brothers would always tease me because I refused to carve the pumpkin - I didn't want to hurt it!"

And I remember there was always a brightly shining moon. Yellow almost. Kind of like the one tonight.”

“See, the moon’s not all bad.”

“When we found out my Dad would go see someone other than my Mom every time she took us up there, my family sold the house.”

I stared at her, feeling palpably the fracturing of a stronghold that was supposed to be safe. “It’s like the anguish gets backfilled,” I said.

“Every Autumn since then I’ve kind of barricaded myself in the library. And when I would walk back to my dorm, I tried not to look up.”

My mind was racing. We all made associations, connections real or imagined between negative emotions and inanimate objects. I personally harbored a distaste for rainbows, country music, and Volvo station wagons - but who’s counting. Resenting the moon though? That was taking things too far. I pointed up: a meteor shower marched across the stars. Caroline looked. We were far enough away from everything that it was easier to face the past out here, or maybe it was just easier to convince ourselves that we gazed up at an entirely different sky.

“If they’re hitting the Earth, at least they’re colliding with the Moon too,” I said.

“Vengeance,” she chuckled. That would be one thing we could always agree on.

We watched for a few more minutes, and then she added, “Look, the moon has a tail now. I told you it could be more interesting.”

And it was true, a sodium tail billowed behind the moon: a more muted version of the ones the comets wore themselves - blurred and faintly detectable - but present.

“Well I hope this convinces you to stick around with us Earthlings for a while,” I said, “I’d hate to lose you to Jupiter just because they have a better moon.”

“I’ll consider it,” she said.

Silence ensued and Ibis nodded approvingly. Meteors fell, vapors steamed, and cherry blossoms hovered slightly when the wind felt like blowing. To live was to accept an allotted string of hours, and I knew the coming days or even years would be vain attempts to reclaim this one, tinged as it was with sadness. For the first time in a long time, I sat still.

## Chapter 19

According to Hermann, The Yellowstone Group was entering a different stratosphere. He could feel it, and he wanted us to feel it too. We were all sitting around the cafeteria, but not for a meal. It was late afternoon and the abandoned eatery was the closest space we had to a demilitarized zone. While Caroline and I were growing closer, the old guard had been engaged in nonstop bickering. It was difficult to find quiet indoor space when domestic warfare was raging, so the rest of us had no choice but to tune in. The quarrel centered over whether to accept funding from a prestigious endowment, renowned for its philanthropic work. The fund was run by a friend of Meaghan's father, who she referred to as uncle. I couldn't tell if she felt warmly towards him or if the avuncular connotation was to expedite favorable tax treatment. Meaghan spoke of the wonder she had felt attending the charity balls thrown by these financial luminaries, held after hours in Central Park museums where anything felt possible. She still remembered the clarity of vision they possessed leading the crusade against cancer - of their appreciation for mixing the hard sciences with the humanities in chronicling the extinction of the moa. Our opportunity to partner with the fund was more than the chance to build vehicles and buildings, she said, it was a chance to establish The Yellowstone Group within a lineage of timeless institutions. NASA, The Smithsonian, The Royal Historical Society: we could sit alongside these titans if only we would forgo our hubris at the table.

In return for vast sums of capital, they were asking for a twelve percent stake in the enterprise, as well as access to detailed financials dating back to our group's inception.

Hermann waited until she was done, and then yawned lazily. Promises of immortality were of no use to those who had already made it this far in such deliberate fashion. His round would close with or without these snooty fossils, and he had been sketching something on his napkin, cleverly hiding a bit of graphite in the crook of his fingernail. He passed the drawing around and asked us what we thought it was. Before it was even my turn, the napkin reminded me of a courtroom sketch, and all the subjectivity that seeps into rooms where cameras are prohibited. “A lasso,” I said, when I could finally lay eyes on it- the lines appeared in the carefree outline of a cast rope flung through the air. I was already feeling giddy at the spirit of the West that I knew would come to clash against Meaghan’s yearning for established prestige.

“A noose,” Brice murmured on his turn, then passed it along.

Holding the paper a foot away from his nose, Hermann compared his intentions against our interpretations. “Both valid,” he said, “both valid, but no. This is the route of the Corps of Discovery Expedition.”

“Are you sure that isn’t something out of Verne?” I asked.

“It began in St. Louis and went up through the Northwest to the mouth of the Columbia. Anyone ever heard of it?”

Meaghan had laughed at my comment: it was the closest we ever came to aligning. Hermann dismissed my insolence. I had only started serious reading earlier that week, but she should have known better. He stalked over to her seat until their faces were barely centimeters apart.

“Maybe you missed the history bit while you were updating your personal website Meaghan? Perhaps with recent information on the fellowship you just won? Which you

won't actually do anything with because you'll spend that runway applying for the next one. And then the one after that. Until one day you'll be so old and distinguished that you can afford to hire someone to do some actual science for you." We all looked at Caroline. It was a brilliant stroke: if he could divide the Biology Women, he would have the necessary momentum to block this particular avenue of funding and all the strings attached. There was a bout of silence. A cook who had been stuck back in the kitchen since the tiff broke out nervously peered around the glass panels of the serving area.

"C'mon out bud," Hermann said, collecting himself. "C'mon out, it's completely fine. Stay if you want. This is an open forum, and you are welcome to participate if you want to." The sherpa went to remove one of the kitchen chairs from underneath an empty table, but it wouldn't budge. Brice went over to help, but still the legs refused to move. Finally Hermann and I lifted the entire table into the air, and the two Mongolians were able to free the seat in question and get the man seated. Meaghan waited until we were done, but her composure was long gone.

"Not everything can be about rebellion, Hermann," she said. "To eschew established funding sources in order to swirl the bromide of your own ego doesn't prove that you are above the societal influences of the East. Flipping the board over merely suggests you will have learned less from the past than your fellow man when it comes time to establish your own set of rules. But what do I know about history?" Hermann made to respond but she cut him off. "And your private plane, and your cool toys, and your big old line of credit still aren't enough to hide the fact that you're still a strange little boy who doesn't know how to talk to people at a party unless you're unveiling your latest magic trick."

Hermann responded by walking over to the window and pointing an electronic key fob towards one of the panes. Outside, an engine hummed to life and the double beep of car doors rose above the sounds of the one sherpa still fidgeting with his resistant chair.

“What was that?” Meaghan asked.

“My Range Rover,” Hermann said, “figured I’d warm it up. Whenever you get to the part about me being the schoolboy it usually means our arguments are reaching the two minute mark.”

“You bought a Range Rover with company expenses?” she screamed, “And still refuse to replace the electron microscope that this... this...” She was pointing at me.

“Lewis & Clark changed how we think about the continent with nothing but Sacagawea and a leaky canoe,” Hermann said to her, raising his depiction of their route on the napkin. “We can do the same if called upon. We shall renew The Corps of Discovery. We shall never surrender!” He fastened the oblong toggles on his coat, and muttered a phrase in Mongolian to the man sitting in the chair, and the man rose to join him. “I’m going to drop off Och in Durkhan and then take the plane out to Menlo for a meeting,” he said. “Thanks everyone for coming out and hearing a little bit more about what’s in the pipeline for The Yellowstone Group.”

For all the talk of money, ideals, and history, my thoughts had veered from the macro ever since the night by the geothermal pools. An idea popped into my head, and I knew I needed to act fast if anything was to come of it. As the girls headed back across the brook to their home, I chased out into the cold after Hermann and Och. They were almost at the car when they turned to see me running behind them. “Hi Och,” I



said, "I didn't know your name was Och, but thank you for cooking all of those meals for us," I said.

"You are welcome," Och said, and then he cried out, "Shotgun! I want one of those heated seats."

Hermann laughed and then turned to me, "What's up Sam?"

"Well, I was wondering if I might accompany you to Durkhan for the night?"

He was a hard man to arouse suspicion in - there being so few limits on the bounds of his own nefarious ideas. "What are you playing at Roberts?"

"It's ahh, it's..."

"I'm just kidding. What does an old man care? Youth! Come aboard, but Och's reservation holds. You'll have to sit in the back."

The frozen landscape slipped by us as Och, Hermann, and I debated what the proper playlist was to roll into Durkhan with. Music in vehicles was a novelty for me after so many weeks associating travel with crooked nails and splintered plywood. Hermann had been on a French EDM kick lately, and Och longed for the tribal songs of his boyhood on the steppe. My thoughts raced for a minute before settling on the safest suggestion I knew: jazz.

"Jazz it is," Hermann said, turning on the surround sound. Wyoming viewed against the melodies of Charlie Parker was Wyoming viewed for the first time. This was luxury travel: the Range spat in the face of the ruts and divots which had threatened to burst the old white van on our way in. For kicks, our driver swerved out into fields of snow, his eyes lighting up every time we skidded across a drift. My stomach heaved as I clutched the overhead coat racks to prevent from flying out the moon roof. An old friend

once commented that the beauty of the West left the irresponsible with no option other than to mess it all up. For the first time, I felt that I was abiding by that truth, not as a visitor or spectator, but as a resident. Guilt mingled with the justification of participating in a wholly new experience; if Och felt any trepidation, it didn't show. Stored somewhere behind his placid eyes was the knowledge that his ancestors had crossed the Bering Strait. While the vehicle performed well in the snow, I couldn't help but smile to myself as the tires spun out in the icier sections, and groaned under the load of particularly steep slopes. The most efficient load balancing system for an automobile was still not enough to compensate for the wrong point of contact with the snow. That year's four wheel drive was still antiquated compared to what we were hacking away with on the Wandruhr down in our garage.

When he got bored of the drifts, Hermann brought us back onto the main gravel road. To compensate for the total amount of adrenaline in the air, he changed the station from Jazz to French EDM. The music shifted something within me, and the rush of a free upgrade soured into the listlessness of heated seats - this wasn't my intended adventure, and I felt like I had to say something.

"Hermann, isn't driving one of these like..."

"Like what?"

"Like hypocritical?"

"No."

We drove on for a few moments, letting that sink in. I looked at Och for support. Black market usage of gasoline was a practice Brice frowned upon, and even if the majority of the villagers agreed with him, the Ferryman had been an anomaly in his

willingness to take a stand. When Och saw me looking at him, he let out a contemplative “Mhhmm” and gave me a pat on the knee. He wasn’t an aged enough elder to get away with it, and I was too old to find any reassurance in physical touch. Hermann’s stare in the rear view mirror took measure of my body language every few minutes, and I knew something had stirred within him. An attack from a biologist was one thing, but he seemed to be amassing the right words to ensure he was understood by his own kind.

“Look Sam,” he said, “People like you and I, people that the world deems aloof, we have the horsepower to direct our energy at these really intangible problems that the average person doesn’t get to think about, you know. It’s only because we’re not fighting some petty crusade over getting respect for our demographic, or clambering for a promotion, that we ended up considering how our entire globe is going to make it through the next hundred years. Does that make sense?”

“Yes,” I said, “but I don’t get what it has to do with the Range Rover.”

“With all due respect, you’re hurling political correctness at me over my car as I’m giving you a ride in it, but I’ll do my best to keep answering honestly.”

“Sorry,” I said, “I’m not trying to wear you down. It’s just that, obviously you got this place off the ground by sticking to some pretty original principles. And I don’t get how paying me to build a vehicle without gasoline fits into you buying a new car.”

For a few moments Hermann focused on the curves in the road - without double yellow or guardrail, the route was visually straining at night. When we emerged from the serpentine sections into more open ground, he resumed the power steering behind his argument. “We’ve established that Sam Roberts is an engineer who takes his time

seriously. Not through arrogance but through accuracy he admits his days carry greater capacity than the hordes of fraternity brothers passing him on the sidewalk, descending on the local dive bar.”

“Yupp,” I said, not exactly enjoying remembrances of those sidewalks, yet unable to forget them either. Peopled by the groups I would never understand, and even worse, by those I thought I did until they abandoned reason for the inertia of the standard thing. It was my equivalent of Caroline’s dismembered childhood; an annulment of the fragile friendships which in our youth seemed poised to set the world aflame.

“The price you pay for your specialization is isolation, but one of the upshots is access to greater means of expediency. Currently your job is to build the Wandruhr. Mine is to keep this place afloat, and every action I take has to be in service of that.”

“Why not take a Prius though?” I asked. “So you arrive at the conclusion that you need a car, fine. I get that. Why purposely adopt the most obnoxious one?”

“Not enough horsepower with the Toyota,” he said. “In addition to constraints of time, each of us has a finite available energy reserve we can draw upon on any given day. The exertion spent worrying over whether or not I’d make it over the grade would invariably detract from mental resources allocated toward some greater conundrum.”

“You’re convinced it’s that airtight? That adding in any way to the larger texture of the world’s myriad causes directly subtracts from your own endeavor? I’m not sure it’s hinged to that degree.

“If a butterfly flaps its wings in Japan... But alas, you still don’t believe me.” Turning to Och: “So he’s new to the Range, let’s try an example from his world.”

I breathed in before the pummeling of Hermann's logic. Sitting in the back row alone, I had no choice but to bear the brunt of it with my feet split on either side of the awkward nub in front of the middle seat.

"Great," Hermann said, "so you're on the way to work - if I remember correctly you live near the Christopher Street Station. Intellectually you grasp that taking the subway is the most effective mode of public transpiration in New York, and it's also the cheapest. But you also know that this price comes at a cost. You're surrounded by advertising; for those twenty five minutes you are living totally engulfed in someone else's world, and they want you to buy things you don't need. Why do advertisers compete for space down there? Because they know that people ride the rails! So now you're really scratching your head because the cost is harder to quantify, distributed between your own fare and the corporations splitting the difference whom you neither know nor trust. Even though the subway isn't churning out the emissions of a private car, you know for certain the furniture company that's advertising down there is - and then some. So you stick to YOUR principles and you get out and start walking. But you have a meeting you can't miss. What type of job would it be if you didn't? If you miss the meeting, the prototype you've been working on for the last few months will never see the light of day, and then not only all of your commutes, but literally all of your waking hours will have been for naught. Only then do you realize that the only escape from this mess is to craft something better. But the vehicle that will save you needs to be built, and that isn't gong to happen if you never get to your desk, mired in the preoccupations of the how. So you take the fastest vehicle you can get your hands on today while you work out the kinks of tomorrow. You grew up in the East so you have cities and things

like that to obscure the situation. But I'm from the Midwest, so the public perception over the modesty of travel was always a fallacy I could see clearly. I can assure you that buying an American made muscle car or flying commercial is a sure fire way to never get where you want to go. So here I am driving through the snow, giving Och and you a ride. And at least he's chill, but he probably just doesn't understand English very well. And you're in the back seat giving me grief. What do you want me to do? Sacrifice what I know to be the quickest path to my destination in order to satisfy someone else's idea of what I should be doing within an arena I don't even want to be competing in in the first place. Do your job Sam! Let me do mine. You want to stay on your high horse?" he asked, slamming on the brakes. "You're more than welcome to get out and walk! So how about it cowboy! Seventeen mile straight shot to Durkhan. Watch out for the crevasses in the rock and the pitfalls of your own conscience. It's a long way down."

I sat immobilized in the back seat, afraid to budge towards the door. "That's what I thought," Hermann said. "You have somewhere you need to be tonight too."

We drove in silence for the next several miles. There were various points upon which his argument broke down. If everyone bought another car for instance, then the traffic would render the gains useless and then it was back to the subways, or apparently the gutters of commercial airports. It all seemed so clear in my thoughts, but every time I went to express myself in words, I couldn't find the gas pedal. The Range arrived at the familiar sight of the creaky steel bridge, but the boys only saw our approach as we were already speeding through. Out of the three, the same lead urchin stepped out to plant his feet firmly in the middle of the cattle guard, his few teeth glinting in the moonlight. Still riled up from our conversation, Hermann actually kicked the car

into a higher gear as we shot towards the adolescents. I couldn't be sure what brand of morality the teenage gang possessed, but I knew our driver harbored zero ethical qualms about running them down. While on our trek to campus that first day, the boys had emitted the arrogance of concealed arms, my guess was that we outmatched them tonight. If Meaghan, beneath her felt Tyrollean hat, was capable of brandishing a rifle, I didn't want to know what Hermann's genre of self defense looked like. At the final moment, the lead urchin dove for safety.

"Gentlemen," Hermann said, as we shot by them. He offered a small salute as they receded in the side view mirror; it was the same respect the matador might have held for the bull. There was no resentment from a driver whose daily routine was no holds barred. As the fuel tank lowered in response to the breakneck pace, something about his foot on the gas seemed to fuel the founder up. He turned back to me and said "It's cool with those guys back there. We kind of know them." Then looking sideways at his passenger: "How are the seat warmers Och?"

"They're great."

"Cheers man."

They exchanged fist pounds.

Shortly afterwards we arrived in Durkhan. Similar to my entrance with Brice, once an avenue was decided upon to approach the small village, it was only a few sharp turns until the desired destination. Hermann and Och discussed the coordinates of Och's residence, and thirty seconds later we pulled beside of a small, decrepit hut - barely larger than the car we arrived in. The men shook hands and Och hopped out of the passenger seat - waving goodbye and extending his wishes for a pleasant rest of

the evening. Hermann offered to chauffeur me the remainder of the way to my destination, but I wanted to play this one close to the chest.

“Fair enough,” he said.

Closing the back door on my way out, I watched the tail lights of the Rover disappear around an intersection. It was the first time I hadn’t thanked someone for a ride.



## Chapter 20

Despite my insouciance towards navigation from the back seat, on foot it took me a couple of blocks to orient myself. The starlit outline of Durkhan's basin began to give a sense of place, but the intensifying smell of fish really drove it home. When the aroma couldn't grow any stronger, I knew I was near the cantina. From there it was trivial to hurry up to the Northeast corner of town to the black and white theater. Part of me expected to see Gerel up on the ladder - lost among the letters - but films didn't turn over that frequently in this town. Instead she was inside, feet propped up on a small crate, one arm holding open a book while the other was reserved for the sacred task of eating popcorn. The machine had been fixed. Inside the theater, melodramatic voices and overzealous sound effects boomed out from a prior era across the silver screen.

Mentally, I was getting ready to re-introduce myself, practicing the subtle flip from nice to meet, err, see you, depending on whether Gerel recognized me. But before I could get my stumbling words straight, she wrapped me in a bear hug and said, "It's so nice to see you again, Sam. But you're fifteen minutes late for the show."

"Oh, you know I actually-"

"And even though you're Brice's friend now and all, I can't just go around letting people in because of who they know. That would be nepotism." Pausing to look about, she whispered, "if it was just my theater, I'd find you a spot in the back row, but if word got out, my boss would kill me. And right now this job is all I have."

"I know the feeling," I muttered.

Gerel ran off to fetch me a fresh bag of popcorn before I could protest that I didn't like the way it stuck in my teeth. That and my stomach was still full from the tikka masala - the kitchen hadn't changed their menu for a few days and I hadn't changed the scope of my voluminous appetite. But when Gerel returned with a fresh kettle, I had no choice but to partake. A working invention was always cause for celebration. We chatted for a while, mostly small talk about where the arts were headed. She weighed the pros and cons of the avant garde against postmodernism while I tried to dislodge the first stubborn kernel from my molars. I tended to consider issues in terms of systems: in terms of holding companies and patterns of control - but Gerel had the admirable ability to discuss aesthetic influences in a manner true to form. It was refreshing in a way I hadn't expected, and I made a note to try and do more things purely for their own sake should the opportunity ever present itself.

She made me believe that corruption on behalf of the large scale studios wasn't about to stop her from realizing her creative vision, but Gerel's avoidance of industry mechanics went beyond simply artistic taste. Her circuitous analysis belied a more personal situation: her move to LA hung in the balance.

"So, why are you here?" she asked, before I could say any more about it. The comment caught me off guard; I was beginning to feel a warmth to the theater which had so far eluded me in this state. Without even needing to see a film, there was a security that came from knowing that folks in the vicinity were not presently dedicating themselves to sucking every last drop of innovation from all they came into contact with like a troupe of bloodthirsty vampires. I gestured around the theater saying, "well, it's a nice place just to hang out. But yes, I did come for something."

“Hit me with it,” she said.

“Do you have any spare lenses?” I asked.

“What are you trying to build?”

“A telescope.”

