ABSOLUTE ZERO

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It's fine that I've lost visual contact with camp when it's -49 degrees out with 35-knot winds. It's no big deal that I've lost sight of the flag line leading the way back, and that a hairline crack in my GPS has spidered its way through the protective covering, freezing its components. That the sun doesn't rise for another two weeks this far north, so that even if they do come looking for me in this weather, they probably won't be able to find me until I'm long dead. There was really no better way this could end.

What did I think was going to happen? That a taut, tiny gal like me squeaking in at just under 103 pounds (and dropping, no less—but hey, 128 with snow gear) would thrive at an arctic research station alone with three tough dudes and no other humans around for three hundred miles? That I would prevail against those odds?

By my calculations, Dirk should be navigating back on his snowmobile to camp by now to grab more flags and form a search party (of only two people, that is—not much of a party), but there's hardly anything they can do. Visibility's down to 50 feet with sheets of snow wafting up in a white wall, and though the weather was decent when we set out, it seems there's a windstorm brewing.

My snowmobile still works, but I must've nudged the handlebars one or two degrees off course so that I missed one of the flags, and now I can't find them at all. If I'd kept going, I'd almost certainly have veered off in the wrong direction, given that 359 of those 360 degrees aim toward empty space and only one points back to camp. So here I am, staying put like they drilled into us in training, twiddling my thumbs on the ice until either I'm found or I can't feel my thumbs anymore. Meanwhile, every instinct tells me to flee.

Dirk had the backup satellite phone, and my radio is busted. Machines, like humans, tend to succumb to the elements when it approaches -50 degrees. Out here we lull ourselves into this false sense of security with all of our redundancies, rehearsals, and safety procedures—spare batteries in our pockets to keep them warm, a snow pod survival shelter hitched up to the back of the snowmobile—but life gets mean anyway. The radio breaks, the top half of the fiberglass snow pod shears off at its rivets from the jostling and the cold. You are diagnosed with late-stage cervical cancer only weeks before the expedition of a lifetime, a time which is no longer theoretical but increasingly finite, measureable, like the instrument readings you've just ventured out to collect for climate data, which half of the reading public won't even believe, and which has now stranded you in snow that is miles-deep.

I probably shouldn't have slept with Dirk last night, not because of the cervical cancer thing (which nobody knows about, by the way—and so what?—it isn't catching), but because now he'll feel responsible if they fail to rescue me and I freeze to death. Also because I'm married. Simon doesn't know about the diagnosis either—do you think he'd have let me come if he did?

There's a saying whenever something goes terrifically wrong here at Summit Station Greenland, atop 10,500 feet of ice and nearly 300 miles from the nearest town, that whatever near-catastrophic thing has transpired—a pipe's just frozen and burst, a generator's broken down: *at least we aren't in Antarctica*. But even there, though the physical conditions can be technically more brutal, the permanent outposts are at least well-populated year-round. Here, in winter (which is now), the station's operated for months on end in perpetual twilight on a skeleton crew of exactly four, which is roughly the number of people that—if delineated in a news headline as casualties in some natural disaster—would elicit barely a collective shrug from humanity: too bad, good thing that it wasn't more.

There was supposed to be another woman here—they try not to maroon us out here on our own, and now there are enough of us in the field to make it work—but the gal broke her foot mountain climbing just before our session began, and they had to find someone qualified and experienced to take her place on practically no notice, and that person was inevitably a guy. That left me alone with her replacement, a climatologist like myself (Dirk, from NOAA), along with our seasoned camp manager, Karl (a Dane), and Roy, our mechanic. For fifteen weeks, I've been channeling me some hard-core Sally Ride. Even got the song on my phone, my morning anthem, though I admit to some confusion over comma placement in the "Ride Sally Ride" chorus. Who's riding whom, and wherefore?

The symptoms of early hypothermia, which I now clearly have, are fairly quotidian: they include paleness, excessive shivering, drowsiness, numbness in the extremities. I can't verify that I'm pale, but the rest are certainly present, though bearable for the moment. It's the later symptoms that can get a bit gnarly and wild. I hate the shivering, though; it saps energy and feels as though I'm possessed by some vibrating menace of a demon, but it does mean that I'm not too far gone.

