Unobserved Absences

The room contains a man and a Celestron CGX-L 1400 pointed through a curved rectangular opening at the northwest quadrant of the night sky.

The room's door opens. A head, capped in brilliant platinum hair cropped short over delicate ears, slides into the door's aperture like a moon emerging over the horizon. The head bears a mouth that says quietly, "Mr. Whitman? Are you going home soon?"

If the young graduate student had not noticed the observatory's open panel, if the door had not opened, he might have lingered all night. Processing, like a computer, except what he has seen—or, rather, not seen—does not compute.

"Yes," he says, because he is expected to. "Home."

Perhaps everything will make sense when he is in his familiar space with a glass of bourbon in his hand.

* * *

Earlier that evening, as he does on the fourth Friday of every month, as his wife used to do, Baird Whitman welcomed the children. Ranging from kindergarteners to nearly college-aged, they had arrived with their parents at dusk, bundled against the night chill. He wore what he always wore, what he had worn for years, the tan field coat Marie bought him many Christmases ago. In the dark, no one could see the grime staining the pockets or the frayed threads at the collar.

First in line was a little boy wearing a baseball cap. Baird brought the stool around for him. "You'll have to take your hat off," he said. "Gentle when you get close."

The boy leaned in to the eyepiece. "Wow!"

Baird's hand steadied the boy as he climbed down and a girl a few years older replaced him. She was taller and could reach the eyepiece from the second step. There was something familiar about the straight hair falling halfway down her back, the precise way she moved her head, the stillness she held while looking. She must be one of the regulars.

"That's the Pleiades star cluster," Baird said. "Sometimes people call it M45 or the Seven Sisters. Can you see the seven stars?"

"N'uh-uh," she said. "I only see six."

"The seventh one is hard to see. Sometimes your eyes have to adjust. Go around to the back of the line and you can look again after everyone's had a turn."

The girl looked away from the telescope and shook her head. "There's only six."

The parents looked too, and, as always, seemed more interested than their kids. Many had known Marie when she was the one setting the sight and bringing the constellations into view. Baird still felt like an imposter, an amateur astronomer given the keys to the observatory out of deference to his dead wife's former position as director of the university's Space and Sky program. Now he was the one helping the little ones onto the stool and adjusting the telescope's focus.

An hour later, after he'd shown a short film in the auditorium and the last family had drifted away across the parking lot, Baird went to take a final look at M45. He loved these hours after the children left. Marie's presence seemed especially strong, as if he might turn and catch sight of her with her waist-length silvery gray hair, wearing the black pants and billowing top she had favored, looking like a figment of the night sky.

He brought his eye close to the lens. Damn. The last kid up, a rather brutish high-schooler who, Baird suspected, didn't want to be there, must have knocked the scope out of alignment. No, the telescope hadn't moved. He was looking at the M45 cluster, but something was missing. A rather big thing.

Alcyone. The largest star system, the one no one could miss.

* * *

The bourbon goes down like a river of fire. The first slug gives him the usual glorious, numbing jolt. After that, it's no more than a drink, two inches in the straight-sided glass. Marie's glass sits where she left it that night two years ago, across from his on the stained oak coffee table. Of course he's cleaned the glass since. He rinses it every week to prevent it from getting dusty. It looks as if it's waiting for her to skip in from the kitchen with the bottle of Maker's Mark.

Marie would have an explanation. And not any old explanation. One that makes sense.

Baird takes the glass of bourbon out to the deck and tips his head back to look up. The redwoods crowd inward, allowing only a small window onto the sky where the Seven Sisters should hang. Indeed, there's the cluster. He can see it with his naked eye, though it's more visible if he doesn't look straight at it. From here, unmagnified, the group of stars looks as it always has. There is no indication that its star star is missing.

Well, maybe it's not missing. Experiment, he can hear Marie telling him. You want empirical evidence. Repeatable results.