We walked up a narrow, spiraling set of wooden stairs to the projector room. Gerel prided herself on being personally acquainted with all aspects of her art. She could act, write, direct, and even perform the back office functions such as accounting and projectionist(ing). Maybe? Whatever. I knew a bit about how optics worked, but she actually knew what life was like behind the shutter. Gerel fastened two convex lenses to opposite ends of cardboard tubes, and began to gauge the refraction of light.

“It’s kind of makeshift,” she said, handing it to me.

“It’s perfect.”

So many of the materials I was used to working with arrived at my doorstep without any tacit knowledge of how they were created. One of the benefits and drawbacks of being an engineer at a well funded group was that rapidity. Convenient in small doses, it warped my long term view of the material into a place where everything was interchangeable and ultimately disposable: not the kind of space I wanted to inhabit on the verge of procuring a gift. By comparison, Gerel’s token was heartfelt and pure. I scrounged in my pockets for something to give her in return. It was bewildering to come right out and ask for a favor like this; the kind of brazen act I never would have undergone for myself. A prickle in the universe had dictated that the only person I felt comfortable going to was one who - on the face of it - had so little to give: but here we were.

I suggested we test the telescope on the roof, but Gerel grabbed me by the ankle as I began to ascend the top flight of stairs. It was bad luck to take a gift for a test drive, she said; though I hadn't mentioned my intentions out loud, it must have been obvious it wasn't for me. Superstition aside, it was never a bad time for some stargazing on the roof, I said, and she released my ankle and followed me up. After we climbed through the top hatch of a trap door, a peaceful night greeted us. Apart from the bulbs of the marquis, the town was relatively free of light pollution, and the sky was chalked with a milky, cosmic dust. Some law of inversion dictates that this level of clarity is always accompanied by some reason why the duration of the viewing is cut short.

"How are you getting back?" Gerel asked.

"Walk," I shrugged.

She patted around her pockets as if there was something more she could do; something she could get me. But it was supposed to go the other way.

"Are you sure there isn't anything I can offer you in return?" I asked, slinging the telescope over one shoulder. I knew as soon as the words came out how meager my position was. How did people manage to pull all of the strings necessary to grow up and support a family if even asking for one favor made me feel so small?

"Just deliver on this vehicle," she said, "and however you have to do it, make sure that Brice gets his portion of what's due."

"I'll do my best," I said.

"That's not good enough," Gerel said. "My brother's a hard worker, and there's a lot of money flying around that place, but I'm worried if he doesn't speak up for himself more often, none of it's going to land on him."

“Understood,” I said, searching her gaze to try and divine the last time these siblings talked. If my own sister was any indication, then perhaps Gerel had yet to hear about the time we skidded to a stop over the garbage beneath the ice.

“Well, I hope she likes the telescope,” Gerel said, smiling. Then added: “It’s a relief.”

“What’s a relief?” I asked.

“That that was all you wanted! At first I thought you might have been one of those creeps looking to buy a muskox skull.”

“You sell those?”

She gestured around the theater. “I don’t kill them, but I do find some out naturally in the wild. Black and white film doesn’t pull in the money it used to.”

“Most things worth doing don’t,” I said in farewell.

Back down two flights of stairs and out onto street level. The night was still, save for my own cough from the tail end of a cold. On the walk back, I was thankful for the weight of the telescope - shifting it back and forth from one shoulder to another gave me something to do. Wildlife tracks crisscrossed the ridges, but I didn’t see anything outright. While I had traversed only a few miles by the time it was midnight, I guessed that Hermann had already cleared Idaho. There was dignity in walking though, and I wouldn’t have traded my position. When you were the only human being for miles, it didn’t seem to matter how you got from Point A to Point B. It occurred to me to sprint a few steps and lunge head first down the bank of the nearest hill. In the manner of a river otter, I slid on my belly to its base. As I looked back, I realized this lower slope was only one portion of a larger massif, and mild wind drifts were already covering up my tracks

from moments before. A sense of security out here was always a momentary affair. Had Gerel really believed I had come all this way looking for a muskox skull? If something couldn't be seen in its natural state, I thought, it wasn't worth witnessing at all. Lost among such speculations, I wandered home. By the time I eased open the door to the Great Hall, all of the lights were off and everyone was sound asleep. Or almost everyone. Although the door to the common room was closed, when I walked in Brice was waiting up with the weariness of a worried parent.

"I'm sorry man," I said, gauging his expression, "I should have told you where I was going. Every day from here till the end of the Fall matters. I get that. It won't happen again."

Puzzled, he said, "Oh, I was just up reading, but good to see you back! Caroline came by. She wants to know if you want to learn how to ski tomorrow."

"She what? I can't believe I missed my chance."

"You didn't. I told her you were in the shower, and that you'd be there in the am."

"What time?"

"6"

"Well, she's an early riser I suppose. What time is it now anyway?"

"3:30"

I stroked an imaginary beard that wasn't there. This was serious. Low on sleep, I worried that one wrong move might sever the tenuous strand of trust I had already built up with her. But I had already committed to skiing, or at least, the commitment had been made. Cancelling wasn't an option. What if she changed her mind? No, I would soak up

what sleep there was to be had, and emerge at dawn to wrangle what I could from this least egalitarian of winter sports.

It was still dark out when the alarm went off, but it was getting to the point where that detail was less of an exception than the norm. Then began the innumerable addition of layers. Already a day on the slopes was off to a questionable start. Like so many other aspects of The New England Sporting Life, skiing remained purely a conceptual exercise for me, wrapped in societal airs. My time spent working in the tuning room had entailed deliberate attempts to shutter myself to the application of the parts I assembled. As I wriggled a set of foot warmers into my boots, I tried to remember that my perception had divorced from what the pastime really was : only another means of moving across the snow. To be transparent, it had not always been the motions of skiing itself that I resented, but the lifts and mountainside developments left in its wake. Construction of these monstrosities cut gashes in the tree line as irrevocably as any freeway; it was the age old conundrum of ruining nature in order to better access other parts of nature which were soon to be ruined. I talked myself into believing that today's experience would be completely different during my full body check of gear. For those who have never undergone this ritual, it consists of starting at the toes, and working your way up the human anatomy, envisaging each necessary layer of your backcountry setup and ensuring it is ready to go. I was missing one left sock and a neck gator, so it was a practice worth completing. Today, we would be using the skins Brice had already introduced to work our way up the mountain - willpower would be our only extra ingredient.

One of the nice things about the dawn and the cold was that when I met Caroline on the bridge, I was so bundled up in layers that she couldn't see how frazzled I was. That seemed like a fair trade for appearing as hulking as the abominable snowman.

"So nice of you to join," she said, casually going about readying the gear and provisions. Aside from my own clothing, I had literally brought nothing. Luckily, Caroline was adept at distributing the safety equipment and emergency supplies equally between our two packs. To skin was to attach an adhesive layer to the bottom of the ski so that it was easier to trek uphill, and after a few demonstrations I felt like it made sense. True to Brice's promise: our models were woven of both nylon and mohair.

"It's so that there's a combination of stick and glide," Caroline said, "too much of either one can be unwieldy."

"Right," I said, nodding automatically. This was the sort of cultish application that could easily slip into its own philosophy. Muhammad and the Art of Mohair Maintenance. Upon hoisting my pack off the ground, a jumble of avalanche gear shifted inside. I was dismayed to inspect the contents: beacon, shovel, probe; not my definition of getting in a few casual morning laps. Lunch back on campus had hovered in my mind as the finish line - the nearest opportunity upon which I could slump low in my chair, and toast to the fact that I had lived the prior twenty four hours to the best of my ability. But as Caroline began to explain how to properly read the signals from the transceiver, it seemed instead that I should be breaking out one of the fancy campus quills to sign away my liability. Once we had taken turns probing for a buried backpack beneath the snow, her demonstration was complete, and we had earned the right to begin our slosh uphill. The unspoken understanding was that we were prepared to save each other's lives, but the



playing field was not wholly level. My hope was that nothing would go wrong, for I had barely absorbed any of the educational material. Thankfully the ascent was primarily a matter of endurance; inhibited brain function may have been an asset. Possessing little in the way of athletic reserve, I drew instead on my motivation to make a good impression, and was generally able to power through. We took a direct approach up the first headwall, far from the incoming road and all the outgoing brooks. On the shelf above the first slope, Caroline created switchbacks to lessen the interpreted grade. We were fully exposed to the wind, and I would have preferred to trade raw exertion for less time blown about by the gales. However far away the distant fang of the peak loomed, we were actually traveling much farther to get there than any crow had ever flown.

At a high enough elevation, even my griping subsided in order to enjoy the view. Beyond any altitude I had ever known, the world below looked peaceful and calm, a distortion I had to marvel at because I knew it wasn't true. I imagined Caroline and I as members of a superhuman race, whose destiny it was to exist at these lofty heights. Topography became less about individual elements and more about gradients. Browns, grays, and whites filled in below us while pinks, salmons, and blues shimmered above. We were the only defined forms in an otherwise blurry palette, and that seemed as it should be, for she had been the only definite thing I could focus on for a while now. Amidst all the required items in my pack, I remembered the one that was there by choice.

Was this what it was like proposing to someone? Creeping about with a grenade of unasked-for benevolence strapped to your person? Of course this was only a gift for a friend, but I had my hopes. For so much of the morning uphill, I wished that time and

distance would expend themselves more quickly. But on the verge of the exchange, I worried I wouldn't be able to steady myself for the handoff. There seemed to be a million dimensions that all needed to fall into place, and none of the outcroppings we trekked between passed the requirements. In the final phase of the climb, the swirling thoughts began to numb and curl in upon themselves. Keep moving, Sam. Don't let Caroline get too far ahead.

The bindings of the touring skis allowed the heel to move up and out of the release while the toe stayed clipped in. Efficient enough for the ski, but tremors ran up and down my calves from the repeated alien motion. My gaze was locked on the tips of the pair in front of me, gliding effortlessly through the snow, when their owner called out: "Hey Sam, let's stop over here!" She was forty feet away, but there was so little noise to dampen her voice that it sounded like she was shouting right into my ear. The summit still soared above us, but we had reached a kind of shoulder near the top - a natural fissure in the rock where the snow ran into pure sky. I sat down beside Caroline, and it felt like a bench formed out of the spine of the world. Looking over the back of our seats, the universe fell sharply away. With our hands on our knees, and the sun bouncing off our goggle lenses, we stared down at the way we had come: two pairs of tracks amidst vast fields of alpine snow. It was a great distance for a couple of souls pushed on by something indefinite. How insignificant were the lessons we had to prove to ourselves, compared with the spires and vertical drops the mountains offered of their own accord; the world would never run out of places for us to go.

Ripping off my mitten, I rummaged through the granola bars and puffy filaments within my pack for the cloth wrapped gift. Before she had even realized my intentions, I

passed it to Caroline and watched her gently unlace the ribbon. In the light of day, the packaging looked as flimsy as the gift itself - shorn angles of tape revealing the amateurish nature of its cutter; never gift wrap at 4am if you can help it. We both breathed a sigh of relief once the telescope was revealed. She immediately held it up, and squinted with one eye closed while the other scanned the horizon. Her scrunched expression revealed a small band of freckles, normally disguised by either makeup or goggles: such were the options for a masked visage in Wyoming, incongruous as they were. She glassed the valley we had been living in for the last two months, and then out of all the great cardinal directions, she decided to look East.

“Wow, thank you,” she blushed, setting the telescope down. Then she looked at me. “But I’m not totally sure what to make of it?”

“Oh, I don’t know,” I said. “It seemed to be the opposite of that microscope Meaghan is always grouching about. And you also have that thing with the moon.” In my mind the telescope had come to represent so much more than that, but I was starting to feel self conscious; cloaked no more were the private thoughts she must have seen I’d had about her.

“Wow, you’ve really put a lot into this,” she said, turning the telescope over in her lap.

“Yea?”

“I’m glad.”

This moment was the happiest I had ever been, and the world was slowing down to accommodate the foreign sensation. Clouds the shapes of continents drifted over our heads. Pangea split off into its fractal constituencies. The southeast corner of Vietnam

trailed off into fiery droplets of Pacific Isle. I was content to be where I was for the second time that Fall, and hoped that for just a couple more seconds, the Earth might forget about its need to change.

“Sam, there’s something I have to tell you.”

A host of possibilities rushed through my mind. None of them good. “Ok,” I said.

“Sam, I’m leaving.”

“You’re leaving this ridge, or like?”

“I’m leaving The Yellowstone Group. I’m moving back to New York.”

With a snap it all vanished. Even the clouds scattered, leaving a diminutive ceiling in their wake: a covering less than a clear sky. We were no longer curators in our own art gallery, but surrounded by the cheap prints of a waiting room - a chamber I felt destined to inhabit forever while real people went about their lives in real cities, discussing real issues late into the night within real relationships. And I was just a ski bum, still learning to put one boot in front of the other without stepping on a cardboard telescope. The era in which I had lived vibrantly closed up behind me, swallowing all hope in its path. Even my curiosity was not directed towards the Caroline who sat beside me, but at the one of the past few weeks: the version who must have weighed the few treasured moments against the many causes for doubt and ultimately decided that leaving was the right decision. But then she said something that changed everything. Again.

“Come with me,” she pleaded, tugging at the arm of my jacket, pulling me closer to her. “My father can get you a well paying job. We’d have enough to rent a flat somewhere.”

“Come with you?” I asked. “I mean, I kind of started out this hike thinking you were going to teach me how to ski. Wyoming has its problems for sure, but I’ve never felt more at home anywhere else than I do right here.”

My moment on the spine didn’t last long, but it made an impression. More sensory input seeped through my nervous system in those twenty minutes than in the twenty years I’ve chosen not to talk about. The wind threatened to tear the tape off the fledgling cardboard tubes and Caroline suggested we head back down. Without a distraction of a certain kind, vertigo set in and I realized how high up we were. No longer in the romantic sense of the phrase but as in: this really isn’t a good idea. When we were trekking uphill, the mountain had felt close at hand, but now it seemed that catching a stray edge could result in a tumble into thin air. Caroline was an adequate teacher, though learning to ski was sliding lower on my list of priorities. We progressed slowly, tracing mostly horizontal lines back and forth, feathering our way down the face laterally. Despite my periodic tumbles, she never lost her patience with me, and for that I thank her. Still, I begrudged the mustered effort she could summon because she knew there wasn’t much time left. I knew because I had reached for those reserves myself: I was used to being the first one out the door. Meanwhile her technique as an alpinist was flawless: the gulf between us a chasm begging to be crossed in haste, but to do so would have only exposed how twisted my feelings had become. To be a beginner was still better than being normal: the Wandruhr had taught me that much.

Once I stopped caring about landing in them, the tufts of snow tasted like nothing at all really. For a few humorous moments, I was able to forget myself and chuckle aloud with Caroline. Biology, ever the underminer of our better nature, may have swung

around and saved me in those light-hearted moments. To smile in deep powder was an almost atavistic reaction. But the sensation was as temporary as a reflex, behind the fog of my goggles and the exhalations of my natural, then forced laughs, I longed for the hour when I could shut my bedroom door and just be sad.

While I was fixated on why she was leaving - between turns - Caroline spoke only of what she would do next. Her explanations were protracted by my falls, but each bit I did manage to hear was only another contributing factor to the buckling of my knees. This had all been a positive experience, she said, and it was always awesome to meet new people.

But, I thought. But what?

But being around animals all day had made her realize that she didn't actually feel the same way about mustelids as she did about humans. Wyoming had taught her she wasn't ready to become a vet; she wanted to be a doctor.

I was speechless.

Before The Yellowstone Group - in her senior year at Columbia - she had actually applied to medical school. She had gotten in but decided against going to pursue her dream of working with animals. But it turned out this place was far away, and dreams weren't meant to be filled with grizzly scat and the wooly pellets left behind by owls. Caroline was coming to realize there was nothing wrong with being a good person within striking distance of a happy hour. Before I could interject, she mentioned she had spent the last few weeks talking the decision over with her family. Subtext: Don't go there Sam! The winter roads to her conscious were closed down for the season. Maybe forever.

I wanted my telescope back, but there was more to hear. For exceptional cases, the medical school offered distinguished applicants mid year admission. Caroline was leaving the wordless wilderness for the meaningless adjectives of higher education, and she was already practicing. I couldn't process it; her new life started in January. She was going to medical school. Brice and I would either be retired by then in a kickass chalet, or plowing people's driveways if our plans went bust. For the lower half of the mountain, I followed the fixed, grooved lines of Caroline's ski tracks. Her future was set in place as rigidly as her railroad carvings over the snowpack; mine was going nowhere. This must have been how the workers had felt when they completed the Transcontinental Line: having followed prospects of fortune out to this remote region of the Rockies, only to pave the way for a select few to more rapidly reach their destination. Had the mountain laborers grimaced that day in Utah, as the final rail tie was hammered in? Or were their expressions frozen like mine into a windburned scowl?

I couldn't take the idiotic side to side turns any longer, and veered ahead to straight line it the remainder of the way down the rest of the hill. Everyone else might end up leaving to live some boring, complacent life, but I wanted to go fast enough to determine my own fate, even if that meant crashing and burning. Of course I fell after no more than a hundred yards, and it was Caroline who helped me up. There was something intolerable about teetering on the verge of competency, and I couldn't help but ruminate on how the order was all wrong. Her ski lesson should have happened right when we first got here. It would have been fine to be a novice then, flailing at first, only to reach deep within and somehow prove my worth. But instead, Caroline's last images of me

would contain wobbly thighs wedged into a pizza - a degrading term of forward motion if there ever was one.

At the bottom, we slowed to a stop on the flat of the bridge between our two buildings. Both of us stood with our backs to a mentor who had taken things too far. Caroline, at least, had found a way to wrest something from the experience, while I felt like my legs were about to give out. She inched closer to give me a hug, but I took a step back and offered a high five instead. Our mittens barely grazed as she tried not to acknowledge how hurt I must have looked. I think it was an act of charity on her part; I'm not fully sure. Caroline forced a smile and said that she would be leaving on Saturday, but was free all day tomorrow. Would I want to hang out? We could meet for tea. She had some ideas brewing regarding the Wandruhr - lessons from the world of biomimicry that might, in some small way, unite the threads of what we had both been working on.

Why do people always insist on making plans of which they have no intention of following through? Just go! I wanted to scream. "Great," was what I actually muttered aloud, already in the act of turning away.



## Chapter 21

I ran my hands through cold water under the faucet - more attuned than usual to the rushing of the pipes. My roommate had been quiet when I walked into the kitchenette, and I was doing my best to submerge my anguish. Once I had regained some feeling in my bones, I walked towards the bathroom to search for painkillers in the cabinet above the sink. Adjusting the mirror to examine my goggle tan revealed Brice staring through the reflection; he was loitering outside the doorway.

“Everything alright?” I asked.

“No,” he said, “no it’s not.”

“Well tell me.”

“Do you remember the Ferryman?”

“The guy with the shopping cart and the oar?”

“That is the one.”

“What about him?”

“He’s dead.”

I plopped down in the armchair and listened as Brice explained how the Ferryman’s mangled body had been found in the center of the village - dropped there by a band of snowmobilers after some unspeakable accident. Rage began to boil within me: the callous manner and swaggering arrogance of those men had cast a pallor over Durkhan’s few optimists. They were a trace of the outside world’s avarice in a town otherwise content to find happiness amidst the squalor. Brice cautioned me against my

explosive remarks though, saying that while he was no fan of the snowmobilers either, the villagers believed these men had been trying to save the Ferryman's life.

I knew him barely, but this person appeared to be at the very pinnacle of communing with the natural world; it didn't add up. Unlike so many of the fantastic explosions which made the evening news, whatever ate away at lifespans in this region was as difficult to quantify as it was to coerce within the camera lens. Even if Brice and I couldn't articulate what was going wrong, we could at least follow the last strokes of the oar. I pressed my roommate for more details, but he insisted that he had already shared everything he knew. If we wanted more information, we would have to attend the funeral in person.

"Well, obviously we'll go pay our respects," I said, "but when is it?" As soon as the words left my mouth, I experienced a streak of *déjà vu* - where anytime I asked that question, I was left with scarcely a moment to prepare: the answer was always immediately. Brice's response was no exception. The funeral was taking place that night.