Anyway, the sex came about because of a fight in the Big House over the dishes. Things had been strained from the beginning because Dirk and I are conducting overlapping ice-melt research for competing agencies—he for NOAA and me for NASA. At a basic level, our beef was jurisdictional. But last night I'd remarked how, wasn't it appropriate that I, the only human present with a uterus (flawed as it is), was frequently assigned double-duty as kitchen mouse, relegated to both cooking and clean-up for a single meal, which meant that it took twice as long for me to achieve any down time in the evenings.

Dirk, who's originally from Germany and pronounces his name "Deerk," was mucking around on his guitar while I scrubbed the bejesus out of those pots and pans. He strummed some lazy chords and responded that it seemed only fair considering I couldn't really pull my weight around here when it came to all the extra shoveling required now that the Green House was entirely submerged in snowdrifts, and we have to tunnel in anew each day just to get down to the door.

I replied that I was already shedding pounds despite consuming over 4000 calories a day, and that I *was* shouldering my fair share with all the augering for ice cores I was doing for experiments that weren't even mine, all the climbing of ice-encased towers to brush off the rime that's gummed up the monitoring equipment, the *just staying alive* I was doing on my meager 103 pounds (a certain percentage of which wasn't even genetically *me* anymore, but I didn't go there).

Karl breezed by the kitchen on his way to the food cellar while we argued, and the sexual tension that bubbled up between Dirk and me was palpable enough that he didn't even bother to intervene. Karl just raised his woolly eyebrows over his inventory clipboard with a peeved expression that seemed to say, "Really? Are you guys still pretending to not want to fuck already? Because Roy and I are getting tired of this whole dynamic and are waiting for you to get it over with." The man could express quite the range of human emotion with just his mammoth eyebrows, which spoke of their own accord as if they were separate entities, mossy epiphytes subsisting on the substrate of Karl's gargantuan pores.

Roy had already retired to the living quarters in the Green House, and Karl had descended into the cellar, so I took the opportunity to propel a wet, soapy sponge in the direction of Dirk's face. At this, Dirk abruptly put down his guitar, whose surface was now pocked with the spittle of soap suds from the sponge, and rammed the sponge right back at me but with the unintentional thrust of a foul ball, such that it hit me quite forcefully in the eye.

I cried out briefly out of reflex, grasped at the afflicted eye, and blinked the soap out as best I could without coming across as a wuss. Dirk leapt over out of genuine concern and remorse for having escalated the situation to the level of puerile playground antics (or perhaps that had been me—either way, that's where we'd arrived). He took one cursory peek at the eye and suddenly we were dry humping against the wet counters, making-out with gusto like middle-schoolers having only just discovered French kissing as an available pastime.

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The more moderate stages of hypothermia start to get fairly interesting. Significant confusion and impaired judgment (which may manifest as intoxication—wheeeeeee), lips and extremities turning blue from blood being shunted to the core, the peculiar *absence* of shivering, and a slowed heart rate. Also, possible urinary incontinence as a result of overworked kidneys. Can't tell about this one because I can't feel my own ass anymore, but I'm pretty sure I've got some of the other things.

These twenty-five pounds of protective clothing are only going to last me so long against the raw elements without the snow pod, and it's got me thinking right now about time. How much time has passed since I lost sight of Dirk? How much time have I got left (one hour? two? twenty minutes?)? Is there any way for me to stretch out my remaining time in such a way so that my perception of it lasts longer than it really is (and do I even want it to?)? And what time is it, anyway? (Time to get a watch.)

I used to say that to Simon all the time—(see? you can't even talk indirectly about time without using time phraseology). Anyway, whenever he wandered around the house wondering aloud what time it was, I would always chirp, "Time to get a watch!"—always garnished with a hint of snark. He was unwilling to wear a timekeeping device himself but was fiercely wedded to his schedules, never eating when he was merely hungry, for instance, only when it was officially lunchtime or snack time, that is, when it was "time to eat." He believed there was hidden virtue in maintaining a routine, enacting a kind of austere tyranny over one's own selfish desires, and who was I to rumple his rigidity with my free spirit? Or I suppose he still believes it anyway—here I am using the past tense though I'm the one who's dying. It does seem appropriate given that I'll never see him again on this fair earth. Goodbye, Simon. We had a pleasant run.

But—and then it strikes me—*oh no*. They wouldn't do an autopsy if they found my body, would they? Oh goddamn it that would be a terrible thing. Not because of the cancer, no—that knowledge could only make things easier on everyone—not that, but because of the semen. Good lord, that is not how I wanted this to go.