He hasn't erected the telescope at home for more than a year, not since he's had unlimited access to the university's fancier Celestron. This model is less powerful but does a decent enough job of bringing the night sky into focus. He sets the half-finished bourbon on the deck railing and searches with the finder scope for Messier 45. He whispers the stars' names as he views them:

Atlas, Electra, Merope, Taygeta, Pleione, and Maia, the name long-planned for the daughter they never had. But no Alcyone. Where the Pleiades' most brilliant astral sibling ought to be, he sees only the specks of dimmer, more distant stars.

Baird lunges away from the telescope, grabs the bourbon, and downs the remaining liquor in a single gulp.

Slurping straight from the kitchen faucet the next morning, Baird raises his eyes to see the telescope still on the deck, dew-covered and useless in the bright fog. What would Marie have said about his carelessness at leaving the sleek apparatus out to gather moisture? The hangover brought on by the two additional tumblers of bourbon he'd downed almost makes it possible to believe Marie might appear behind him, or that the previous night's follies were a bad dream.

Shit.

He Googles and finds that missing stars are not unheard of. A study proposed by astrophysicists at Cornell "defines the probability of observing a disappearing-object event in the last decade to less than one in one million." Unlikely, then, but not impossible. Still—this is not some obscure star whose absence was discovered by comparing data sets. This is the main attraction, the star sister, visible even to elementary school children squinting through a smeary lens. Such attractions do not simply vanish. He searches again. His desperate strings of words—Alcyone disappearance, latest astronomy news—yields nothing.

He drinks coffee and takes three ibuprofen. He wants to check again, to train the telescope once more where Alcyone should be—will be, damn it—but dusk is nine hours away.

Marie would encourage him to get another opinion.

* * *

Baird parks behind the science building where he spent so many Saturday mornings in Marie's office, sunk in the sagging leather chair across from her desk while she graded papers. When she finished, they would visit the Farmer's Market set up in the main campus parking lot. She was the kind of person who would spend a half hour talking to the farmer while she picked out her bag of apples.

His footsteps echo in the hallway. He hasn't thought about which way he's going and his feet carry him toward Room 1751. As if Marie might be waiting there. Baird sees from afar that the

tall oak veneer door is open. His heart quickens. In this new universe of disappearing stars, would it be possible for a person to reappear?

As he moves closer, he sees the open door is the adjacent one, 1753. Dr. Ed Martinez looks up as Baird hovers in the hall. "Come in, come in!"

"Am I interrupting?"

"No. I need a break. Catching up on the journals."

Baird sits in the swivel chair. "What's the latest?" The two men look at each other across the bleak metal desk. "From the journals, I mean."

"The rumors turned out to be true!" Ed grins, erasing decades from his wrinkled cheeks.

"The latest from LIGO means we're looking at a whole new way of studying the universe. This fourth gravitational wave event—" He holds up his hands. "Sorry. I always forget this isn't your field of study."

The chair squeaks as Baird settles back. "I know what gravitational waves are."

Tiny ripples in the fabric of space-time. Predicted by Einstein, though not detected until recently at the Laser Interferometer Gravitational-Wave Observatory. *A disappearing star*.

Predicted by astronomers, though not detected until recently by Baird Whitman.

The words Baird might have spoken die in his throat. What would Ed think of him, an amateur, making this ridiculous observation? Here in Ed's orderly office, what he's seen through his home telescope seems like exactly what it is, the foolish pursuit of a lonely old man, and the missing stars a figment of an aging widower's overactive imagination.

Ed's face transforms as if the room's light has dimmed. For a moment, Baird wonders if he's spoken the whole story aloud.

"I wanted to talk to you anyway." Ed picks up the miniature astrolabe from his desk and runs his thumb around the perimeter. Marie bought the replica of an ancient calculator for her colleague, spending hours scouring Etsy shops. "You know we've been immensely grateful for your help with the Friday program."

"I enjoy it."

Nothing in Ed's face is twinkly now. It's harsh as a distant planet's bleak moon. "The continuity has been great. But it must be hard for you, being reminded every month." Ed sets down the astrolabe and stares at it as if it will begin speaking in his stead. "The new department head wants the graduate students more involved. And since you're not, technically, an employee—"

Baird lets out a breath. This too, shall pass. Marie was fond of repeating this phrase she'd borrowed from her grandmother. She was right.