Beside the pile of boots and jackets around the door, Brice began lacing up for the memorial service. He would certainly understand if I just wanted to rest, he said; but I knew that was his way of saying I basically had to go. From the moment I had invited this Mongolian into my life, the sherpas had been unflinching in their support of our joint quest; no sleep would come if I was knew the inhabitants of the village were in mourning. I hobbled over to join Brice before the rest of my body could utter protest. My toes were gnarled from having been crammed into ski boots all day, and the nail on the right big one was already peeling off. I slid a pair of dirty woolen socks over them as

there hadn't been a day recently with enough time for laundry. Brice watched with disdain and commented that allowing them to expand back into their normal shape might be even more painful than keeping them restricted.

"Then what do you think about skiing to Durkhan, instead of walking?" I asked. "I think I'm starting to get the hang of this sport."

"Even with skins," he said, "The route back will be impossible."

"We'll hike back. All we need to worry about right now is getting there. Do we want to be late for the funeral or not?"

Under the moonlit basin, I was beginning to feel that this was my natural habitat and the warmth of my bed was the out of bounds experience. It was the first time I had seen Brice ski, but as with everything the native set his mind to, he was more accomplished than anyone I had ever met. He didn't think there was anything particularly interesting or remarkable about his versatility on snow - it was simply an extension of his duties to stay current on the means of navigation. We cut a trail across the silent valley; the beauty of the bindings was that we could flip from trekking to skiing mode if we reached a section we could glide down. Together, we achieved the kind of Bedouin harmony which is granted those upon an honest errand, and it was no surprise the bison chose this evening to make themselves known. Assured of our nomadic origins, they loomed not upon some distant hilltop but on either side of our path. Shaggy coats cloaked the ancients, falling to inches above the starry snow. Their ice beards dusted all the way to the ground, while wisdom clung taut about their entire countenance. Even chewing on grass became the most sage of activities. Content to

contemplate, they would have outlasted anyone at The Yellowstone Group in a late night conversation of: What Does It All Mean? On any other occasion, we would have paused to check in with them; Lord knows we needed the countenance, but tonight we had miles to go before sleep, and at least a few kilometers before a funeral.

After taking a last thorough look at the herd, we poled over the next ridge. Now that we were on skis, the narrow passageway between the valleys hurtled by, and Durkhan glowed below. Unlike my prior visit in the dark, the village was lit by torchlight tonight. It was difficult to make out the incandescent bulbs of the marquis when every block within the minuscule grid was transformed into an intersection of fire. How do you commemorate one who refused to give in to the pull of petrol if not with a primitive flame? To live a lifetime without succumbing to the comforts of the gas powered or the aesthetically pleasing was a contentment few knew.

Despite being a novice skier, I locked into Brice's tracks until we coasted upon the outskirts of town. For a millisecond, I wished Caroline could have seen me, but then just as quickly the thought was gone; tonight's errand was an end in and of itself. Kneeling there in the snow, we clipped out of our ski boots and back into normal shoes from our packs. My legs didn't quite bend the way I wanted them to, and I hoped the service would at least have comfortable chairs. We carried our equipment to the only patch of dry ground in town - beneath the overhang of the movie theater. For the first time, its lights were shut off, and no film played across the screen. Life, it seemed, had transitioned beyond what could be captured in black & white. We left our gear there and headed across town. While torches burned in the eaves of every hut, the streets themselves were deserted. An eerie gleam smoldered around the shadows of the

town's makeshift objects; unique instruments suited to survival by day cast off grotesque patterns by night. No one manned the gas station, and the former sparkle of diesel was dulled by its presumed culpability in the Ferryman's recent demise. The scent of fish began to make itself known, and no one needed to mention that the proceedings would be carried out at that most time honored of local establishments: the cantina.

Within, its rooms were brighter at night than they had been during the dim frenzy of the day. Contrary to our first meal here, the air this evening was infused not with chaos, but with the utmost quiet and respect. Unanimous in their regard for what the Ferryman stood for, peace was the greatest honor the villagers could bestow in a setting characterized by bedlam. Wordlessly, we walked into the back room, where it seemed an even greater degree of mourning was getting underway. While I expected to see the body on display, or some next of kin to shake hands with, there was nothing of the kind. Instead, a long wooden table stretched along the length of the room. At its head were the objects which embodied the various pillars of the Ferryman's credo. While the majority of the heap was unmarked and scattered, three pieces among the clutter stood above the rest: a shopping cart, a wooden rod, and a roll of duct tape.

As we made our way around the table, Brice grasped both hands of the men and women present. Extended limbs in my direction signaled that I was now part of the fold: we were all equals in celebrating this great man's death. But there was an order to be adhered to. In a culture as deeply rooted in thrift as Durkhan's, the most important matter to sort out would be the disbursal of the deceased's belongings. Only then would a forum convene to investigate circumstances of death. A latecomer raised her hand to ask if there would be time to share stories from the old days, and an elder responded

that yes: there would be time to share stories from the old days. The back room was beginning to grow crowded, and both small talk and further inspection of the items were abridged to accommodate the growing influx of visitors, well wishers, and very old friends.

Gradually, the group settled around the giant oaken table, and the man who had responded - eponymously referred to as "The Eldest", began to explain the rules of how we would proceed. I whispered to Brice whether I should give my seat to someone more, er - Mongolian, but his stare held me in check. The Eldest emptied a bag of knobby bones onto the tabletop; its clatter introduced the game of shagai. Brought from the Mongolian steppe, it was a pastime traditionally played with several hundred pieces, but limited flock sizes had reduced our current set to eighty bones. Around the table, no one batted an eye at the display of death echoing before us. Among the gnarled faces of the Ferryman's contemporaries were a few familiar expressions of youthful vigor. Gerel sat at the abject side of the rectangle, surrounded by some of her hip, part-time colleagues from the theater. Clustered along the diagonal, the snowmobilers stuck together in a close, greasy clump. Despite Brice's earlier appraisal of their innocence, I couldn't help but see the men cloistered together as much for protection as for any grand design pertaining to the game. No one else at the table introduced themselves beyond the grandmotherly latecomer who said, "Hi everyone, I'm Phyllis."

One of the elders barked something in Mongolian, and she said, "Excuse me, I worked with the Ferryman at the grocery store years ago."

Several "Mhhmmms" sounded in response.

“Is Phyllis her real name?” I asked Brice - accustomed as I was to the monosyllabic nomenclature of the Mongols. One where every extra utterance was a wasted smack of the gums.

“Maybe,” he said, already staring intently at the bones, “That woman’s a little off; I’ve never spoken with her directly.”

Part ritual, part strategy, part divination: shagai encompassed all the elements I was looking for when I boarded the Grumman that September day. But before I could find out how my own fate was intertwined with that of this bizarrely displaced people, I had to know the rules. The Eldest held up an exemplary bone into the light of a hanging carbide lamp. A sulfuric glow tapered from hot white to greenish around the edges, and the fungal hue reminded me of the aged fish sauce served at this same location. My stomach lurched upward into my throat, and I started in my chair - but everyone else was so fixated on the proceedings that only Brice gave me a reassuring pat on the knee. Each bone had four sides, representing four animals of the nomadic culture: horse, camel, goat, sheep. Four approaches to harnessing the stored energy of the sun. Four prints of hooves. Four ways of being. The Eldest paused as various members of the table chimed in on what made each side of the warped bone correlate to its respective animal. Some explanations were more convincing than others. The S groove along one of the sides denoted the first letter of Sheep. Two distinctive bumps on another facet hinted at the humps of the camel. Horse and Goat were anyone’s guess. One of the snowmobilers was trying to explain to Phyllis that an easy way to remember the goat side was by a hole somewhere in the middle - but she wasn’t buying it. An heirloom drawstring bag housed the entire set, and several of the elders took turns

smoothing its velvet surface flat against the table. Therapeutic even upon spilling its contents, the bag's modest design evoked the simplicity of the traditional ger.

While I was hoping for some practice, the concept of a dry run was a foreign notion to a people who defined themselves by their ability to learn and adapt. The Eldest gathered up the wobbly eighty and placed them into his palms. The overflow climbed up his forearms as he poised somewhere between the stature of a shamanic healer and an overburdened server at a fast food restaurant. He balanced his charge for a few moments before casting them off in a great heave. Bones splashed down along the length of the table: the game of shagai was officially in play.

A consensus of rules emerged over the first few turns, which fortunately occurred on the opposite side of the table. Each player scattered the entire set anew at the start of their turn, and the goal was to find two matches among the rubble: two bones with the same side facing up. Upon discerning the nearest pair, the player endeavored to flick one matching piece into the other. A connection granted the right to retrieve one of the bones from the collective pool and into a personal pile before proceeding to the next shot. A miss, a strike against a different bone, or a "push" rather than a true flick, all resulted in play passing to the next mourner in clockwise fashion. Whoever had the most bones at the end of the game won.

By the third or fourth turn, I couldn't help but ask Brice what hung in the balance, beyond bragging rights and the presumed respect of the Ferryman for all eternity. My roommate's concentration was fully exerted on the task at hand. Unable to offer eloquence, he said, "Winner gets his stuff. Goes in order of top three."



A shopping cart, a stick, and some tape. Greater incentives could have been imagined - yet so much of what I had earned over the prior years had proven meaningless, perhaps there was unseen value in the mundane. Antiquated ideas of Durkhan natives had shaped the course of my career once already that Fall.

The first big gambit was initiated by none other than Phyllis. Unlike the elders, who flicked with deliberate, mostly linear focus, she approached the sport with a carefree nonchalance, caroming off other player's elbows and mugs. Her quest to connect two of the same species would have made Noah proud; no surface lay outside the scope of her tactical consideration. Eight pairs of goats and sheep later, she nodded to a man on her left that it was time for him to begin his turn. His figure was vaguely recognizable, but not anyone I could immediately place. Coiffed hair and collared shirt were rarities in these parts, and buttons fastened all the way to the throat made for three anomalies in a village defined by workwear style. An unfortunate field settled into place after he cast the bones, and for the first time empathy issued from other members of the table. Words of encouragement bellowed from all points around the perimeter as he aimed for his best available option - two camels spaced on either side of a herd of less undulating ungulates. With no margin for error, it was a difficult shot: the kind of spread I had seen outlined in billiards reference manuals. Impossible angles were involved. The timidity of the man's flick reflected the precariousness of the situation, but it wasn't enough to get the job done. The camel stopped just shy of the canyon of horse and sheep; it was heartbreaking to see the mass of bone spiral to a stop - orphaned in the middle of the sanded table. Chairs creaked as intrigued onlookers settled back into relaxed positions. Pats on the knee ensued: the national form of encouragement. He would get it next

time. I stared hard at the man, determined to remember. His complexion was uneven, as if parts of his visage hailed from the tanned northern steppe while others were almost Caspian in their Eastern European refinement. And then it struck me, the alterations of color were those of bruises. A black eye masked partly by makeup was revealed when he turned to offer the set to the next player. This was the man who had been so mercilessly beaten on our first trip to the cantina. While I would never find out the circumstances of his crime or its penitence, the reactions of the crowd answered one question I hadn't thought to ask: even within this dingy backroom, renewal was possible.

A few turns later, the original pool of eighty was already down to sixty, and we weren't more than halfway through one revolution. Suddenly I was immobilized with concern; maybe it stemmed from the exiting ethos of the Biology Home, or maybe I harbored some soft spot for vanishing species even before I arrived in Wyoming, but I had to ask Brice: "Dude, they don't like, kill them just to get their bones, do they?"

He sighed. "For you white people, everything is a safari," he said. "All you talk about is big game while you sit there eating a hamburger and fried chicken. The way the world actually works, if you don't live in Wyoming or the West Village, is that herders raise, care for, and kill the boring animals like goats without too much ceremony. Now pull yourself together, you're up next!"

Goats aren't boring! - I wanted to protest, but I had enough logistics to worry about within my own realm. Up close, the bones resembled pieces of frozen gnocchi, the least understood variant of pasta. They had one fold down the central spine and were about as knobby as you'd expect. I had watched all of the other players flick at the pieces with composure, and had given little thought to the motions involved. Now that it was my

turn, countless modes of imparting force presented themselves. Was the ideal strike off the fingernail or the shin? Did one recoil upon contact or follow through? Bestowing English was an advanced technique for a first timer, but the rate of extinction mandated a bold approach. Whatever the origin of species, my toss to set the state of the board produced nothing but endless variation. All eyes were upon me as I scanned it in vain for natural pairs to strike at. The bottleneck reminded me of how hard it was to think clearly during the watchful eyes of an engineering interview: patterns available to relaxed minds hid themselves from view. Breathe, I told myself, even though my breathing was fine. It was my heart rate that was jacked through the tin roof. Groans began to emanate from the elders at the time I was taking, but the Eldest held up a hand, telling them to hush. A hostess I hadn't noticed earlier took the opportunity to collect drink orders.

I tried to latch onto the smallest possible thing: focusing on the grooves of one individual bone. Lacking the crooks of a camel or the shifting contours of the sheep, it had to be either a goat or a horse. I forgot which one contained a hole in the middle, so I studied the immediate vicinity for a match. Before I could trip myself up by overthinking, I reached down and flicked. A satisfying clink ensued as the pieces connected, and reassuring eye contact from the elders confirmed that it was a valid strike. Stretching out with my arm, I decided to remove the piece that had been struck rather than its antecedent, leaving a better opening for the follow up shot. Deciding which of the two pieces to take was one of the more charged aspects of shagai tactics, and as my arm stretched in midair across the graveyard, Brice's hand lashed out and gripped mine in the lock of a vice.

“Always remove the piece with the non-shooting arm,” he said. “Otherwise you lose your turn.”

“Where has that been this entire time?” I asked.

“Everyone else has been doing it.”

One of the snowmobilers broke out in protest. What was this newcomer doing here anyway? It was unheard of to offer advice in the middle of play, especially to a matar. My instincts took over, and before the group could reach consensus on whether I deserved another turn, I took it. Two camels, then two more. And then a couple of goats. My collection was at four, but on the next cast, there was simply nothing in sight. Content with my bounty, I flicked a piece conservatively, colliding with a different grazer. Brice looked at me suspiciously, but I didn’t want to draw unwanted attention to my assisted turn with too impressive a haul. The ploy worked, and whispers of what a dumb shot I had made at the end outweighed any questions over the validity of the four pieces already accumulated.

Expecting Brice to clean up per his norm, I was surprised when daydreams of my own attempts were still playing through my mind and his turn was already over. Puzzled, I turned to hear him explain how his hands had been feeling funny for the last few days. It was almost as if he were possessed of too much circulation: oversensitive and trigger happy. He had been meaning to bring it up to someone, but when was there ever a good time? I had to agree with him on that much.

“You’re in the plot at least,” he said to me. “Maybe top five or six of everyone who’s gone so far.”

It was a staggered leaderboard. Phyllis was winning by a mile, but after that it was a motley crew. Out of the hovering mass of strangers down our side of the table, Och racked up a respectable three bones. He tipped his trucker cap slightly in my direction as we made eye contact: for him it seemed an enjoyable evening. Gerel was down for five by the end of her turn, and she held up her hand in a telescope at me, which I interpreted as us being on good terms. The second revolution of play found the table littered with empty bottles, cigarettes, loose change, and ash - all forming a small mountain range around the border of bones. With each subsequent cast, the collection in the middle diminished and the rim built up.

The flow was interrupted by a beam of headlights shining through the slats of the cantina's siding. We all squinted in the glare from this unseen party foul - but then the light lowered in intensity as the owner remembered to kill the brights. Another clatter echoed off the board as a few more horses whinnied from play. Then a familiar beep of automatic car doors locking. Then a quiver sent straight to my gut.

## Chapter 22

Hermann entered and the entire din fell to a hush. The current player held his hands rigid, as if caught delving into the cookie jar. Our founder strode into the cantina with the confidence of a head chef moderately approving of what the short order cooks were doing. Once the pieces clattered across the oak, Hermann eased himself effortlessly into the throngs of spectators. His presence elicited a response ranging the gamut from inside jokes and formal pleasantries to looks of downright fear. Only Phyllis's greeting rose above the level of the strictly personal - the preferred mode of social interaction from the young leader. Come to think of it, aside from the ode to Lewis & Clark and its ensuing aftermath, my interactions with Hermann were limited to private discussions. Fireside chats in which we were both always "in on it" - a mutual understanding that we alone conceived of matters as they truly stood. But how many of these secluded side channels existed between him and the textured interests of Wyoming's competing factions? Silken strands connected the stooped shouldered to the venture backed in this place, with surprisingly few detours between them. My concerns were interrupted by Phyllis's continued calls for attention.

"This young man was the only person to believe in the vision we had of an organic produce section. Everyone else laughed at the idea."

Hermann offered her a pocket handkerchief.

"We were in the straits, and then this... this adolescent who's not much older than my son drives up one day and writes us a check." She burst into tears.

“We’ll get it back up and running,” he said. “I’ve got an eleven o’clock next Wednesday with someone who could be very interested.”

“Thank you. Thank you!” she said. “Our gratitude is boundless. If the Ferryman were here tonight, I know he would be so proud of you.”

Hermann held up a glass to the group, “May he rest in peace!”

“Cheers!” the Mongolians shouted, having spent enough time in English speaking watering holes to adopt this turn of phrase. Before the repetitive communal chanting could commence, Hermann was pulled into the corners of the cantina, back into the world of cloistered dealings. As a well compensated member of The Yellowstone Group, I felt as though I was entitled to know how Hermann’s climate industrial complex made these sorts of philanthropic outbursts possible. I didn’t see where the revenue was coming from, yet somehow business as usual kept humming along. Every time I raised my concerns, Hermann explained that he wanted to shield me as much as possible so that I could focus on execution, so instead I played the game. Revolution number two of shagai resembled the first in many respects: for all the auspices of chance and divination, aptitude and cunning proved to be the greatest indicators of one’s successes. Phyllis built upon her commanding lead, followed in bone count by a couple of the burlier snowmobilers. Och and I clung to the back edge of the leading pack, with most of the elders content to simply be present at the table, their eyesight not exactly what it was.

Feeling in the thick of things by the time it reached my second turn, I effortlessly cleaned up a pair of goats - adding two more bones to my cache. I wished that Caroline were watching for the second time in as many hours. It was always battle to bring

myself back to the completeness of my surroundings, and I hoped it would become a habit someday. But on the way back from that split second segue into what I wanted most, I passed by all that I had already done: the victories of Manhattan - brief yet tangible, the increasing likelihood of my ability to keep a straight face against the West's more harrowing encounters, and running throughout it all, the peace that comes from sitting in on wholly distinct ways of life, content to forestall my own longing for purpose until the time arose. A small opportunity presented itself now. Ossein, the sticky residue of bone, had left a mineral dusting in my palms in the wake of the first turn. No more or less adhesive than anyone else's seated around the funerary table, but my bet was that I was the only one whom it reminded of pool chalk.

Massaging my hands back and forth over the knobs, a thick deposit accumulated until my fingernails and skin were covered in a complete film. Unfair levels of control permeated my shots as one flick after another connected with its intended target: I couldn't miss, and didn't pass up the opportunity to smirk at the snowmobilers as they got their treads all in a bundle. On my fourth turn I went for the coup de grâce: sending a goat up and cleanly over a field of sheep until it connected squarely with one of its brethren. Cheers erupted; the Mongolians were losing it at the jump shot. For a second I thought the carbide lamp was going to fall on the table and burn us all the way to Hell - so great was this reaction to my feat of ingenuity. I couldn't have imagined my life not including this moment. Louder than any reaction at the table was the outburst from the bar where Hermann stood hunched over a ledger. Several villagers were handing him coins and slips of paper, and even Brice had to laugh at the man's hustle. While us players risked the chance to win a dead man's belongings, Hermann was collecting cold



hard cash from bets placed in a side pot. His risks in the derivatives market vastly outweighed the stakes of the actual thing, and he seemed a full incarnation of his life's mantra: you could pretty much do whatever you wanted. Making eye contact, he raised a glass in my direction, and for the first time since the harsh words exchanged in the Range Rover, I smiled and waved at him. It was impossible not to when you realized that someone believed in you through a vein the rest of the world would never strike upon.