We didn't use a condom. Why would we use a condom? I'm both sterile and dying, and I told him we didn't need one because *we didn't*. But what if they find my body and suspect foul play? What if Simon can't accept that it was an accident and demands investigation? What if Karl mentions the argument he overheard last night to whoever comes from the NSF to collect the body, if Roy corroborates that there's been tension between Dirk and me this entire time, and if they think maybe he set me up to freeze to death or drugged me or raped me or something else terrible like that?

Clearly I've watched too many police procedurals—I can't even tell if that's plausible (is this the confusion I was warned about? (would I even know if it was?)). What if Dirk goes to jail? What if Simon hates me for all eternity? (Does it matter if I'm not here to know?)

So. Shall I try even harder to find my way back now and live to die another (very near) day, or shall I bury myself in the snow?

The snow. Technically it's what we call "firn"—snow that's lingered around for more than a year without melting (snow with an old soul). It's already submerged half the snowmobile. It's also accumulating in the facial pocket of my hood, which cocoons my whole head and contains only a narrow opening in front for the eyes. My tears are starting to freeze on my eyelashes—the goggles were too tight and the steam from my body heat had crystallized on the inside of the plastic, so I removed them.

To avoid the wind and pass the time I lie down to make snow angels, but the snow is too firmly packed. I only manage a vague depression and laugh at how it resembles the shape of a chalk outline at a crime scene. It occurs to me that only an unhinged person would try to make snow angels in these conditions.

My metabolism is losing the battle against the heat sink of this -50-degree ice sheet, which is so vast it would raise sea levels seven meters worldwide if it melted, which is why we are out here monitoring its demise and ours. Ostensibly, we're part of an early warning system that's meant to sound the alarm when we as a species have pumped so many greenhouse gasses into the atmosphere that we're officially doomed, but none of us believes anyone will listen anymore. We're really out here for ourselves—because it's fucking fantastic—to hell with the rest of you fools.

The hand warmers and boot warmers gave out awhile ago at the end of the day's mission, the electric hand warmer is out of batteries, and I can't access the spares without taking off my giant insulated mittens, at which point my hands would soon cease to function altogether in the thin liner gloves and they would freeze anyway. The laws of thermodynamics always win.

I've stopped shivering altogether, which feels like a reprieve—no more vibrating demons—but I know it's a bad sign. It's clear to me now that there are only three ways this can go: one, they rescue me and I die a miserable, undignified, incoherent death three-to-six months from now; two, they *fail* to rescue me yet find my body anyway and Simon has to process the grief of both my passing and my infidelity at once (a dick move, on my part); or three, I completely disappear.

A yellow-green Aurora flickers into focus above me, though I'd almost missed it with all the snow blowing around. It's only a windstorm, so there aren't any clouds obscuring the sky. The light displays are common up here at this time of year, but it's not like we're out lounging by a campfire watching the heavens. One doesn't linger in the frozen north out of doors for any longer than a glimpse, but here I am now, and it's a wonder. I want my experience of it to be transcendent, but it reminds me so much of the holograms from sci-fi movies and I feel inadequate to beholding such a marvel.

The native Greenlanders, I'm told, say that the lights represented their ancestors kicking a walrus skull as a ball in a game across the sky, which strikes me as an altogether too-mundane explanation of such an incredible phenomenon. An alternate tale suggests that it's the spirits of stillborn babies dancing up there in the heavens, though to be quite honest, I think I prefer the walrus skull soccer myth. I suppose if I'd ever lost a baby, though, I'd perhaps want to imagine seeing its spirit once again, happily performing a jig across the magnetosphere, but I was never able to conceive. I won't say I wasn't disappointed by that realization once it came, perhaps even devastated (though I do think that term is overused), but fertility treatments seemed pointless to me. Natural selection has always been my only religion, so if I wasn't supposed to breed naturally well then I wasn't supposed to breed.

Still, having been born a female—a fate I would not have chosen if I'd had any input—I felt that I'd missed out on the one thing that might have made a lifetime of playing second fiddle endurable. It would have been worth it just to know what it felt like to be that host to a parasite that would grow inside and indeed feed off of my body and eventually develop into a real live human being. To have experienced the carnal awareness of becoming a beast. What else was any of it for if not birth, love, death, and all the sex in between? Take any one of those out and it's like you've tried to make lasagna without the sheets of pasta. The rest is only sauce.

Well now I'm host to a parasite of another kind, one that's allconsuming in an entirely different way. It's appropriate, I guess, that since I couldn't have the one, I got the other, and in the very same vicinity to boot.