"I'm sure you understand." Ed's face has transmuted again.

Baird is not sure of anything. He does not understand anything.

"Do you mind doing the next one? Kimmie Cantwell will take over after that," Ed says.

Kimmie is the one with the short platinum hair, a ring through her nose, and a bruise-blue tattoo half showing from under her shirt sleeve. A look that would have shocked Baird if all the stereotypes he once held about scientists had not vanished with Marie. Does Ed expect acknowledgment? Acceptance? Does he expect Baird to vanish without a word?

Baird gives the slightest of nods and steers the conversation back to where it began. "Tell me more about the fourth gravitational wave."

* * *

Can something disappear if it never existed in the first place?

Baird has a complete and specific picture of Maia in his mind. He's spent so long desiring a daughter that he can call her up anytime he wants, almost more easily than he conjures Marie. Maia at seven, that age before cynicism begins, when children are still amenable to the suggestions of their elders. A small, squirmy body and a smile missing teeth. It's Marie's face, smoothed and rounded.

He talks to Maia sometimes. He finds it easier than talking to Marie, who had a complicated relationship with conversation.

"Your sister is missing," he says aloud to Maia the next night, out on the deck.

In fact, it's worse than that. Atlas has disappeared, too. Atlas, next in line after Alcyone in brightness.

This truth seems to call for more bourbon but the bottle is empty.

"Where did she go?"

No one answers.

* * *

The rain wakes Baird after midnight. He sits, heart pounding, until he remembers that, despite the bourbon, enough of his faculties remained intact so he remembered to bring the scope inside.

The weather report predicts cloud cover for the next five days. Are the stars disappearing at the rate of one a day? So far he has a sample size of two, Alcyone and Atlas. If they're going in order of decreasing brightness, Electra will be next, and Maia after that. If the clouds remain for their predicted duration, he may never see them again.

You old fool, Marie would have said. Always so concerned with your own little sphere. We are all stardust! Doesn't it interest you one bit that you're observing something never before seen? You should take notes.

Baird flips on the lamp. On Marie's side of the bed is a nightstand with a drawer, where she kept all kinds of things. Scraps of paper, the home blood pressure monitor the doctor insisted she begin using, half-consumed tubes of hand lotion. He opens the drawer and scrabbles around among the contents. He retrieves a four-by-six-inch spiral-bound notebook with a cover patterned with cartoonish flowers. He opens it gingerly, unsure if Marie ever used it. The first page is blank, so he begins there.

It was their tenth wedding anniversary. They had finished dinner at the Brazilian restaurant Marie loved so much. For someone so small, she certainly could eat. She had a particular fondness for those parts and pieces of animals that made stealthy deposits to the insides of unsuspecting arteries. Skirt steak, bacon, short ribs.

"If you tune in," Marie said, "you can hear what the universe is saying to you."

Baird would have snorted and laughed off anyone else who said such a thing. But his wife was a bona fide expert, a Ph.D. in cosmology who made the universe her life's work, not some new-agey type blathering about forces and energies. Then he realized she *was* joking. He pushed their plates aside and reached for Marie's hands across the table.

"I'm not good at tuning in," he said. "Can you translate?"

She made a serious face and did something in the back of her throat so her voice sounded like a door creaking open. "Marie and Baird. I am the universe. I see you are bound together, although the time you have spent committed to one another is less than the blink of a blink of a blink for me. Ten years! A few billion might impress me. Still—in human terms, it's notable. Lots of people don't make it that far."

"Thank you, universe, I'm glad you're impressed."

"There is one thing. I can understand how the idea of procreation might appeal to you. It appeals to me. Nothing I love more than spawning a galaxy. But I don't need to partner up with another universe to make that happen. You—you need each other. And I can see this procreation business has been eating you up." Marie took a sip of water to soothe the universe's throat. "I'm telling you, it ain't never gonna happen. So here's some advice. Given how little time you humans have, relatively speaking, I suggest you focus on something else."