Brice got a few pieces to connect, restoring his confidence but not enough to be seriously in the running. He still wriggled his arms a bit when he was sitting still, and though neither of us totally trusted her, we agreed that Meaghan should take a look when we got back. Och played consistently, and it was now a speculative matter of who among us held the podium positions after Phylis's undeniable possession of the gold. Gerel continued her progress with a flashing smile, but her swagger ran beyond her actual bone count on her second turn. The final throws of the game occurred between midnight and two upon our giant clock of a table. Yet even within that expanse, the endgame stretched longer than expected. When there were so few pieces, several players had to recast before the bones landed with matching animals facing up. A few cries burst out as players who had struggled to get on the board early bagged a few knuckles to their name in the closing round. Fittingly, the final matching pair appeared for the Eldest. With the muted grimace of a golfer closing out the last day of the tournament on eighteen, he stared long and hard at two sheep before connecting them with a dignified tap. Our game had drawn to a close. Shouts of "Shagai" rang out around

the table and throughout the entirety of the back room. One stage of honoring the Ferryman was complete.

During the tally, I was fidgeting with anticipation at the result. A few of the players congregated at the front of the room for the second half of the ceremony: these had been the Ferryman's inner circle. For all her chatter of camaraderie, Phyllis remained seated - she would no doubt have her pick of the objects, but she would not be granted the honor of handing them out. One of the elders reached inside his breast pocket to remove a pair of eyeglasses. Squinting thoughtfully as if reading the Sunday paper, he marched around the table, counting each player's stockade of bones and inscribing the result in a notebook fashioned of sheep skin. His look intensified as he passed Och, and I squirmed in my seat, nervous that I would have nothing to show from the night save for the ossein residue beneath my fingernails.

When the votes were finally tallied, it was Phyllis with the gold, one of the snowmobilers with silver - and then something strange happened: the elders announced an incredibly long Mongolian name I couldn't understand - and the man who had been beaten stood up. He beamed proudly as someone grabbed the carbide lamp where it hung by a chain and cast its beaming ray in his direction. Bathed in the limelight, his coiffed hair was Oscar worthy, and we all waited with baited breath for the speech detailing his road from the gutter to the bronze. These were the kind of fairytale narratives the public lived for, dwarfing the expected accomplishments of the champion. Everyone cheered.

Sensing the moment should have been hers, Phyllis wrinkled her nose and shouted: "No, no, no. That can't be, he didn't even get a single bone."

Murmurs broke out among the table and even the stirrers of the side pots came over to inquire what was happening. Those who had cheered the loudest now began to admit their memories confirmed the brutal truth of Phyllis's recollections. Inspiring as his return to the arena of fair trade may have been, the converted thief had not set aside a single bone during our game of shagai. Turning on their signature dime, the crowd called for a recount. The warm, nostalgic rosiness which had pervaded in the wake of the fallen's redemption darkened to bloodthirsty calls for action.

"Count! Count! Count! Count! Count!" they cried, as it became difficult for anyone to concentrate. I began to relive in flashes the terror of their "Float!" shouts upon my first demonstration. But if those early incantations had thrown me off course, the current ones would set me back on it. The elders apologized for the accounting error, acknowledging that the name they had read off for bronze was mistakenly the name of the person who had come in last. Similar to Bingo, a consolation prize awaited the thief, but the chief responsibility of the moment was to sort out the top three, and assign the heirlooms accordingly.

"So who is it?" Hermann called out from the back of the crowd, inducing a fumble of pages where before had presided solely statesmanship.

"Um, let's see here. Mhhhm, yes, I do believe it is. Mhhhmm. Sam Roberts." Cheers broke out with renewed vigor. One of the best and worst things about the villagers was their potential to marshal a boundless enthusiasm behind any announcement, irrespective of content. American audiences tire quickly, automating tracks of even their snickers. But I was now surrounded by an endless supply of emotion: I belonged among these people. Pulled by arms in every direction, I joined the

gold and silver recipients at the head of the table. Chants shifted from “Sam! Sam! Sam! Sam! Sam!” into one long cry of “Shagaaaaiiiiiiii!”

With her first round pick, Phyllis chose the shopping cart, grasping at the chance to relive her glory days with the Ferryman. It was the clear choice, and I couldn’t help but find myself caught up in the criteria of this remote environment, diving through the crowd for the chance just to brush up against the shiny aluminum. Metals in the mountains heralded dawns of a new age, and this was no exception. When everything else breaks and splinters, an object which holds itself together is something of a sacrament. The real toss up for my fate was how the snowmobiler would choose; the mysteries of his profession providing little insight into what he found valuable. He took his merry old time deciding, and a deeper search of my own preferences revealed that I would be happy with whatever was left. Something about seeing Phyllis actually have to maneuver the shopping cart back across the crowded cantina brought me back to the validity of the economy I was raised in. Perhaps the only true feature of the remaining objects was their attainment of the nondescript in a land where everything stood out.

At the end of the day, the snowmobiler went with the duct tape, leaving me with the wooden rod. I had to laugh as I walked up to it - the irony of receiving a piece of wood in a region more heavily forested than my home state of Vermont. But as I stooped to pick it up, I couldn’t lift it off the chair. The villagers laughed at my strained efforts, but a few more tugs were fruitless against this unyielding excalibur. Forget about dislodging the rod from stone, it felt like it was made of stone. The Eldest came to my aid amidst the raucous jeering, and Brice fell in immediately behind. With their help, we were able to transport the leaden log back to my chair.

“Why is it so heavy?” I asked Brice.

“You didn’t know?” he said, “it’s petrified.”

After the awards ceremony, we were finally free to mingle and swap stories about the Ferryman. My main anecdote was, of course, limited to my single encounter. Hands waving through the air, I re-enacted how I had almost been hit by the shopping cart on my first visit to Durkhan. Elders with several decades on me laughed from deep within their bellies, and assured me that they had endured similar experiences upon arrivals of their own. Joyous as they were though, light hearted recollections and harmless back slapping weren’t enough to completely quell my undercurrents of lingering suspicion. While I always admired the term “celebration of life” as being one way to remember the deceased, the fact remained that a death had occurred, and I still wanted to know why. Phyllis was the only one completely divorced from the main body of the gathering, and our gold and bronze medals made it straightforward to strike up a conversation. A sour expression defined her wrinkled features, and she was quick to assume the reigns of conspiracy.

“I don’t trust those snowmobilers any farther than I can throw them,” she said.

I looked her up and down, judging the quality of the metaphor.

“I don’t trust them!” she shouted, and I feared that if I dawdled any longer she might test her tossing out on me. But then she couldn’t help but get caught up in examining the piece of petrified wood I had lugged over, and I became steadfast by association. She described how if she had really thought over her decision any more, she may well have chosen my talisman.

“In life, he granted passage from one realm to the next,” she said. “Now he has crossed the ultimate river.”

“How do you think he crossed it?” I asked.

Son, she said to me, Durkhan has always been a filthy town, but the particulate matter of late isn’t coming from cookstoves alone. She beckoned me closer so she could whisper the rest. Honorable plainsmen at heart, the men of the village were unable to admit to their women and children that they had been supplementing their income with stints in the coal mine. It took a crotchety old woman such as herself, she surmised, to see plainly how the villagers managed to support themselves during the dormant months. There was no other way.

“Coal mining?” I asked, shocked. “I thought all of the energy in Wyoming came from geothermal.”

Phyllis couldn’t keep her guffaws within her decaying teeth. She clutched at her sides until I thought she might asphyxiate from oxygen deprived lungs.

“Less than .01 percent, my dear,” she said, “less than .01 percent. You enjoy the rest of your time in your cozy little bubble. This has always been a state of coal.”

Surely the Ferryman was too old for strenuous labor, I conjectured. But Phyllis would have none of it. The money to be made in mining was substantial enough to dust off even weary limbs. The question was, what exactly was the coal powering? Even she didn’t know. Export was always an option, but no nearby state was faring any better in its survival of the elements than Wyoming, and means of egress were limited. Regardless of Phyllis’s ignorance as to the end goal, hers was a knowing look that surveyed the bobbing heads throughout the ceremony. How many of the asthmatic

coughs around the room came from hearth and home, and how many stemmed from work below ground? Weariness may have been a precondition of village life, but reticence for further discussion that night sprang from the men's desire to make it through the following day, not exhaustion from the current one. Countless workers in that very room would march out at sunrise to the same conditions which enabled the Ferryman's demise.

Brice stopped by to let me know that Hermann had offered to give us a ride home. No transportation decision was ever easy; my hand felt perpetually forced between hypothermia and rigid principles. But my hand wasn't the one we had to worry about: Brice's was quivering to the point of uncontrollable shaking.

"Let's take him up on it," I said.

We bid Phyllis good night and congratulated her on her achievement. She looked tired, weary of a Pyrrhic victory as the implications of the death began to sink in. Blind spots existed at these altitudes, and spoken truths affected the speaker just as much as the listener when uttered aloud.

Seat warmers in the Range had been extended to the back row, Hermann cheerily announced as we piled aboard. Brice took the front seat while I beta tested the recent expansion. Point Zero One Percent signs floated through my field of vision, but it was too late for further bouts with the driver. Tomorrow morning I would ask Dave about the implications of this figure, and whether his progress in the subterranean reflected the state's average tribulations below the crust. Hermann had a few questions for Brice about his shagai technique. Despite my friend not putting his best foot, or hand, forward, it was obvious that he was still widely regarded as a student of the game. No mention

was made of my bronze; were it not for the piece of petrified wood in the trunk, my podium spot would have vanished completely from memory. We rumbled into campus shortly after midnight, and without further fanfare, each headed for our respective beds.



## Chapter 23

All morning I waited for Caroline to drop by the common room to go over the biomimicry designs. By noon, that moment had not arrived. Since I had last seen her, feelings of anger and disappointment melded into ideas about how I might convince her to stay; I couldn't help but feel that the decision to leave Wyoming was hasty on her part, and a little more time would surely benefit all parties involved. More than crossing two thousand miles, more than nipping at the bud of whatever had existed between us, what nagged at my stillness was her switch from veterinary to medical school. If I had observed anything in my two and a half months with her, it was that Caroline didn't care about people nearly as much as she cared about animals - and I mean that as a compliment. In an age of trite personal narratives designed to sell oneself to the highest bidder, who else but Caroline was going to wade through an animism so difficult to convey?

By lunch time, waiting around seemed like a dubious strategy on multiple fronts. After a quick meal down on the first floor, I walked out into the brightness of the day - foregoing the requisite layers for the short walk across the stone parapet. Standing at the base of Caroline's window, I packed the snow with my bare hands until I had a chunk the size of a softball. Uniform smoothness is a difficult temptation to resist in these frozen spheres whose life expectancy is a lone toss. I was still admiring my creation as it sailed through the air, connecting squarely with Caroline's window. But this time no one came to the sill.

I gave it a minute. She may have been in the middle of packing or even on a different floor. Behind me, the creek bed offered better visibility into the brunch area, and I edged closer to it, trying not to imagine how creepy this all must have looked for someone with an uninterrupted viewing. When the seating area came into focus, it was only Meaghan who glared back at me - interrupted from the ritual of her crossword puzzle. Jockeying back through the loose snow to the launch spot, I let another one rip towards the second story window, and pressed my body against the side to shield myself from the first floor's prying eyes. When the sill remained shuttered, I knew I had to act fast before Meaghan came out with another loaded gun. A scraggly alder grew next to the Biology Home, its bark whittled away from countless seasons of diffracted wind and ice. I climbed its glossy branches until I reached a section without holds. My tenuous grip wouldn't last long - so with a leap - I made for the window in a single reckless bound, falling just shy of the sill's outer ledge. My body tumbled several feet below, clanging against the aluminum gutter which hung halfway between the stories. It began to creak beneath my weight; something about the single navigable column against the backdrop of a completely impregnable surface hinted at what ice climbing must have been like - but for the moment I needed to put a clamp on further winter endeavors, and master the present.

Desperation propelled me up the final face of the ascent, and I barrel rolled into Caroline's bedroom. This wasn't how I expected to make my first arrival to this hallowed ground, but here I was. For the last few weeks, I had tried to put a clamp on how much daydreaming I did about Caroline and how she spent her time, but of course those efforts were futile. Surrounded as I was by my quilt and wooden frog, the possibilities

seemed endless as to how she would decorate her own room. As I dusted myself off and looked around, now I knew: completely empty. An odd decor for a girl I hadn't pegged as the Spartan type. Rising to my feet, the horrible truth began to sink in. This wasn't someone's idea of a minimalist decoration, it was a room that had already been deserted. An empty bed frame stood idly in the corner, its wooden slats exposed. A reading desk by the wall with a plain wooden chair. The room was colorless except for two green mats, one at the base of the desk and the other by the door. My first reaction was to get out of there as quickly as possible. Lingered in her abandoned room gave me the chills in a way that vast quantities of bone had failed to do twelve hours earlier. Outside the window, the gutter swayed a bit and then completely fell off, banging all the way down to ground level. It was archaic anyway, useless in a part of the country without rain.

With Caroline's departure, the rustic charm had drained out of the place as well, or perhaps too weary to cling on in her absence, it had simply peeled away. I crept down the stairs; my goal was to minimize human interaction as much as possible on my way out the building. For as many high crimes had been harbored within these few square miles, there was still something apprehensible about entering one way and exiting another: I couldn't have talked myself out of it.

Whatever my projections had been as to Meaghan's morning rituals with cornflakes or crosswords, my anticipation turned to shock upon encountering her suspended above my roommate's limp figure. Brice sat at the kitchen table with his eyes closed, body fully slumped against a chair with his arms extended out over the placemats. Meaghan bent intently over a bandage above his elbow, having just

withdrawn a syringe. With surgical precision, she swapped it out for a dab of rubbing alcohol and pressed down hard. She knew what she was doing, but I couldn't shake the image of a wolf above her prey, biding her time until the final stroke.

"WHAT THE -" I yelled.

Brice's eyes shot open just as they had on the divan back in the Commuter Lounge. "It's fine, Sam. It's fine," he said drowsily, as his head lolled back against the chair.

"Keep walking, Sam," Meaghan said, "this doesn't concern you."

"I've been getting that a lot lately," I said, but I did continue on. Brice had my trust, even in his sedated state. Having witnessed firsthand the changes he was undergoing, I couldn't obstruct medical action, however predatory. Uneven floorboards creaked beneath my feet towards the door; so much more warmth had exuded from this room when it was used as a serving area rather than an operating table. As my hand was upon the knob, Meaghan called out for one more thing.

"I don't really like you, but I don't want to be responsible for this any longer either," she said, handing me a letter. After receiving it, I headed back out into the early afternoon and walked to my room very, very slowly. Turning the letter over in my hands, I knew that - despite today's despair - something golden existed in the recent sliver of time: the narrow band between when a note is written and when it is read. Still I felt nervous. Back within the solitude of my room, I finally had the courage to open it - the pit in my stomach firmly lodged there whether I waited any longer or not.

There was no name on the front of the card, and no record of the word "Sam" printed anywhere. On the back was a seal containing the initials CBW inscribed in wax.

What a legendary move, it occurred to me. In the age of crypto-everything to leave security in the hands of the apiary's excretions. It was a level of personal reserve I hadn't attained, and the beginnings of a social imbalance that would persist throughout the letter.

Dear Sam, it read. When I told The Yellowstone Group about my plans to leave, they actually escorted me out the door immediately. Hence, I scrawl this with Meaghan looming over my shoulder and a van idling outside. During our talk yesterday, I didn't tell you everything, because I know how much your vehicle means to you. In a way I need that same thing, I just don't think I'll find it here. You should know that our work in wildlife gene therapy was paving the way for human adaptation. When they started testing the protein on Brice and he began to show negative effects, I knew I couldn't be part of an organization that skipped ahead of clinical trials. Regarding other things: you should know the thought crossed my mind more than once whether we would ever be more than friends. I have a hard time believing it didn't cross yours either. But when would I see you? I've found a new calling now, and that life is going to take up a lot of my time. Good luck, Sam, I know you're going to do amazing things over the next couple of years, I just wish it wasn't for them. - CBW

I had never known Caroline's last name, and apparently she didn't want me to ever find out. No address. No phone number. Even if there had been an exchange of contact information, what bland moniker would I have won in her address book? Sam Wyoming? She knew less about me than I did about her. Following up was pointless,

the girl was gone. If my contract here was renewed through the start of the new year, it would be a silent spring.

For some reason, I was frustrated most with Brice: fed up with him and all the others who didn't even know the role they were playing in the grand plans of more intentional men. But then I thought of Gerel, and the telescope, and the delicate web of obligations that kept everyone I knew entangled in some short sighted scramble. Brice needed the money, Gerel yearned for a film to her name, and Caroline apparently craved the validation that medical school would offer. I was left with the moose and a fractured ice boat, both fair weather allies at best.

The longer I sat on my bunk, the more I began to bask in the numbness which washes over the lost who want to stay lost. Without realizing it, so much of my frantic pace: to be everywhere and to be everything, was borne out of a desire to appear legitimate as much as it stemmed from an itch to get the vehicle working. While the spine of my true calling was still there, one of the chief pairs of eyes who had given so much shape to the mannequin I had assumed lately was not. With one source of staying upright removed, I realized how featureless my attempts had been to be a normal person while working on a one of a kind machine. So I did something that normal people do: I drank.

## Chapter 24

The logical thing was to head down to the dock. Our workshop had always been a safe space: a spot for the boys to be boys, albeit in our own unique way. On the way down, I raided the liquor cabinet in the cafeteria, hoarding the trim bottles within the deep folds of my winter jacket. The Mongols had cleared out for the afternoon, leaving their fermented concoctions atop dusty shelves. Murky shades of my moral code permitted the pilfering of this opaque liquor whereas the alarm would have been more certainly raised in the case of stealing vodka or gin. I was still fidgeting with my mittens on the way down the hill when one bottle clanked against another within my layers and spilled its contents down my shirt. Grabbing the last intact vessel, I swigged liberally, doing my best to take the acidity in stride. If I squinted hard enough I could see where the glacier calved off across the far edge of Luna. Today was a particularly clear day, at least for the rest of the world. Aquamarine and sapphire slices bobbed in the ever incoming tide, and it felt that a crystalline hue was closing in. I hurried towards the shed - inside was the same dappled light that had existed in the cantina; the same openings which always occur when Durkhan structures settle into their porous foundations. A thin layer of dust coated what was - in the grand scheme of things - still new.

A quarter of a ways into the bottle, my initial aversion to the liquid abated, and it became as cavalier an affair as drinking a liter of water. Asymmetrical experiences. The first of something was always markedly different from the sixtieth. How many times had Caroline already gone skiing by the time I first pointed my tips downhill? Were the oceans of hours we spent by the geothermal pools for her simply another Tuesday? The

shed was still strewn with notebooks that mattered at the time. Thoughts that seemed urgent until they weren't were now part of the larger body of stale detritus. Most of the binders were not only filled to the brim, but crammed full of graph paper besides. I flipped through several until I came to a green one with some unmarked paper remaining. Only three quarters were filled with equations - the rest left in unblemished splendor.

Scrawling out ideas of what I could do next with my life helped pass the time - reminders that I wasn't defined solely by this experience. The lack of clinical trials on behalf of The Yellowstone Group stood out as an indicator of what not to repeat going forward. If anything was impressed upon me, it was that the next endeavor would have to be more of a socially conscious enterprise in the eyes of the world. And also something previously validated. For that to become the next item on my resume, I was willing to take a hit on pure innovation: those fields attracted too many unstable people. My drunken thinking stumbled upon the observation that if the outside world could look at the name of whatever I was doing, they should be able to grasp that I was competent. More importantly, they should be able to see that I was trying to be a good person. I began to make a list of organizations along these two orthogonal axes: Teach for America, Habitat for Humanity, Peace Corps. National Geographic, NASA, Congress. Maybe throw in a few scholarships and fellowships for good measure even though I wasn't totally sure what you did on those. I wanted to be a scholar. I wanted to be a fellow. Whatever happened during this next month in Wyoming, this list would be my rubric for how to continue: if it wasn't humanitarian or eminently respected, I wasn't doing it. Caroline had medical school locked in, but I was still scanning the atmosphere



for my North Star. The thought was too much to bear: I was marooned physically and spiritually in the middle of a vast inland sea. If someone had told me then that my application stood a better chance if I changed my name to something responsible sounding like Arthur or Sybil: I would have done it - so depleted was my confidence in the name Sam. I lay my head in my hands and cried. This was supposed to have been that opportunity! That crucible which changed everything. Somehow I had failed to represent something that Caroline might have been impressed by, and the irreversibility of this realization began to sink in. First impressions are only made once, and after they settle, it's hard to break free. Especially if you don't see that person. I would always be quirky Sam, but nothing more. The best I could hope to grasp at - if I couldn't amount to any degree of notable individualism - were the coattails of one of these impressive sounding institutions. Promises of safe passage hovered in the double spacing of their reductive applications; the second half of my twenties awaited on the far shore, replete with car, wife, and a biweekly subscription to the New Yorker. Who was I to think that climate adaptation could have boiled down to something as childish as a bike. Something as stupidly named as the Wandruhr?