I've decided to hunker down out of this punishing wind—to hell with our training—so I set off on foot away from the snowmobile, collapsible shovel in hand, to find a spot with more give so I can dig myself a proper snow den. With each sluggish thrust of the shovel, I feel an incremental increase in pain. This is the pain of succumbing to ice, which is strangely a pure, hot sort of pain. It's not the kind of suffering that varies or comes in waves, but rather, it builds in a slow, gradual pitch to a howl, and then, I am sure eventually, a roar. When I say that I can't feel my feet anymore (and I can't), what it really means is that I feel only the death of tissue there, the end of something that was previously alive. When I say that I am frozen to the core, what I mean is that I am slowly being boiled—simmered, really—down to an essence of something, to a base level of *me*-ness, and what is left now is a bouillon cube of my former self. I am more concentrated now than I ever was before; I am the ultimate Olivia.

The final stages of hypothermia are when all the really crazy shit goes down. Before entering a coma, a person who is freezing to death will often experience what is called "paradoxical undressing," and then immediately afterward will perform what is known as "terminal burrowing." The former is exactly what it sounds like; the muscles responsible for shunting blood to the core to preserve organ function begin to fail, and the sudden release of blood back to the extremities causes a burning sensation like a kind of hallucinatory hot flash, so the person (who is already disoriented and confused) strips off all of her clothes to try to cool down. This is when terminal burrowing sets in, wherein some ancient part of the brainstem is triggered and the person behaves like our fluffier mammalian ancestors did in winter to prepare for hibernation: she crawls under a car or a shrub, or digs herself into a den of snow, in a last-ditch effort to get cozy. And then she dies.

Folks often wonder why a girl like me sought to spend her whole adult life training for the opportunity to conduct hands-on research in a place as indifferent and inhospitable as this one, a place where nothing macroscopic can survive on its own. It's simple, really. To me, there is nowhere more extraterrestrial than here, and this was my chance to set foot on another planet. It's like being on the moon, but since we've decided as a species for some reason to stop going there, this was the next best thing. The ground is always white, the sky is always black (at least in wintertime), and you can't survive outside without a veritable space suit. I've even experienced a version of weightlessness out here in this unforgiving wind; I'm such a lightweight that my down parka and wind pants scoop up those 35 knots like a sail. I've been swept off my feet and hoisted aloft for ten yards before being repatriated to the snow, so I know what it is to be held captive by the sky.

The truth of the matter is that I came out here today with the explicit goal of never coming back. If I were being completely honest with myself, I'd admit that I didn't nudge the handlebars one or two degrees, I yanked it a full-on right angle and throttled as hard as I could. The truth is I came out here to die, but now because of my little indiscretion and related paranoia, I'll have to vanish as well. Fitting, I suppose.

I know that I'll lose consciousness and my heart will stop almost as soon as I've removed my clothes, so I have my grease pencil at the ready just in case the wind blows the wrong way and someone someday unearths my body (or more likely, everything melts and I'm exposed by Mother Nature, who doesn't give a flying fuck about my transgressions). I'll be like the famous Iceman who emerged from that European glacier back in the nineties as a mummified messenger from the Copper Age, except they'll call me "Ice Lady" and it won't sound half as intriguing.

To be honest, I don't quite know what to write: "I love you, Simon'? "No autopsy, please"? "Humanity blows"? None of these seems substantial enough for a statement of such finality.

I always work better under pressure, though, so I slide into the pit that I've dug and then I strip off my parka and clothes—not from delirium, but with purpose—until I am naked to the waist. The pain of it is fierce and jolts through my body like a rocket, and my arms are so stiff that I fear I may be unable to maneuver them enough to inscribe a coherent message. I am so, so tired. But I lift one gloved hand with the other one, gripping the pencil in the fisted style of a preschooler with a too-thick crayon, and press down into the concave depression of my bare abdomen.

I've settled on the phrase, 'I regret nothing," and start to write it across my belly, but my body is shutting down rapidly now and it doesn't come out as well as I'd have liked. I've miscalculated how long this stage would take, how far gone I already am. It might as well be absolute zero outside for how ineffectual we humans are against this level of cold.

It seems now that only the muscles in my eyes can move, and all I can do is lie here with years-old snow spilling over me as I reread the words, "*I regret*," smeared across my stomach in black grease—the only part of the message that I complete before my limbs seize up entirely. I read it back to myself over and over: "*I regret I regret I*"

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