Laying down felt like a good idea. My heart was starting to race and I had been told before that the correct response was to even things out: put as little stress on the circulatory system as possible. But there was still a third of the bottle left, and even if everyone else around me was bailing, I tended to be a finisher. Reaching over, I downed the last of it. The urge to throw up was there, but I kept the fluid down. I was a finisher, even if everyone else around me was giving up. Corrugations in the tin roof were more entertaining than they had been in months, and in the absence of anxious

gulps, there was a long quiet. Geese honked on a whim, and the wind was there with me. The wind wasn't a quitter either. Disgusted at myself for drinking so much, I kicked at the bottle to send it spinning across the floor. Too inebriated for a clean strike, my foot sailed through the air but my knee managed to nudge it a few inches towards the work bench and out of sight. Breathing out, breathing in. I clutched the notebook close to my chest, convinced it was my life raft above the swells of this capitulation. Everything prior was compromised, and I began to rip out blueprints from Brice and I's attempts until all that remained were the recent pages with the names of the organizations. Then I unzipped my jacket and tucked them inside, convinced there was enough insulation to protect the self interested from tampering with my future plans. It felt as though the warmer it became within that thermal layer, the colder it got everywhere else. Gradually, I had to admit this was the coldest I had ever been. The coldest degree in which the outside world had ever registered itself. I had been this cold only once before.

Tires of memory skidded on the icy crust of my subconscious. Suddenly I was back at the start of a sequence of events that had begun this trajectory. We were driving over the pass from Vermont to New Hampshire. Someone's parents had a vacation home there and I was brought along to a New Year's Eve Party. I use the term we liberally here: it was unclear to what degree I was invited as a fellow partygoer and to what extent I was brought along solely for the contingency of someone's ski bindings breaking. Despite renouncing the sport myself, mechanical things always made sense to me - and there weren't a whole lot of options for me to test that out up North. The guys who cared enough to plan this sort of getaway had us returning on January 4th: three full days for them to recover after the big night. I was a junior in high school.

Volvo made these station wagons where the last row faced backwards, out onto the recently traveled road. Some people considered these seats to be nausea inducing, but I always had a high tolerance for nontraditional forms of travel. I sat alone over the left tire, sharing the rest of my row with the gear. I remember it was quiet aside from the skis clanging, with chatter wafting back from the front seats. Old Yankees organized the trip. Guys like Trip and Jimmy: East Coast thoroughbreds getting away for the weekend with their girlfriends and some of their girlfriends' friends. The talk that night was all about collegiate ski racing even though they still had a lot of senior year to go. Slalom and Giant Slalom racers could expect a full ride, while those of us in the tuning room did our best to pick the right wax for the conditions and cheer them on.

We weaved through the turns of Franconia Notch; I wanted the year to be over already but time has a way of slowing down. Alternating peals of excitement and concern echoed from the other passengers. New Hampshire is one of the few spots in the East that can compete with the heavy hitters in terms of sheer ruggedness. Vermont's Green Mountains are mere hills compared to the Whites of the Granite State. Franconia Notch in particular offers the kind of bare knuckled pitches that form the backbone of stories for years to come. Craig, the driver, was still in the phase of the drive where the congratulatory beers felt a long ways away. For what seemed an hour, I watched the guard rail of the Notch receding behind my perch, its silvery dorsal fin keeping pace with the outrunning Volvo. In all the time I had to read in the wake of what happened, I couldn't believe no one had ever written an account of the third row of this vehicle. The crow's nest, the periscope, and that big wicker basket on the bottom of hot air balloons were never so ideally situated as to give their owner a true understanding

into the world beyond the craft. Hyper focused on the distance between the guard rail and the double yellow, I knew we had the wrong slicks for the conditions about forty five minutes before Courtney Havelchuck shouted out, "Craig! Oh my God, did you forget to put on the snow tires?"

"Sorry babe. I was too hungover," he said, "but these should be fine, we're almost there." Barely after completing his excuse, the car fishtailed around the next ravine. Our Volvo strayed into the opposite lane, then veered back across to fray its freshly painted edges against the serrated guard rail. Craig began to mutter about the distribution of weight compared to normal driving conditions, shifting culpability from the wrong tires to the wrong cargo. "Let's get rid of the skis and the boots," he said, "All of that sliding around in the back row isn't helping."

I was expecting protests from the other racers, but they all offered their consent. They could always buy new ones.

"Well then, I guess we don't really need the tinkerer either, if we end up ditching the gear," Trip said.

"Won't he like, die though?" one of Courtney's friends asked. I gave her a pleasant wave.

"No, this is a big trucking route," Craig said, "someone will scoop him up, I've hitched plenty of times."

I wasn't so sure that Craig had done that, but nor did I really want to be in the back seat of a car with people who cared so little about me. With muted fanfare, I helped unload the Volks and Rossingols whose etchings in the race course did more to secure my career than any human had ever done. Despite signing my own death certificate, I

couldn't help but feel that it had been a good run. I had made it farther onto a senior New Year's Eve trip than any other underclassman in my high school. I had read so many tales of misguided adventure when I was young that I actually felt relieved our expedition only ended with mutiny and not cannibalism. The Volvo receded down the Notch, and I held the skis about me, their tips pointing sharply up like a fence. Tail lights flickered as the station wagon braked around the corners, its refulgent orange hazards reminding me of the perils involved with trying to keep up. For a long time, I sat on the guard rail, balancing the risks of falling backwards into oblivion against hunching so far forward that I ended up as roadkill. There weren't many truckers to come through or travelers of any kind. Thanks for that Craig. Locals knew what roads could be safely navigated at this hour, and this was not one of them. It was a clear night, and the snow crystals on the side of the road had developed a healthy coating of surface hoar. The kind of conditions that make for a champagne sound when other people ski through them.

Boredom clamps its jaws closed more quickly than the cold. To keep myself occupied I checked the DIN on all of the skis. They looked good. Even within this situation, there was always some aspect of my environment that I could help fix, that I could improve. Toes were the first parts to go, then fingers. Then some exposed spots along my neck where the nylon of my gator had worn bare. I bounced lightly on the balls of my feet, then kind of pointed my boot toes outwards as if I were tap dancing. When that didn't get my circulation going, I broke out into a series of jumping jacks. Finally I stayed still for a long time. My eyes struggled to remain open or closed, I had never thought so proactively about what to do with them. I raised my mittened hands for the

first cars to pass by, but they moved on. The yellow eyes of their headlights were searching for something and I wasn't it. I remember sliding down the guard rail and thinking that was fun, the way I might have done at the hand rail at school.

Then it was light out but I was laying down so deep in the bed of a pickup truck that the sides of my universe were dark. Teenagers wore flat brimmed caps with ears impossibly exposed to the chill dawn air. Vests, skating shoes. Energy drinks powering us into morning. Their crew was so coherent but my role in the matter didn't make any sense. These guys would have been the social pariahs of their high school; even if I had been abandoned by my friends, at least I had some skin in the game at the main table.

The hospital I remember pretty well. Head doctors missing. A nurse practitioner named Nan draping a blanket around me and assuming command of the ward. The number two hundred and fifty blinking across the monitor over my head. The realization that this number corresponded to my heart rate. Shallow breathing - panting practically - as I struggled to get a breath. Whitewashed walls of the ward and everyone holding something. A notebook, a pen, an extra EKG not plugged into anything. But I had nowhere to put my hands; it's a strange thing to be in such a decisive moment with nowhere to put your hands.

Electrodes dangled from every available point on my chest to more blinking screens. Lead wires sheathed in primary colors, every one of which recorded a vital sign from a body I was growing increasingly detached from.

"Stranded, Roadside. Hypothermia with cardiac complications," a surgical voice said from above, paying more attention to the screens than to me. Interferences and interactions coalesced to tell a story, but the pages of my fate were hidden from view,

accessible only to well trained minds. Viewed in this light, or rather, viewed under this ungodly fluorescent light, I believed that if I could just learn enough - about everything - then I could help.

Two hundred and sixty five. There were no more emergency buttons to press. Nan parted the crowd of residents like the Red Sea, brandishing a syringe filled with a metallic liquid the color of mercury on a cloudy day. I relaxed my left arm, that's where syringes usually go if you're a righty. But as Nan held the blade high above her head, wielding it with almost Abrahamic authority, her aim went straight for the heart. I hadn't been to church in years, but it's amazing how quickly you find religion in a pinch. YELP. But it was just one of the nurses ripping an electrode from my skin near the strike zone. Nan double checked the dosage, muttering she may only have one shot. She planted the syringe directly in my sternum, the part of the body whose sole responsibility is to prevent these sorts of exterior infringements. It felt like I was getting dragged underwater by a refrigerator, and the last words to shoot through my mind were: "What do you believe?"

To the best of my knowledge, that moment marked the end of my residency on Earth as a normal person, capable of finding a reason to live within the regular slew of options. My recollection ended with Hermann pulling me back up and onto the ice beneath the tin roofed shed. Bewildered, I gasped for air and flopped down on solid ground. The fluorescent lights of an earlier era were now merely infiltrating spots of sun. Hermann was wearing his scuba gear and appeared as exhausted as I felt. He too lay on his back and took each breath as it came.

“Sam, I know you’re trying,” he choked out, “but don’t ever put us in that situation again.” He couldn’t take his eyes off the spot where I had fallen through the ice - the thin film that had crusted over his usual underwater entrance. My senses felt frayed after having been party to a voyage they hadn’t signed up for. Wyoming provides a very quick feedback loop to the aspiring innovator: you get to make the same mistake once, and I had used up mine. Eventually I would come to see this facet of the landscape as a positive thing, but right then, my head hurt. Under our boots, the ice began to rattle with the drumbeat of far off footsteps, and I scanned the dusk to see a small platoon of sherpas running in our direction from camp, carrying medical sleds behind them. Even Hermann uttered only a few grunts when they appeared beside us, mentioning not to worry about salvaging the diving tanks and to just get us warm. He was paler than I was, completely spent from saving me with CPR, I would later find out - though not from him. We allowed ourselves to be rolled onto toboggans and borne uphill. Gliding across the high alpine meadows, the silhouettes of the sherpas’ funky beanies played against the waning light in the same way as the rescuers in New Hampshire with their flat brimmed caps. Would I ever be saved by a social group with any considerable standing? Most likely not. I talked about responsibility a lot, but found myself inert when it came time for them to drag me out of a predicament entirely of my own creation.

The sherpas had a protocol; I wasn’t the first drunken idiot they had trekked out into the night to pull from the wreckage. My stupor prevented me from knowing exactly what had transpired, but for some reason I still felt a sense of gratitude. For the sherpas, for Hermann, for the chance to arrive at the helm all these years after being stuck in the back seat of the Volvo. My dream was to hang it out on the line further than



anyone ever had, yet still be in control. Concessions have to be made for oxymorons like that, and I knew this would be the last time I would allow myself to be a liability. The great unknown was whether this was my final mistake before hitting on an approach that would get me through, or if I had already squandered my chance.

## Chapter 25

Thanksgiving arrived more quickly than I had anticipated, as holidays tend to do when you're confined to bed in the wake of an accident. The weathervane was swiveling from West to North over the latter half of November. Under increasing slabs of snow, my view blanched into a wilderness worthy of the Arctic Circle, and it took a mental will pressing outward from my bed to stave off collapse. My waking dreams were filled with the poles, single points where it was possible to inhabit every longitude at once. All one had to do was keep going up. But before I could climb, I had to get up and walk - a task that was difficult until the third or fourth day after my plunge through the ice.

Brice kept me company for an hour or two at a time. He knew how much I liked animals and regaled me with his sightings. He hadn't seen as many mammals roaming our valley since Caroline left, but he had spotted some migratory fowl. Grouse flapping off a pine branch when the toe of his boot snapped a twig. A trumpeter swan preening in a patch of open water.

"That sounds nice," I said.

"It was nice," he said, "It was nice to see something that was just nice, and nothing else."

"Mhhmm," I said.

"So you're learning."

As if shaking off the chill weren't cumbersome enough, there had been some glitches with the geothermal that supplied the usual heat and power to the building.

During one of my many slumbers, I heard the faint sound of banging as the sherpas installed a wood stove right in the common room. Although we already had a fireplace, when the actual radiators went down I realized just how aesthetic it had been. In lesser hours, the new model hissed away, its heat trickling up into the rafters; a few strands of temperate air finding their way up the three steps into my bunk. During long stretches of afternoon, I would get up and do mini laps around the windows. By their frosted glass, I could hear the gurgle of the stream down below. Silver wands formed the individual bursts that made up the rapids, dissolving clear molecules of oxygen in the ongoing depths. Everything was moving but me, and I tried not to look at the faulty compass because it was always pointing East. When laid on a surface that wasn't perfectly flat, it tended to drift in that direction - and no surface around here was perfectly flat.

On the day of thanks itself, a short handwritten note arrived from Hermann, stating that he wanted to catch up in person - just the two of us - before everyone got seated for the main banquet. Climbing up the stairs to the building's central turret was more exercise than I had gotten in days, and I relied heavily on the metal railing as I went. Hermann was also convalescing when I reached him; both of us were close to needing one of those sliding electronic chairs which allow the elderly greater mobility up flights of stairs. Maybe the next venture would center around the vehicles of the home.

His eyes remained closed for a long time when I entered. "You were muttering something about a Volvo when I found you," he said.

"I was pretty well rounded before that incident," I said, "but after I got out of the hospital I really became a great deal weirder."

"How was that process?"

That one was trickier to answer. What more was there to say that wasn't already apparent in my decision to come here? "A few friends were ok with slowing down to meet up for tea or going for a walk - at least for a little while. By the time I was a senior though, most of my class was back to celebrating New Year's as they always had."

Hermann looked up at me.

"It's ok," I said. "People like to go out. They outgrow some things and become interested in others; they're social animals. I don't really hold that against them even if I don't get invited any more."

"No, people are animals," he corrected, "and they celebrate New Year's the way they do because that's all they know. Come Monday morning, or January 2nd, or whatever the breaking point of reality may be: they'll go peacefully to the commute. They don't even need ranchers to do it for them; they'll herd themselves."

I squirmed a bit in my seat. It had been a long time since I had left this building.

"Sorry," he said, "the only station I could get these last few days in recovery was country music - it always puts me in a dour mood."

"Me too," I said, "I mean I've had those thoughts before as well. I just like, don't know if I'm the one that's messed up because I can't maintain that cadence or if everyone else is more biologically fit or something."

Hermann frowned in concentration.

"My favorite time of the week has always been Tuesday afternoon."

"Oh, the best," he said. And as if it were the most natural extension of our individuality - Hermann went on to wax about the upcoming round. The focus was really centered on building a team that he could trust. I began to sweat profusely as I waited

for this to culminate in my termination - I had violated the trust after all. But Hermann thought the exact opposite. If that had been my low, if that was the worst of it: well then buddy we'd be alright. Amidst the kindling in the fireplace though, burned remnants of my fellowship and grant applications. There would be no more of that, he said - prime material to goose the flame, but no way to live a life.

"My mother was Swiss," he said, "and for all her charisma, she carried with her the trappings of the Old World. In her heart, she believed that despite our best efforts, nothing could ever really change. My Dad grew up in Bend, Oregon and though he took it to extremes, I do believe he was correct in man's ability to move forward."

"How do you know which way is forward when you're all turned around?" I asked.

"There's always a fall line," he said. "If you were to roll a bowling bowl down a mountain, which path would it take? Do the opposite of that. Be animate." Folding his legs, he reached down into one of the many troves of his cabinets, rummaging for something confined deep in the back. "The last step for the Wandruhr involves learning some control," he called out - over the crash of staplers falling and papers fluttering in the air.

His face was completely blocked behind the shelves, but I responded:

"Maneuverability seems like kind of an arbitrary metric, how will we know when we've got the hang of it?"

"There's a grove of aspens along the south shore of the lake, spaced a street's width apart. Go there, and you may find what you were looking for in the first place." When he reappeared, he was more flustered than a simple rummaging would have warranted, and I didn't know what part of it had to do with the clutter and what pertained

to his interest over the lake's aspect. But then he handed me a notebook with a stiff canvas cover, and I was completely absorbed. The outer leaflet was navy blue, the color of 11pm on a Sunday night. Patterned across it were small multiples of a couple setting off backpacking, outfitted with pastel shirts and hiking poles. Embossed on the lower edge were the initials CBW.

"This was Caroline's. She gave it to you?"

Hermann wobbled his hand in reply, indicating that the mechanism of the handoff teetered between any clear cut notion of exchange. "Pay attention to her ideas without any heed to genre or scale," he added.

"Her ideas? She was working on the vehicle too?"

"Not knowingly. Left purely to her own devices, she was exploring patterns in nature. Rhythms that present themselves only upon countless hours of study. I believe she only started to make the connection between the biological world and the vehicular one once she had already made the decision to leave."

"We were supposed to meet!" I said, "But then the Ferryman died, and—"

"May he rest in peace," he said, letting the notebook fall into my hands. Two thirds of its pages were ruffled and wafered; only a small portion remained unwritten. In her own indirect way, Caroline had been trying to help. How was I supposed to not chase after someone like that? But the streets of New York were beyond my scope if I was to maintain any integrity to the current quest, and apparently the only path forward was through the pages of this pastel notebook. Although I was starting to feel better, I couldn't shake the wish that I might have drawn the straw of a real life rather than this increasingly bizarre one. But there was no time to read and dwell now, as Hermann had

already gotten up from his chair and - despite the hobbles - began throwing on some more formal layers in preparation of the Thanksgiving meal. He had a spare corduroy blazer if I needed one, which I did.

A half hour later found us nestled among those who had arrived on time, assimilating into the banquet until we had achieved the rank of guest. Almost everyone has been to a Thanksgiving meal at one point or another so I won't go detailing the goopy textures of the gravy or its near volcanic interactions with the mashed potatoes and stuffing. What caught my attention more than any culinary caldera was the difficulty of scooching the wooden chair the final millimeter to the table without standing up; I had been seated in the same place which had given Och so much trouble. Once there - regardless of my resolutions to gloss over the mundane - I couldn't help but fixate on the absence of turkey. A flightless bird was simply too much for Hermann to bear, and he cried that he wouldn't further condemn the fowl by making it the subject of annual slaughter. So instead we chewed on our tofu in silence. The taste of soy itself was somewhere between bland and bad, and the process of eating it became a question of how widely it could be dispersed among the side dishes. Meaghan was the first to comment on the abandonment of traditional customs.

"You have to pick your battles, Hermann," she said. "If you take up every environmental concern as your own personal vendetta, you'll have a hard time participating in society."

Hermann and I smiled at each other; he had a dangerous ability to argue either side of this issue.

"It's actually delightful if you mix a sprig of rosemary with the soy," he said.

“The only thing more disgusting than this meal is how you treated the institutional investors,” Meaghan said, “These are good, hard-working people, and you ostracized them from the round.”

“Good people don’t fence off their investments to the point where it takes a blood hound to follow the trail from their rosé filled galas to the excrement ridden factory farms that fund the whole thing.”

“You can’t dismiss people entirely just because they eat meat. These are family men who uphold society. They-“

“I’ll eat tofu every Thanksgiving until I die but I’m not taking a cent from them. I won’t stand for the hard boiled hypocrisy of colonial New England or the debutante debauchery of the American South. If one more of these sycophants goes on about trying to make the world a better place I’ll colonize Saturn.”

“You’re American,” Meaghan said, “you can just call it the South.”

Hermann dug his passport from his wallet and threw it on the table. “Not anymore.”

Beside me, Brice ate greedily; he had been working diligently the last few days. His task had been to file down the points I had dulled, and to fit together the pieces I had broken during my drunken bout. I picked at my own plate, trying to go through the motions. Contained to my bed, the only physical exertion I had undergone recently was the constant wrestling with my thoughts. Meanwhile the sherpas ate with the spirit of survival endemic to a species before the onset of hibernation. Stocking up on all available rations whenever possible was a sharp idea when a radio signal could chirp at any moment calling them away. Even excluding emergencies, the demands of the sherpa lifestyle called for outdoor work in twelve, sometimes sixteen hour stretches,



irrespective of the time of day. An obligatory meal for me was for them a true respite. Perhaps cultural events were more necessary pauses when life was naturally demanding. Amidst the ravenous devouring, one of the men paused to examine a carrot dangling on the edge of his fork. He had never seen one before. Meaghan blushed: the first and last time I would ever witness it. She reveled in the admiration of her small miracle, and despite everything that occurred between us, I was happy for her. Sustaining life in a harsh environment was one cause for optimism that I hoped recent events would never take away.

Hermann's ears perked up at a sense of contentment not directly traceable to his own actions. Rustling the group from our reverie, he asked that we each declare what we were most thankful for. Och stated that he was thankful for a good job. He then added he was thankful that his wife was expecting their second child in the Spring. There were numerous toasts and cheers as Och verified it was alright that he had technically listed two things. Everyone agreed that was just fine. Brice took some time to think over his options, twirling his fork between his fingers in the interim. Between mouthfuls of newfound carrot, it appeared that on deliberate thought he might not be grateful for anything. The rest of us stared in disbelief, trying to wrap our heads around how the generalist could summon the same degree of sadness we assumed was reserved for those of us with a high enough degree of specialization necessary for that unbridled pursuit. Finally, he said that he was grateful for the chance to try and get his sister out of Durkhan and on to LA. Without that, he said, he wasn't fully sure what would be enough to build a life around. Hermann stalled his usual antics; family bonds

were an unknown to him, lurking land mines threatening to upset the even ground of his consciousness.

My turn came suddenly and my face grew hot. Despite all the close encounters which had been legitimate causes for concern, public speaking remained a rare and daunting task. I thought about what Brice had said, about how the only thing to be grateful for was the mere shot to do something for someone else. But I was one rung farther down on that ladder, and without someone to help all I could say was: "I'm thankful for someone to miss."

"You're talking about your sister?" Meaghan asked.

"He's talking about Caroline," Hermann said, "alright, who's next?"

Aside from Och, a few more indeterminate sherpas had been invited to eat with us. It was always unclear what the barrier to entry was for the servers to join the served, aside from whom Hermann predicted was most likely to get under Meaghan's skin. Those seated directly after me in the rotation gave their thanks in Mongolian, which apparently was totally acceptable. All present who understood the remarks responded with customary "Mhhhmms." Meaghan was thankful for her small success genetically engineering the carrot. Hermann was thankful for the future, in all its halcyon glory.

We cleared our own dishes that night, letting our hands run beneath the cool mountain water in the sink as it considered its way towards lukewarmth. Brice and I took turns washing and drying, commenting on what we were not thankful for until we had expended enough negativity from our systems that we were ready to buckle down for the home stretch. As our outlooks cleared above the soapy water, we spoke of the importance of finishing, and dreams, and what was at stake. We didn't know whether

we were talking about our sisters, or Caroline, or LA, or a cockpit of fiberglass strapped to skis - but it almost didn't matter: we were moving on. Placing a hand covered in suds on my shoulder he pulled me close as if to say something profound. But as the dish detergent bubbled off his soaking arm and popped in the air above our heads, we just laughed. It was good to be back.

## Chapter 26

Later that night I found myself alone, within one of the sporadic glades of solitude holidays occasionally afford. Brice had gone to Durkhan for the evening to celebrate with his sister and the extended network of relatives that bordered on the population of the entire village. Despite all of the controversy Columbus Day engenders in the East - in the West, you take a holiday when you can get it, and let the past recede.

For a long time I stared at the cell phone Hermann had lent me to call my own sister. Somewhere over the hour, it began to vibrate, alighting with the resonance of another incoming call. Rumbling against discarded pistachio shells, each vibration sent the phone a few centimeters further across the surface of the table. Then it abruptly ceased. Peering at the miniature screen, I saw that it had been answered, fielded from one of the other receivers within the building. My chance at communicating with the outside world was gone.

Haley would have to endure the holiday without hearing from her older brother; I sensed she would find a way. Shortly after arriving here, I had borrowed Dave's phone to let her know about my residency in Wyoming through the end of the year - it had not gone well. I tried to convey a sliding sense of temporary, but some aspect of my voice sounded the alarm. Luckily my sister knew no hatred or resentment, merely dismissal.

"Another one of your crazy ideas, when are you going to get a real job?" she had said, in between sips of chai at one of the Greenwich Village coffee shops where she completed her education. I've never heard someone talk about the importance of consistency and hard work who wasn't seated. She hadn't reached out since, and given

her temperament, I interpreted that as a sign everything was going well for her, if not for us.

Cell phones shunned out of sight lose their allure, but the notebook handed over earlier still possessed an innate power. Within it were keys to past and present; interspersed among the bold imaginings of biomimicry and the quiet moments of personal reflection. Some musings I wasn't yet prepared to look at: for a while I thought about whether the reading could be automated. Meld the highs and lows of whatever was revealed into one solid punch to the gut rather than a prolonged concerto of tugs at my heartstrings. Natural language processing wasn't my forte, but I knew enough techniques to be dangerous: skip a page for every occurrence of the word Sam, or reduce page volume to only illustrations and sketches - it should have been fairly straightforward to identify a block devoid of text. After these ideas lost some of their initial luster, I knew I was acting less organically than even the table's pistachio shells, and my only choice was to open the notebook, and read it as a fellow human being.

Caroline liked to draw - everyone who had ever tried to hold a conversation with her knew that. But I was unprepared to be drawn into the texture of the world within her pages. Scampering across the inside of the jacket was an arctic fox, tail held down and wrapped around its ankle. It was in the act of crouching down on its hind haunches: the trim moment before leaping into action. Stenciled snow fell around its den. Caroline's commitment to shading and detail, and the unrelenting volume of it across the vast swath of the page, was astounding. Around each of the fox's paws were markings - notes in miniature about the animal's ability to regulate discrete body temperatures towards its limbs and tail. I was beginning to understand why she took such a vehement

stance against overblown genetic manipulation: there were so many highly evolved mechanisms for the cold which animals had developed already. Who would have understood them except for those who had looked? And who would have looked except for those considered lost?

Caroline's whimsical interpretation of natural history continued throughout the rest of the notebook. Three consecutive pages were devoted strictly to polar bear paw prints - varying tones of her No. 2 pencil represented the level of heat still radiating from the tracks. Notes scrawled along the margins detailed how these types of thermal images could be used to understand animals who typically thwarted a traditional lens: barely perceptible cream colored outlines against an even whiter snow. By the fourth page, Caroline moved on to the animal itself, burrowed beneath a structure resembling an igloo. The entranceway lead upwards to a central chamber along an incline - a tunnel just barely large enough for the polar bear to turn around in. Scrawled in an arc above the diagram were the words: "these types of grades within passageways can be used to improve energy efficiency."

To keep a journal is, of course, to embark on a solitary endeavor, but this trace of longing for a more beautiful way of life was lonelier than most. Sparse densities of arctic life were a melancholy result of what the land could support, and it was no surprise that a girl who had sworn off the moon chose to study the surviving creatures at these latitudes so severely. Nearly two hundred pages elapsed in similar fashion: beautiful yet circuitous aspects of nature portrayed in a detail fitting for the previously overlooked. Mule deer who hopped on all fours, lynx with paws the size of snow shoes. All her ideas were wacky, original, fluid, and pure. Borne of an inexhaustible admiration for the

creatures she studied, inklings of Caroline's passion blotted out the limiting lines of the page: the kind of deeply personal interest that had to be abandoned rather than carried out in the wrong vein. There were more ideas proposed on this paper the thickness of card stock than I could ever hope to implement in my lifetime, but it did not seem a wasted life to begin the attempt.

Accustomed as I was to a sphere of tidy vectors and right angles, it took me an hour to acclimate to the organic curvature of Caroline's portraits. Weary from the kind of sustained concentration that results from staring down the rabbit hole of a new field, my eyes were beginning to droop by the time I got to the mustelids, and downright closed by the section on underwater mammals. Otters, seals, walruses, whales. I would skip this section and return to it at a later date. In the event we wrapped up the Wandruhr and got commissioned for a submarine, I would return to it again. Nothing lay beyond the leagues of this place's ambition.

After the sketches of North American species had run their course, the journaling began. At the first glimpse of prose, I slammed the notebook shut, sending small bursts of dust spiraling into the air. Some caverns of thought I couldn't repel down. Unhunching from my perch over the coffee table, I looked around. For me she was still right about to walk through the doorway. The first time she had come over to visit us, I had tiptoed around for hours beforehand, making sure the room looked clean enough to enter - that no serial killers or anything lived there. But then after the fact it was almost too clean! When she arrived there was nothing to comment on but the spotlessness - exactly the kind of behavior one might suspect of a serial killer. Now, amidst the tracks of slush and a November's worth of dings in the wall, no one could deny two twenty-

something males lived there; our spare layers cast carelessly across the counters would have provided ample contours for conversation, but there was no one to converse with, at least in real time.

Ultimately, I didn't have the gumption to examine what Caroline had been thinking those months we were both living in Wyoming. But there was one stretch I felt I could bear. Flipping back through the recently elapsed past, I slowed down my leafing when the dates in the upper right hand corner began to prefix with July. Having overshot the mark slightly, I backtracked through the sand streaked days of a New York August, still deciding how to gain traction over the snow. On the 27th, the distinctive word *Oculus* spouted out from among the particles of speech and the pronouns. She described how she had initially told Meaghan that she couldn't accompany her on her errands, only to end up going anyway when her sister got on her nerves in their brief overlap at home.

"Today I met Sam. Different. Not arrogant. I hope they pick him. He seems nice though his sister is a typical NYU \_\_. He doesn't know yet how weird a sign it is that someone would be able to drop everything and just come out here. Or how low on the ladder I am. Or how exhausted I feel just trying to go about the most everyday of things. The subway on the way back uptown was full of \_\_'s."

I slammed the journal closed and another poof of dust. How did she know that I'm not arrogant? I don't even know that I'm not arrogant. And what was a \_\_, anyway? Mentally, I hadn't been prepared to see my name in print; I had been expecting some preamble at least, maybe a little color on the weather or some witty observations thrown in about how the neighborhood had changed. Once my heart returned to a normal rate after a few minutes, I propped open the journal on my knee for another pass. When she



wasn't dwelling on how everyone but her was running late or the shortcomings of both our sisters, Caroline resided within the musings of earlier chapters: observing nature even within urbanity's deeper throes, and her acuity was not the least bit dampened by a day spent in lower Manhattan; I remained riveted with sightings of pigeons and rats described in the same flowery language normally reserved for more cuddly mammals. Like everyone who passed beneath the glass and carbon behemoth of the Oculus, she was aware of the similarities to the whale. Unlike the rest of us moon gazers though, she could not be contented with remarks of "how nice" or "wow". Instead, Caroline dove straight into how the structure was missing some of the crucial characteristics of its living counterpart. She described the function of tubercles - small abnormalities found on the leading edges of a whale fin: one of the least understood aspects of an animal initially hunted for its oil and blubber. These tubercles were less of a necessity for fossilized representations, but the features were essential for mimicking accurate movement. They increased dexterity for the kingpins of cetology to the point where they could turn on an aquatic dime. Several inscriptions within Caroline's Oculus analysis pointed back to a more detailed explanation in the aquatic mammals section - precisely the part I had skipped.

Windmills, sails, fans, and fins could all benefit from this technology, she wrote, scooping up a greater volume of air or liquid as they carved their intended paths. Caroline argued that it was precisely because the secrets were contained in the less frequented annals of biology that tubercles were not more widespread. I read in painstaking detail how the morphological structure gave rise to a delayed angle of attack: exactly the kind of barriers Brice and I had run up against when we thought we

were hitting our limits. From that point onwards, her errata began to sound strangely similar to the banter you would hear down by the docks surrounding the Wandruhr; I wasn't the first one to put together the connection. Painful to relive were her overlays of Luna Lake, detailing sections where we had blown astray during our tack upwind. With a refined sail design and a tubercular leading edge, she posited, we could deftly arc over the frozen valley, turning the course we charted in our minds into three streaks in the snow. It all came down to serrated contours: improvements on an airfoil.

It took me some time to catch up with her way of thinking. If what Caroline drew was true, this could impact all the ways people harnessed motion, ranging from the adventurous to the vital. Planes, turbines, surfboards: half the modes of transport worth mentioning were squandering their turns to the stone ages because the person who came up with an improvement threw in the towel. She had not left without some reason, but posterity would suffer the loss. How many other ideas had been relinquished by frustrated daydreamers who caved to the allure of having something concrete to show too soon? Buried in a monogrammed notebook were author's initials whose full name I would never know. I closed Caroline's journal for the last time. All the dust had been shaken free - there were no more poofs. Even if its author was gone, I would make sure the ideas contained herein would see the abridged light of a Wyoming day. I thought of our last hours together, trekking up into the mountains. It's impossible to even clip into a pair of skis without getting wrapped up into the larger designs of the world.

## Chapter 27

The shed's contents were more logically assembled after my week's absence than they had ever been during my constant participation. I wonder now how Brice managed to put up with me? Entering into his world, staying briefly, always flitting ahead of the propulsion released from a pent up idea. Destined, all the while, to retreat back into the next architected experience for someone of my background and privilege.

A battered old radio crackled in the corner, tuned to a station of traditional Mongolian ballads. I smiled as the melodies reverberated off the flimsy plywood shed, and set to work. With Caroline's notebook propped open before me, I began to file down the leading edges of the runners to match the serrated serifs of her sketches. It was a slow job by hand, tracing outlines against broad surfaces only meant to be sheared by laser cut. Hours crept by in glacial, though satisfying progress: sanding and filing, becoming acquainted with each curve and contour of the runners atop which I had thoughtlessly risked my life before. It was a delayed meeting, like shaking hands with a stranger you pass every day on the street, and finally saying hello.

For lunch that day I packed myself a sandwich of cold cuts and chips. Mustard, bread, canned tuna. Delicious and yet somehow elusive for the first twenty some odd years of my life, occupied as they were with cafeteria food. Self reliance was a lifestyle I was coming to imagine I could get behind, at least until dinner. But it was a peculiar quality to any space within the sphere of Mongolian interior design that there were never any trash cans - the concept of garbage was wasted on them. Unsure of what to do with the plastic baggy at the end of my solitary munching, I shoved it into the pocket of my

jacket, and hoped that one of the gore-tex fabric's myriad features involved preventing refuse from getting too moldy. An hour after my meal, the third and final runner had been filed; there were no more impediments to tackling the main sail. Caroline's notes indicated that this was the most important part: the overall surface in contact with the wind was larger and the complexity of the tubercles involved was not linear as area increased. Each distinct aspect required its own custom ornamentation to harness the organic grace of the whale, and we would need all the acrobatic feats we could muster to ensure we didn't end up battered by the forest again.

I folded the cloth sail and transitioned it over to the work bench so that I could examine the mast uninterrupted. Assuming a cross legged position down on a thin mat, I began the final push. Sunset was coming earlier as we inched closer to December, but even that was no excuse for having barely completed a quarter of the mast by the time it was dark. Granted, tubercles were nuanced, and it took constant glancing back and forth between diagram and implementation to ensure that the frequency was appropriate for the available wingspan.

For the rest of that week, the work continued slowly but with the utmost attention to detail; we bucked the trend of American manufacturing at the cost of our creation maybe never seeing the light of day. But as the hours spent crouched down beneath the Wandruhr lengthened, my appreciation for an intimate knowledge of the vehicle also grew. Thankfully my roommate approved of any further inspiration drawn from the sea, and didn't interpret my sprawled figure in the negative sense of a beached whale. Brice said he barely recognized me chewing contentedly on my sandwich, oblivious to the stubble sporadically dotting my normally clean shaven face. He assisted by performing

glide tests on all the runners. Even though we had already done these, he was rigorous about not introducing any new compromises, and always reigned in ideas one step before we moved too far in the wrong direction.

Along one of the near banks, he pulled each runner by rope over the open ice. Brice would pause, scribble something in his notebook (a habit I am content to say he learned from me) and then go on to test a slightly different pitch for the next few meters. From his hurried movements, I could tell he thought we were on to something. Brice would drop out of sight for a few moments, lost in the haze of vents from the upwelling steam, but he would always emerge farther down the shore, beaming. With something to push against, he had snapped out from his Thanksgiving melancholy and back to his old self. We both had.

Striding back into the shed with head held high, he handed the sheets of his observations over. The recordings didn't fundamentally change the kind of vehicle we would be riding into the unknown, but they confirmed Caroline's suspicion that greater maneuverability lay within reach. River and bough awaited to verify that fact, and the time was drawing near to pen our final hymn in the Book of Leviathans: the gospel according to Brice. As the components began to fit together on the fourth day, I couldn't help but fixate on the idea that we were somehow cheating the air of its resistance. Our sail would be a swooping arm, robbing friction and pressure for the sake of will and whim. Our vehicle was a platoon of only one, but I grew wired at the thought of entire fleets traversing the landscape in such harmony. And this was only one application of the underlying technology.

By that afternoon, Brice and I were bumping into each other more frequently than we had over the prior few days. Normally it was easy to divide up the work; we both had tasks that we were good at. This increased proximity could only mean we were nearing the end of the project, and it was with some reluctance that I stood idly by watching him put the finishing touches on the control panel with a soldering iron. Many of these hard skills had been passed on to me over the last few months, but there was still so much to learn. I wanted to be the kind of person who wasn't intimidated by that fact, who was renewed by it, but in the moment I felt overwhelmed and my wrists hurt. It was a welcome ache, the functioning of sensory perception traded for having accomplished something. Maybe I hadn't realized how much I needed this: the building of the Wandruhr and the steady accumulation of confidence alongside splotchy bruises and the frequent nick of paper cuts. Nothing was taken for granted these last few months, and there weren't too many other periods in my life I could say that about.

With an hour of daylight left, we had to admit that we were done. Our earlier completions rode on the humped backs of early morning gusts, and we were somewhat dumbfounded about what to do with our remaining window. It seemed a violation of all we held dear not to ride out beneath the fading remnants of the day.

"Didn't Hermann say he wanted to be on hand to help us benchmark the test course?" Brice asked.

I was in the midst of inspecting the cockpit - no longer from the lens of a bird's eye engineer, but as a contributing member of its crew. "We basically know what he's going to say," I replied. Our suggested course had been proposed before. To my reasoning, if we held our own private session now, we'd only be that much more prepared for the

public demo. Brice shrugged, it was not in his nature to break the rules, but he had spent enough time around unreasonable demands to know that sometimes the how had to be submerged. A hint of mischief danced across his eyes too; not wholly immune to the alpenglow.

Third attempts carry a sense of desperation - however confident you may be - and as we vaulted across the ice we knew this would be our last chance to summon what was capable in the face of an unflinching winter. No sparks this time as we took off. No wasted motion. The revised edges of the airfoil proved almost overly responsive as our brains caught up to the lack of lag. This was power steering, instant translation of thought to action. The tubercles had their own ideas about which route was the quickest, and it was time for the helm to listen. Tacking transformed from a series of planned maneuvers into a natural progression upwind. Thought fell to feeling over ice that had only grown thicker and more stable since our last attempt. The decrease in chatter proved to be one less thing to worry about, and it wasn't long before we had shot off the southern surface of the lake towards the aspen glades.

As expected of our final training ground, the spacing of the trees was wide enough to grant reasonably conceived turns, but not so far apart as to completely remove the threat of collision or decapitation. Peels of bark chipped away upon our close encounters with the grove. For the first time in months, remnant leaves from deciduous trees hung suspended above us, clinging to the last nutrients they could gather. Their copper and burnt orange counterparts fell scattered about the ground, whipping up in our wake to form spindrift worthy of a commercial. This southern bank was perfect for

figuring out exactly how far we could push our craft, and our bodies began to smush against the fiberglass as we emerged from increasingly aggressive maneuvers. Once we were satisfied that we could operate this course with competence upon a later date, Brice and I exchanged helmeted nods; it was time to traverse back across the frozen lake to the north shore. Topography there remained unknown to the fortuitous benefits of moderate germination, and we needed no refreshers on how its densely packed cover had broken us down during our previous encounter. We searched for the same creek which had served as our first inlet to this impenetrable wilderness, but in the absence of markers we settled upon one of its many siblings. The Wandruhr passed silently from the frozen lakebed into the tributary, and we braced ourselves as the pitches and switchbacks of the riverbed shuddered under our weight. Our vehicle groaned under the strain as well: the nimble turns demanded stretching the very composition of the material. That seemed as it should be - the best of our innovations allowing us to simply survive on challenging terrain rather than growing smug over an artificial one.

The garbage confetti appeared below the ice at roughly the same distance upstream. Brice gulped. I felt like a pocket of air was stuck somewhere between my chest and my lung. He signaled for me to slow down but I was already braking hard and lowering the sail, allowing the Wandruhr to cruise over the immobilized refuse below us. Most people shy away from what makes them uncomfortable, from what might tamper with their notions of winter or whatever season convinces them the Earth is still round. But in that moment before the veil on a comfortable lie was lifted, the only word to come from Brice in the front of the cockpit was: onward. Before us, light poured in from the



end of the canyon, and we angled the rudder directly towards it. The drop-off of the riverbed reminded me of the aircraft carrier falling away into the Hudson: the same sense of boundary, the same muddled sunset giving birth to an impossibly tampered sky.

But the Hudson lay between cities, and the only question with this outlet was whether it spilled into another mountain pass or out towards the great expanse of the plains. My goggles blocked out all levels of light but the most directly rose colored, and my destiny sanded down to a single scarlet point between the granite walls. I held up one hand against the glare, and with the other tillered us up the ravine as my vision adjusted. This crack in the crags had been forgotten by all except for its towering neighbors. We burst through the opening, holding our breath as the world went into slow motion and the valley turned down the frequency of its ragged edges. Moorish in appearance, the undulating hillsides amidst which we now found ourselves demanded a different skillset to navigate gracefully. We channeled momentum from each downslope into the next grade up, rocking from side to side as if in a half pipe - sole competitors in a never before seen slope style contest. Our lift was not unlimited, but with correct timing and necessary wind there was just enough to go around. Over a distant knoll, we could make out the familiar outline of the fence. Both Brice and I were surprised it extended this far up the range, having assumed its dominion was more localized in nature for the animal control experiments.

"We should turn around," Brice said, "we don't want to mess with the elk, or whatever other herds Meaghan is cordoning off."

"I'm going to bring us in just a little closer," I said, though we both knew that wasn't true. Clouds were starting to pour across the moor and visibility was diminishing. Brice responded by hoisting up a piece of the ballast from the floor between our feet. I was worried the snow was going to be visible beneath us with the support exposed, but the layer he hoisted was the familiar mass of petrified wood. He had snuck it into the bed of the cockpit without my knowing, it being one of the few materials capable of dampening the vibrations reaching up through the runners. With the aid of a small pulley, he roped it up to shoulder level, and slid it out in front of the nose of the cockpit.

"Now if we can just slide it - ugh - forward," Brice stammered, "man this thing is heavy." Our center of weight began to shift off center, but my friend managed to secure the battering ram in place. While the petrified wood would be the first part to make impact with the more recently deceased fence, it would not be enough to salvage our craft from the collision: this was the unspoken pact. For all the modes of travel I had ever dreamed of, all the archaic sports emulated, jousting was never on my radar - but that is what our errand had become. Brice raised the point that at least we had no opponent on horseback intent on spearing our hearts out. None that we could discern, I corrected. Rushing headlong into a stationary object demanded less valor, but we accrued little in the way of safety gains - a direct hit being all but assured: our course was locked in. Akin to what occurs when a bull sees red, or when a wolverine sees anything that crosses its path, we had become instruments of nature, acting on behalf of a population.

While the fence may have been built to deter curious antlers and prodding hooves, it was never meant to withstand impact from a fiberglass vehicle hurtling into it at

seventy five miles per hour behind a petrified battering ram. Felled logs were no match for wood tempered by the ages, and we shattered the barricade with scarcely the pause of a speed bump. Amidst the maelstrom of timber, I looked left and right to discover the appendages of runners and sails still miraculously intact. Brice and I let out yelps of joy, followed by a mittened high five that turned into a hand grasp we couldn't let go of. After a few oscillations, our course leveled out and and we strained our sights to glimpse the herds contained herein. But there were none.

An empty basin, blanketed with fog, was disturbed only by the regular distribution of suburban homes. Full stop.

"Slow, slow," Brice muttered as we we stared incredulously down an empty street. A normalized grid stretched on either side of us to form a square half mile real estate development. Both of us were speechless. Clean cut timber houses sat complacently behind cement sidewalks and paved roads. Fire hydrants. Streetlights. Our runners screeched against patches of exposed pavement: one surface they had never been designed to withstand. A mechanical arm extending from a truck bed was in the middle of putting the finishing touches on an insulated window. A steel crane shot up through shrouds of mist. As my gaze followed it up into the low hanging clouds, my heart sank. This was how it all ended. This was the cold weather community of the future: identical in all respects to the setting I had left behind. Antlers adorned the entrances to the more expensive entrances. I wanted to vomit. A Range Rover idled before one of the completed structures, spewing a steady plume of exhaust. Brice and I hopped out of the cockpit and marched toward the car on foot. I wanted to hurl a block of petrified wood

right through the windshield at Hermann, for there could be no mistaking this as the true revenue engine of The Yellowstone Group.

We passed by a silent house, painted drab shades of olive and brown. Colors someone would impose on a structure who didn't have to live in it. Chemicals leached out of the wet pavement and formed that splotchy rainbow effect in the puddles, painted with toxicity. Fiddling with the radio, the driver of the Range didn't notice our approach until we were tapping on his windshield. He lowered the automatic window with a click, and I inhaled deeply to prepare for the steady stream of insults I was about to let fly at the founder. Behind us, the steady beep of construction vehicles ticked off the seconds in mechanized time. When the driver turned to face us thought, it was not the sleek, taut expression of Hermann, but the hollowed visage of a Durkhan elder: a recently appointed foreman of the construction crew. He shouted that this job was an improvement over mining or maintaining bridges, and he was convinced that nothing could have explained his good fortune but divine intervention. "You should get out of here Brice," he said. "We've got work to do." Completely ignoring me, he rolled the automatic window up.

After we got back to the Wandruhr, we did a lap of the futuristic settlement until we were convinced of the cracked nature of the present. The next hundred houses were all like the first. At the back side of town was a conduit of trucks rumbling uphill, laden with plastics, furniture, and, coal. Viewed in a more - or less - enlightened context, the mist took on the charred quality of smoke, and along the far ridge we could make out a plant belching its fumes into the atmosphere. Brice asked me what smelting was, and I said I didn't know. I had spent every waking hour trying to be better at this environmental

thing, and still I didn't know. Then the basin filled in with cloud cover, the opacity worsened, and we couldn't see our hands in front of our faces.

We retreated via turns borrowed from the humpback whale, and felt ourselves about as close to extinction. If given the option, I'm sure Brice and I would have headed straight down to the depths of the sea - so defeated were our efforts on the terrestrial third of our world. Even after we cleared the escarpment and were tunneling back through the riverbed, the beeping of cranes and bulldozers rang in my ears. It wasn't the tick of a countdown, we were far too late for that. It was the crazed ring of a missed alarm, exercising its right to a victory lap as its owner slept in.

## Chapter 28

We had succeeded in our quest for mobility and the only reward was in discovering how fragile the world was. Rage boiled within me, but Brice cautioned against a premature explosion. His counsel was to bide our time until we could pin Hermann with an actual crime. Bulldozing over our natural heritage was not a prosecutable offense in any court of law. How did I think the courts of law were built in the first place? My friend had witnessed enough kangaroo courts in his native village to know that if we wanted anything out of the American judicial system, we would have to spoon feed it to them.

So we did our best to grit our teeth and smile, coming to terms with how so much hype surrounding a project could fade to apathy on the verge of its completion. Postponing our formal demo was as simple as letting the natural stream of events take their course. Everyone at The Yellowstone Group was astir because Dave was finally reporting that his progress on geothermal was behind schedule. Sherpas conducted themselves with an eye towards job security, and for the first time since I had arrived in Wyoming, there was not an “mhmm” to be found amidst the peaks and troughs of their conversation. They understood intuitively the links of the energy food chain even if they never put it into words. Without the same confidence in the slide deck portraying how the Earth’s magnanimous mantle would rush to our salvation, it would get harder for anyone around here to ignore how the majority of our current energy supply still came from coal. In a way Brice and I grazed the same petting zoo, spinning yarns of tubercles and whales when we knew the true engine of transportation hummed on a diet of lead fuel and lumber. If we still believed we were engineers, we were kidding ourselves - we

were the sales team. Our pitch was built atop aerodynamics and personal narrative, but that didn't change what it was.

We had to act fast if we wanted to come to terms with our place in all this. The warmth in the interior of the Earth was leaving us: we were bad at taking care of what we had been given, and the light had gone out. Despite consistent not good news, the stone halls still pulsed with the predominant air of appearing to look busy, and Brice and I were able to carry on clandestine conversations amidst the hurried public. I continued to badger my roommate about securing prosecutable evidence against our founder. While we both had some ideas, the very instruments we needed to get a hold of were the same ones we had eschewed in our determination for focus and solitude: a stable land line and an internet connection. It was time for some context surrounding figures we only knew face to face.

The prevailing air of suspicion was palpable enough that neither Brice nor I looked forward to being questioned outright as to our whereabouts if we went missing for a day. So for the first week of December we bided our time, huddled beside the portable heater down in the shed pretending to make some last minute adjustments. In reality, we were mapping out how to ensure that when our hour of opportunity came, it would go smoothly. Under a perfect scenario, we would issue a background check on our associates using a phone borrowed from Brice's sister. Once every couple of weeks, she secured some time on a landline in order to place requests for new film reels. This frequency was of course faster or slower depending on the season and the shifting aesthetic tastes of Durkhan's residents, and when they did occur, the calls happened early - first thing in the morning Pacific time. For our purposes that meant an arrival in

Durkhan by dawn, and a departure around midnight the evening before. To avoid suspicion, we would set out via the most trusted mode of transportation going: on foot.

Barely used alarms buzzed us awake at 11:45; we had tossed and turned for all of an hour and a half. Our trekking setup remained unchanged from what it had been, save for the addition of headlamps. The longer nights had given rise to deeper hues of darkness in the small hours we seemed to always find ourselves wading through. While usually adept at translating the lesser spoken nomenclature of outdoor gear into English, for some reason Brice kept referring to his headlight as a torch during the first part of our ascent up the valley. This somehow morphed into calling it the true torch, and we both found the pause for a laugh despite the marauding expediency of our quest. We couldn't classify ourselves anymore: some days it felt like we held dual citizenship in the countries of the scholar and the explorer, but on nights like tonight we belonged to no nation.

Glittering lights of the campus twinkled behind us; the sherpas had put candles in some of the windows for the upcoming holidays. Despite everyone's ambition at The Yellowstone Group to shake up the existing world order, and our impending quest to shake up the shakers, a part of me I couldn't fathom wanted to yell at everyone to stand still. If none of us visionaries had ever come out here, what would the valley have looked like? What creatures would have roamed in our stead? Shortsighted stewards of a place that needed no improvement.

Brice tsked at me - a reminder that I was wearing a headlamp, and any measure of looking back was a beacon to watchful eyes. Halfway through the narrow ravine separating the watersheds, he reached into his backpack and handed out adjustable



poles. The snow was only getting deeper the farther into winter we went, and additional tooling was necessary to stay atop the surface. The trick was to match each pole plant to the forward stride of the opposite foot. Overall I think they helped, though every time I dwelled on my technique too much I ended up stumbling. We reached the edge of the village at dawn, and Gerel was still rubbing sleep from her eyes by the time we congregated beneath the marquis. I wasn't sure how Brice managed to communicate with her, but our meetings at any hour always occurred flawlessly. Whatever means of familial telepathy existed between them managed to elude Haley and I, still sending smoke signals through the precambrian dark.

Gerel broke off her hug with her older brother to comment that we both had a way of appearing at the theater whenever we needed something. Ironically it was always for a piece of technology - wasn't that supposed to be our realm? Well, anyway what was it this time?

"We would like to hop on your morning call," Brice said.

"Since when do you have such a deep and abiding interest in black and white film?" she asked.

"Sorry," Brice clarified, "we would like to use your phone. To make our own call."

"Use my phone?"

"After you are done with it, of course."

Had I been in Brice's shoes, I would have argued that saving the world trumped next week's screening of Casablanca, but I was also the one without a sibling I could go to for help. They settled on a finalized order: we would use the phone after Gerel.

“What would a few minutes be in the scale of geologic time?” Brice asked, once it was just the two of us. His mittened punch on my arm was meant to reassure, but I couldn’t calm down. When I stalked after his sister to plead our case, she initially made a scene but eventually came around to my way of thinking.

“Sam cares,” Gerel said. “He only shows up when he wants something but I have to give it to him: he cares. Go ahead and use the phone first if you want to, the movie people aren’t going anywhere but to take another selfie in the mirror.”

Despite meticulously planning how we would get from campus to this point, Brice and I hadn’t discussed which one of us would place the outgoing call or even who we would try and get in touch with if the landline worked. To be fair, almost every one of our prior endeavors that Fall had been either thwarted or redirected along a course we had never dreamed of: failing to plan ahead was less of an oversight than a conservation of energy. We were still pacing around outside the building when Gerel called out through the loose change speaker that we may as well deliberate inside. On the opposite side of the velvet stanchions, the conundrum remained unchanged: who would be around to answer the call? Who was unhinged enough to believe in a conspiracy theory, and yet responsible enough to be up at this hour? It was a dwindling body of stakeholders. No one really got it, which was one of the paradoxes that had sent me spiraling out here in the first place. I creaked open the door to one of the two screening rooms and sat in the back row of the theater - handing myself over to cinematic inspiration. The situation hadn’t been this desperate for me personally in a decade; I hadn’t needed an escape this total since Vermont. That was the only other place I had seen destroyed by outside investment on behalf of the nonresident. A Vermonter would be the only person to

believe me now: the guys at the bike shop. Usually they arrived a couple hours before the doors opened, and I prayed that even with the time difference they would already be up and running on the East Coast.

Back in the lobby, Gerel handed me the receiver and we all waited for several tense rings before a raspy voice answered on the other end of the line.

"This is Alpine Sports, your one stop shop for skis, boards, and snow blades. How can I help you?"

"Dustin," I said, "is that you?"

"Great balls of fire! Roberts!" he answered, "what are you doing gracing us with a call from the big city?"

"Dude, I'm not there anymore. I'm actually out in Wyoming."

"Noooo way. That's cool man. I mean that's really cool. To be honest I didn't think you had it in you."

"Umm, thanks," I said, "you'll have to come out and visit when things quiet down. Right now it's actually kind of an emergency. Would you mind looking up someone for me?"

Dustin was quick to help but slow to grasp the accuracy necessary for his query. Instinct had been enough the first time he saved my life, but this episode demanded precision. What I wanted were all scientific articles published by Hermann in the last decade, peer reviewed or otherwise.

There was a chatter of keys on the other end of the line amidst sporadic slurps of Red Bull. I let out a sigh of relief as the white papers Dustin listed off pertained to the de-mining work Hermann had spoken of in the jungles and rice patties of Southeast

Asia. Nobody was denying that his past was every bit as eccentric as his present, but maybe Brice and I were overreacting in our recent conviction that he was a charlatan. Then Dustin continued to announce reviews from a few additional schools of thought which Hermann hadn't publicized as much: a case study on phrenology citing the skulls of hockey players as inversely proportional to mental capacity, an op-ed on the similarities of group think between present day Silicon Valley and pre-war Berlin, a guest appearance on a radio program citing the rise of streaming entertainment as the downfall of the human spirit. In summary, nothing we wouldn't have already suspected from a founder who wasn't short on original ideas and a room with a view. Gerel, Brice, and I were on the verge of laughing out loud, and we were trying to tell Dustin that his research had been sufficient to allay our fears, but it was getting difficult to rein him in.

"Dude," he exclaimed, clearly taken with the figure we had grown so accustomed to. "You work for a genius."

"Hah, it comes at a cost," I said, "Anyway, thanks for your help man. I'll let you know when's a good time to--"

"And I quote from the Times, 'A pioneer in the nascent field of geo-engineering, turn to page 8 to read why this young entrepreneur believes global warming can be reversed in our lifetime.'"

Silence on our end. "Turn to Page 8, Dustin," I said quietly.

"It's the online version."

"Click the link."

"Worldwide leaders appear in public for the first time in months as the reflective material is deemed a success. Global temperatures fall three to four degrees in wake of

government grant to Menlo Park based outfit specializing in materials science. Talks to continue at Davos in January regarding further deployments.”

The three of us in the theater looked around uneasily. Gerel mentioned that as long as we had him on the line, we should have Dustin look up The Yellowstone Group. Imploring my old friend to dig even further, we were left in silence for ten minutes before he clicked back on to say that a search for The Yellowstone Group turned up nothing but a regional bank in Southwestern Montana and a blog post by a girl who claimed there was a weird glitch between Old Faithful’s eruptions and pressing pause on her music player.

“I’m not going to call you a liar, Sam” Dustin said, “But maybe you should get some rest buddy. It sounds like this Hermann guy was a legit dude, probably just ashamed at botching one of the bigger scientific problems in human history after it initially looked so promising. It was good catching up bud, call back some time when you just want to chat and don’t need something.” The line clicked off.

“Should it really come as a surprise to either of you that whoever controls the means of cold weather production would force circumstances advantageous to those means?” Gerel asked us.

“What’s Davos?” Brice wondered aloud.

“People meet up in the mountains to ski and discuss the future of the world,” I said.

“What else is new?”

Yet again I was struck by the shortage of hours available for studying the society we spent all of our time in. Someday I would research the incentives of humans as closely as I had scrutinized the physical forces. I wanted to know what people meant

when they referred to the Prisoner's Dilemma, and I wanted to stop being surprised when everyone else had an idea as to why people acted the way they did but me. Gerel saw it coming. She may have been sweeping up stale popcorn at the moment, but her life had a linearity to it - one day she would get out of this place and do great things. I felt a bit like an intellectual gun for hire, running in circles. The fact that the jobs came with a preponderance of espresso machines and stock options only made them less romantic in hindsight. My early adolescence had been bartered for goods of high value that I didn't even want, and now there was no getting it back.

Kernels from the nearby kettle exploded into their true nature, and Brice and I took turns manning the ticketing window as the theater's early morning patrons gathered for the 10:00 am showing. We weren't getting off scot-free in exchange for the information we had gained. When the queue had run its course, we poured a box of Peanut M & M's into our bag of popcorn and watched the sun come up over the ridge. My vote was to have Hermann arrested and put behind bars immediately. Brice and Gerel agreed that few authorities even existed in the area, and those that did were already in the coffers of The Yellowstone Group.

"Have you even seen any cops since you've been out here?" Brice asked.

"No," I said, "You?"

"I thought I saw one once," he said thoughtfully, "but it was just a man in a blue hat."

"Lawlessness," Gerel said, "what dictates the West is lawlessness." What, she asked me, would an arrest of Hermann do exactly, supposing we even had grounds to detain him.

The only thing I could offer was that it would lead to better living conditions for the villagers - who might be able to quit coal mining for a return to healthier forms of life.

She scoffed. "They're always talking about the sacred ceremony of the buffalo and the sanctity of the headwaters, but when it comes down to it, they want theirs just like everybody else. You should be here during trapping season. The back of the theater gets to smelling like beaver pelts when they store them on their way to Cooke City to sell after the show."

"Arresting him will at least get all this to stop," Brice said, "I'm not saying that's going to cause everything to go back to normal. Because what does that look like anyway? But if the world is incentivized to destroy itself, I'd rather be a cog in the grand scheme than an accomplice."

That sounded fair to me, and even Gerel had a hard time taking issue with her brother's line of thinking, though she added, "We could also just burn everything down. I mean, I'm moving to LA anyway." We told her we would resolve this on our own, we had gotten ourselves into the conundrum in the first place. As we left the theater doors lingering open with our fingertips, it hit that point where you usually say something upbeat to the party you are leaving behind. Something trite like "Until next time" or "Thanks for having us". But on this occasion, none of us could bring ourselves to do it. The world was complex and twisted, and at the tail of that sunrise, no physical movement of arms, no stringing together of words, could combine to form a gesture that was in any way reassuring. So we let the door close and walked up the nearest hill.

## Chapter 29

Brice and I burst into the common room later that afternoon with a plan fully hatched. After dinner time - around the hour he took his tea - one of us would pin Hermann down to the floor while the other would tie him up with nylon climbing rope. If the police were nowhere to be found, it would be a citizen's arrest. From there, we trusted fate would be on our side for the five hour drive down to Salt Lake to deliver him to the authorities. I had never been to Utah before, but Brice said he had a good feel for the route by eye.

I was in my private bunk, adjusting to the fact that my present surroundings would be winding down in the near future, when streaks of fur began to hurtle by outside the window. I walked over to get a better look. An elk paused to look up at me in the dim glow from the fluorescents, as if to say, "What are you doing standing still?" Then it shook its antlers and tore off towards the lake. Farther up the valley, a red blaze smoldered from the heart of the forest. It had been too cloudy an afternoon for such a brilliant sunset, this radiance grew from a combustible ember. Gerel's words came back to me: burn everything down. She had never come up short on a threat before.

Wind licked down the oncoming strips of flame - the dry snow at this altitude seemed completely oblivious to its capacity to douse the burgeoning conflagration. Brice was still in his room, reading a stack of letters spread out around his bed. The two of us had made a pact on the way back - that whatever occurred during the intervening hours - we would proceed with the citizen's arrest at any cost. But as the unpredictable gales hopscotched fire down the mountainside towards our home, any statistical model we could have produced as to our chances of success would have been inherently



flawed. Elk continued to pour around either side of the building, their taut muscles and inquisitive stride melding together to form a braided, atavistic stream. Amidst the muted crackling and migratory scampering, a familiar bleep from the driveway signaled the locking of car doors. Shortly thereafter a turbocharged engine roared to life, and I dashed towards the bay window to see what was going on. Through the shrouded night, the driver turned up the lapel on his jacket, and gave a feral once over of the gravel road. Then he sped off.

“Brice, this is it!” I shouted, jogging over to my boots and hastily shoving them on. There was no time for tying laces, I crammed them into the wells beside my feet. Brice poked his head into the common room, his face in tears, as he gripped the contents of a hand written letter. Hermann had written us both a personalized note explaining the story of his life, he said, offering me an unopened envelope with my name on it. Whatever had been said, it had left my roommate immobilized. But I turned down my copy, and stormed down the stairs. Words were infinitely malleable, flexible enough to suit whatever end. I trusted the pit in my stomach when I saw the crane in the sky. Enough damage had been sustained by the silent sanctuary of the Earth’s reserves as we came to terms again and again with the human condition. If I ever prayed in the future, it would be for my neighbors to finally move beyond themselves.

Dashing out into the open that night was to realize forever that the infinite expanse was gone. The world was a burning auditorium, larger than the indoor space I had left behind, but still bounded. Clumps of ash and fiery debris rained down from celestial rafters. The elk were gone. Tail lights receded across the lake; whichever route Hermann followed was no path I had ever seen a vehicle take before. I slipped and

skidded down to the shed and raised the makeshift garage door. Preparing the Wandruhr was a blur, and I vaulted off before I was fully ready, telling myself I had internalized the motions gleaned from only a single working test drive. Light pollution from the fire obscured a clear view of the stars overhead, and closer to home, the situation was equally opaque. I surmised that Hermann had disappeared somewhere beyond the aspen grove on the south side of the lake. Outside the northwest corner of this northwest state, I possessed little local knowledge. Dusty old maps had always served as a reminder of our true location, but glances at them were stolen, and so many of the electronic resources featured an already curated set of borders. By strained sight, I threaded the Wandruhr among an increasing number of steam vents and mud pots in the wake of an estimated trail. While the mountains grew less foreboding to the South, the topical abrasions upon the ground became more pronounced, harkening back to the primordial origins of the Earth.

The cockpit bounced and tumbled off even the slightest steppe in the ice. Shuffling my feet to see the floor, it appeared the petrified wood had been removed. In an effort to stay preoccupied over the last few days we had essentially reduced our labors to rearranging parts around the shed; neither Brice nor I could have imagined we'd be needing the Wandruhr in action so soon. After the shelf propping up Luna Lake, I followed the faint tire tracks down the slope of a fractured massif. While the Range was nowhere in sight, I tacked on either side of its etchings, and allowed the more open terrain to fill up my sails, harnessing the full power of the tubercles. The Wandruhr accelerated with each improvement to the angle of attack and I could feel the rivets chattering - wheezing out their rusty sighs. Eventually the grade flattened, and the

crevasses grew less cumbersome. At the far end of a lone outcropping, the car finally came into view. Hermann had become mired in snow, his tires spinning uncontrollably as the engine churned without anywhere to go. Its idling sent a pang of sadness into my heart. The sort of attitude I adopt every time I see prey stranded in a wildlife documentary, no matter how many times I've tried to come to terms with the circle of life. That still made me the hunter this time, and my course was set to ram the founder head on.

I tried to pull at the tiller, aiming to alter my trajectory slightly. When that did nothing I began to heave my entire body at it, willing to settle for any degree that wasn't directly forward. Hoarfrost lined the copper wires and aluminum arms leading from the cockpit to the runners, coating my steering options in a sheen of Shackletonian mire. I lifted myself by the arms from the fiberglass and began to edge out of the protective cocoon along the front beam. Indifferent to my plight, the vehicle still careened forward at speeds close to eighty miles per hour. My cries to stop, for somebody to hear me, were lost to the wind as I removed my helmet to bang it against the vehicle's jammed side. Chunks of ice were kicking up from behind the car only a hundred yards away, and they were sailing through the night in my direction. Shielding myself from the onset of this meteoric deluge and its teeming trail of snow, I leaned out into the open air beyond the front of the craft - using my body as a lever - hoping to pull the Wandruhr off course through brute force if I couldn't steer it outright.

I looked back at the way I had come. On the underside of the cloud bed above the lake, an orange reflection seethed with the heat of a warming cauldron. A kerchink echoed from the front runner, and the aluminum beam to which my legs still clung

began to pivot, causing the Wandruhr to climb a bank beside the stranded car. Ensnared in the arctic quicksand, Hermann stomped and flailed against the churning tires. My vehicle's left runner caught on his Range's trunk and snapped off without a second thought. The imbalance sent me spiraling from my perch and into a nearby thicket. Amidst the familiar crash of spruce and fir, I heard an engine behind me splutter into gear - dislodged at last by the unintended encounter. A stray branch had lopped off the Wandruhr's main sail, and a severed stump jutted between my roost and the cockpit. I rose hopelessly to my feet and stumbled backwards from my creation, but before I could see it coming through the forest cover, I was squarely within the path of the resuscitated Rover. Dazed, I sidestepped hopelessly - only to survive with the realization that it wasn't yet moving more than 5mph. I fumbled with the rear side door, legs churning as Hermann desperately searched for traction. It was a battle to search for the single hold that would get me in out of the cold, and despite all the measures he took towards secrecy and protection, I found out that night that Herman was the type of driver who kept his car unlocked.

Inside the back seat, his savagery was in full force and I was immediately thrown into a headlock which cut off my air supply. Thirty seconds passed of diminishing oxygen, all while my mentor kept his opposite arm firmly locked on the wheel. About the only thing I could feel was the Range accelerating at a suicidal pace. For a long time I had speculated as to how exactly I would meet my end, and I remember giving some sort of internal "Mhhmm" at the fact that it would be suffocation. Then through the metal I could feel the pummeling of branches as our path entered another copse of aspens. Hermann's grip lessened perceptibly. I didn't have enough room to pick myself up and

look around, but I had enough space to think. When you've been utterly confined, an inch is as wide open as a mountain basin - and I had finally been wronged enough to consider myself a vigilante.

"You're under arrest!" I shouted, reaching for the zip ties buried in my jacket. I couldn't get the zipper to go down with my bulky mittens, so I had to pause momentarily to take them off. His hold released around my neck completely when he heard my words, and Hermann just stared at me. For the first time, the condescending mentorship faded out, and there was pure wonder - those brief moments of recognition when two people pause and look at one another long enough to think: "What is it like to live a day in your life?" That was my last image of him: a concerned expression framed between an upturned collar, both hands at ten and two on the steering wheel. His eyes refocused on the road as a single white tailed deer stood paralyzed in the headlights. Its eyes glowed in the wash of the LEDS with a lunar yellow. If Wyoming was about to be colonized, than this denizen of golf courses and fertilized front lawns was here to claim its rightful place within the suburban food chain. It was time for the last predator to die. Hermann's final act on the globe was a first for him personally: he hit the brakes. Clumps of slush must have lodged themselves deep within the antilock pads, for our stop was uneven and the massive SUV began to pitch sideways. The Range missed the deer but rolled onto its side, and without a seat belt I was launched through the window, a husk of a body tumbling to a stop in the snow. Battered but otherwise sentient, I watched as the Range Rover toppled down the grade until it was a crumpled skeleton, barely reminiscent of the proud specimen that had idled outside of the The Yellowstone Group on that starry night.

The crushed mass of the car disappeared at the base of the hill into a fizzling pool aglow with yellows, oranges, and greens. I rubbed my eyes, staring at the otherworldly colors and convinced my vision had been distorted by some impact or another - so much more frightened of impaired sight than I was of failed leg or limb. But then something about the perimeter of the lagoon struck me as familiar. An image from deep within the rolodex of National Geographics bubbled up, refined further still by the front of a baseball cap. What ultimately swallowed Hermann and his vehicle were the microbial waters of Yellowstone's Grand Prismatic Spring: a large enough logo to submerge him completely.

## Chapter 30

Police lights and Christmas lights flickered together to form the end of an era. My head throbbed as I tried to recount the sequence of events for the officers. First off was the deer, but that had already sauntered off to thwart other endeavors. Next came the prismatic spring, which was equally unhelpful as it silently bubbled away. The policemen grew brusque as this vanishing act stood in the way of their last minute holiday shopping.

“What are you, like, some kind of stranded boy scout?” the lead patrolman asked as he began to scrawl down notes without waiting for a response.

“He can barely grow out a beard, Todd,” another one said, “he isn’t capable of murder.” The pair went on to explain how protocol mandated that I still be handcuffed and kept overnight in a Salt Lake detention cell while they sorted out the paperwork. I was fixated on the spot where I had last seen Hermann sink into the depths, and couldn’t fathom how there would be no attempt at a recovery. Sufficiently pleased that the trouble was far enough away from the real estate development: law enforcement was calling it a wrap. I accepted the cold metal around my wrists with equanimity.

“Get a trade kid, that’s my advice. Then start a family.”

Raising my shackled hands to the sky was the best nonverbal gesture I could muster to communicate: one day at a time. A woman brought over a mug of hot cocoa, and I thanked her for it. Two sips in though, I spit out the brown liquid, spiked as it was with a healthy dose of holiday cheer. The men just shook their heads at me as I lay crouched next to the steaming cup. Even upon my arrest, it seemed I would

continuously be punished for refusing to be one of the guys. Herded into the back of the cruiser, I endured expletives about how difficult it was for them to bear the cold, especially once we left the insulating blanket of the Grand Prismatic Spring. The female officer began reciting a prayer about the serenity to accept that which she could not change, the courage to alter what she might, and the wisdom to know the difference.

The problem, I wanted to tell her, was that there was nothing that didn't fall in that first category if you travelled in certain circles.

"What are you gonna do?" one of the men asked rhetorically, shaking his head as the windshield cleaner froze in place. He took a long swig from his flask. "I mean, really, what are you gonna do?"

For the first several hours of the drive, we skidded along the fire roads - the paucity of consideration given to the tires appending itself to my already overcrowded envelope of concerns. For the first time since the crash I thought of my friend Brice. I asked if there had been any sign of him.

"We let all those people sort out their own affairs," Todd said, "Better not to meddle in this part of the world. The only reason we followed you is because we had to hit our quota for catching speeders, and that Hermann character was the only one with a car."

Despite many close calls we made it to Salt Lake in one piece, and having described my sojourn in one precinct I have no desire to repeat the experience, even in the retelling. The primary difference between my arrest in Utah and New York was that there was a great deal more questioning as to the make and model of my vehicle. Like so many other facets of what my life had become, I wasn't sure where to begin. There



were also a lot of Mormons running around the station, none of whom could understand why I hadn't memorized Hermann's license plate number. I was released the next morning on condition that I appear back in court the following March. At the rate life was approaching in those days, it felt like a century away.

A white van idled at the foot of the steps, sitting to the side of the traffic on a slush filled street. My suspicion had been that there were all of six people in Salt Lake, but I actually had to wait some time until I could cross. Familiar edges of an olive Tyrollean cap and frizzy red hair left no doubt as to who the driver could be within the fogged up windows. Block after block elapsed as we shifted in our front seats, struggling to define exactly what we were to each other if no longer colleagues. Without the pressure to distill everything down to an agenda, Meaghan was able to do something she had never been able to over the intervening months: talk normally. Outside of such a rigid social structure, she wasn't a bad person to get to know. For the sake of propriety, she would be staying on through Hermann's funeral and assisting with the transition of a new management team. She also wanted to make sure that Brice and I were well equipped to begin our next endeavor.

Coffee stained floor mats, littered spare gloves, and a hastily stolen gas station squeegee all spoke of a hurried rush on her part to come get me. Between turns at moderate speeds, Meaghan offered that she would be more than happy to provide references, and I couldn't help but ask why she was being so nice.

"Well my name is all over this enterprise for crying out loud," she said. "We want our people to go on to bold and legitimate endeavors afterwards. Let me know how I can help."

I nodded my thanks. My hair was matted after a night spent sleeping in cramped compartments, and despite the cold I covered my head with one of the van's residual spare baseball caps in exchange for my beanie. The two of us drove along the Gros Ventre and Madison rivers, in a van that had seen better days, towards a valley whose time had almost come. Heat from the car fan was warm enough for Meaghan to shake her mane free of the cap, but not yet toasty enough to turn down.

"Where do you think Hermann was heading last night?" I asked.

She thought for a long time. Her eyes were rheumy from a long drive through the night, but they refused to tear up.

"It could be that even he knew the forces chewing up the New West would spit out the bones when they were done," she said. "Manipulating atmospheric air temperature is one thing, but it's quite another to stave off investors when they want their money back. Perhaps he just wanted to drive south to look at those unspoiled lands one last time."

I thought of the deer, and the tire marks in the snow, trying to put my finger on what caused Hermann to take his foot off the gas. He had brought more cold on the world than any ice age, and in the end he was scalded alive. We had lost a man of extremes.

"So you knew?" I asked Meaghan.

"I get that a lot," she said, "What are you referring to specifically?"

"You knew not only about the money coming in for real estate, but also that he started this trend in the first place?"

"Who do you think helped him write the business plan?" she said, "By the way, is your seat warm enough? These gadgets can be so fussy."

“It’s fine,” I said, and she seemed content with that.

Brice the indefatigable was sweeping up outside the Biology Home when we pulled into campus early in the afternoon. I’m sure he would have cleaned up the Building of the Built Environment too had it not completely burned down, replaced by a pile of rubble and ash. He explained that he had gone looking for me through the night, reaching the circle of police sirens by dawn. After fastening the broken runner back to the main body of the Wandruhr, he had limped the craft home under the hesitant first light of a mid December morning. His return to the remnants of campus preceded ours by little more than an hour.

Meaghan gave him a mild bow but otherwise busied herself taking photos for the insurers. Part of me couldn’t believe her obsession with the proper aperture settings on her highbrow camera; any hack with a flip phone could have documented that which existed no longer. But I suppose we can’t just shut off the way we are. In between clicks of the shutter, she repeated her stock phrase to Brice about being more than happy to write him a letter of recommendation, should he require one during the course of his future endeavors. Brice said he wasn’t sure if the local blacksmith would necessarily care about who sat on the last group’s board of directors, but he would keep the offer in mind. For a second, all was still, and the exposed brick of the fallen hall’s cadaver stood out against a yellowish streaked sky. There was something honest in a search for shelter amidst the backdrop of fallen housing, and we all might have floated off into an Edward Hopper painting had Meaghan not handed us checks for more money than any

day laborer ever knew. Orders of magnitude greater than my promised salary, my first reaction was to consult with Brice to ensure my friend received an equal share. He did.

I thought of the cold hard bills our pieces of paper represented. Would I ever grasp the attitudes of a nation who remembered its leaders by inking their faces across the money supply? Could I ever live out my days among a land where heroism had to be chiseled into a mountainside? If this were the fate of great men, then my ambition had evaporated. I was content to be a wanderer stopping in to Mt. Rushmore's gift shop to pay with crumpled Hamiltons if the wrapper of a Klondike Bar was the closest I would ever get to a polar bear. I had done what I set out to do, and I only felt worse.

Meaghan wanted to know if I would accept a ride back East aboard the Grumman, and I asked for a moment to catch up with Brice before deciding. Left alone, the two of us hugged each other and expressed in our own way what an experience these last few months had been. I handed him my check and said I had an idea: The Repair Shop for Vehicles That Don't Exist Yet. No external funding or fanfare, just two friends working out of a garage. Our earnings would cover us for rent. Brice smiled, but looked down at his check and said that he was committed to sending his sister to film school. It occurred to me that the magnitude of our currency was lost on my native friend, his prior wages having been paid out in tögrög. When I explained what the adjustment equated to, he shouted out a phrase in his native tongue, the steppe equivalent of: Great Heavens!

"Mhhmm," he added, as the possibilities began to yawn before him, "Mhhmm, yes, this will be good."

I promised to return and realize our plans on the first of January. But having missed Thanksgiving, I felt obligated to spend Christmas back on the East Coast. He looked skeptical, but I patted my check against his coat pocket, saying, "Keep this as a security deposit."

Meaghan and I barely talked during our van ride to the river, but once we got up in the air, it was difficult not to adopt a broader perspective.

"Surely the world will criticize what has occurred here," I said, from the safety above North Dakota.

"The world has already found out and moved on," she said, handing me a newspaper. Page 8 of the Times ran with the headline: "Drunken Billionaire burns down home, totals car. Will tech's new elite ever grow up?"

"He didn't drink either, did he?" I asked, "For me it always felt like such a thing, but I honestly can't remember with Hermann. He was always up to something grander."

"Hermann was very good at controlling the arenas within which he did battle. You would do well to remember that Sam."

"I'll try," I said, pulling the sleeves of my fleece down over my knuckles. My mittens had gone missing... somewhere.

Crested ibis poked its head out over Ohio. I guess all we really take from these experiences are the creatures we meet along the way.

Throughout the descent, Meaghan proved herself every bit the pilot that Hermann was. Those of high breeding always possessed these rugged skills by birthright, while I had to risk my life for the slightest chance of learning something new. But over the past

three months, I had risked, and I had learned, so it was with genuine warmth that I thanked her for the ride as the two of us took in the density of our former home. If we had all just stayed close to the people we cared about, maybe transportation wouldn't have been such a big deal. But we can't choose where we're from, or what we grow up exposed to.

There was nothing left but to shoulder our packs and bid each other farewell.

"Where will you go?" she asked

I was already walking.

Depending on the conditions, the mountains look different every time you see them. The view up the Hudson less so, a built environment as indifferent to its surroundings as the people who built it. Caroline was up there somewhere - a subway ride away, but I was no longer the type of guy to go below ground. Silently, I thanked her for the person she had been. The person who sketched out polar bear paws for three pages before getting to the point. I had lost so many to the adopted urgency: the surface of the High Line was the flattest I'd crossed in months.

My adventure was no ordinary one, and I needed the kind of extended audience to hear me out that only family can provide. Haley's apartment was a short walk away, and my vigor returned with all the possibilities of the future generation. It took every block down to Barrow to rearrange the pieces of what I'd seen in a way that mattered to someone already doing their best within an urban environment. Was it not as outlandish a task as screaming at someone already shivering to go ahead and feel the cold? I

ducked in for a pair of chais before heading up; this would be a long one. All I could do was try and explain myself, and what I would no longer participate in.

THE END

### Acknowledgements

Thanks to my parents for reading the first completed draft, and to the Wilmot brothers along with the rest of our workshop group for their genuine interest. I'm also grateful for Amanda and Stein for supporting the decision to go off on a vague adventure to pursue writing.

Shout out to Espoir, Sam and Chelsea for making me feel at home, even on the road.

Much inspiration is owed to Brice, for his uncanny ability to turn up anywhere.