The waiter came by then to collect the plates and clean the table with a little metal-edged crumb sweeper. Their hands slipped apart. The waiter handed them dessert menus.

Baird bit down on his lower lip. "I thought that's what you wanted." Was he speaking to Marie or to the universe?

"I did. I do. I mean—" This was Marie answering him, in her small, normal voice. "I think it's time to move on. We aren't made of money, you know."

Baird felt her words as a punch to the gut. He'd taken on editing projects outside of the ad agency job to cover the in vitro treatments. An egg donor would be the next step, the infertility doctor had told them, a more expensive option. But Baird was willing to do whatever was required.

"Honestly?" Marie made the word into a question. "I don't have it in me. There's so much research I want to do. Without a kid, we'll be able to travel. I can apply for that fellowship in Chile." She turned over the dessert menu and scanned the after-dinner drinks list. "They've got *cachaça*." She slipped back into the universe voice. "The night is young, oh celebrants!"

Baird didn't feel much like celebrating anymore but what the universe wanted, it appeared, the universe got.

* * *

Day 1, he writes on the notebook page, observed absence of Alcyone from the M45 cluster. Is this an observable fact, or a fault in the observer?

One of three things can happen. When he next looks, more stars will be gone, the same number will be gone, or the missing ones will have returned.

"Too many words," Marie said once.

"How about no words, then?"

And he became silent, in that moment and in many others to come.

He turns the page.

Day 2. Disappearance of Atlas. He notes the passive construction, how he has, in true scientific notation, removed himself from the record of the observation.

Sometimes the absence of Marie is so palpable it's as if he's fallen into negative space.

A faint shadow shows behind the page he's written on. Had Marie used this notebook? Baird holds the paper up to the lamplight. He doesn't want to turn the page any more than he wants to set up the scope again to see what may have happened to the Seven Sisters.

But he does.

* * *

Near the end of the cross-country trip that was serving as their honeymoon, they had ditched the tent and slept rough on the gray sand, curled in their sleeping bags outside Elko, Nevada among and rocks and cacti. Probably there were scorpions but she didn't care. Marie with hair even then down to her ass but no gray in it yet, wide eyes that Baird could get lost in the way she could get lost in the stars. Marie with her notebooks. There were notebooks everywhere, cheap ones she bought at the drugstore, filled with observations and equations. Some of it he could understand, like the date and the simple statements about what quadrant of the sky she was observing. Other notations made no sense to him but he found them beautiful nonetheless.

Even here in the desert she had a notebook. She wrote in it after they made love, shimmying out of his sleeping bag into hers and shining her head lamp down on the paper.

"Cataloging my prowess?" he asked.

She slapped his shoulder, a love tap, as if to say of course not, but she didn't actually say that so he continued wondering.

That was the first time he got up the nerve to look in one of her notebooks. Sure enough, she hadn't written a word about him. It was all stars and rotational angles and cloud cover. But his looking became a thing. The next time he peeked, a few weeks later, she had written about him, or rather, to him. A sentence for his eyes: "Honey, we're running low on eggs. Pick some up later?" How had she known he would look? Another path formed, tying their hearts together. Her writing, his reading, a tricky role reversal since he was the one who earned a living from words.

He asked her once, after the habit had gone on for decades, if she really didn't mind him looking.

She shook her head. "No, of course not. I'm an open book. Ha ha!"

But all that was yet to come. What they had that night in Elko was velvet air and condensing dew, the shuffle of the desert wind, the distant hoot of coyotes. And the sky. Baird lay on his back with a towel folded under his head for a pillow and followed Marie's voice as she took him on a tour of the night's treasure.

"And there's Algol." Moving her finger down.

Every star had a story.

He knew that the light from the stars they saw now had traveled further than any human could wrap his mind around. He had learned from his one required science course for non-science majors that the star whose light they saw might well be dead by now. Marie disabused him of that notion. Sure, it was possible, especially for some of the stars visible through the university's strong telescope. Less likely for those they could see with their eyes alone. But he hung onto the idea that the scattering of light across the sky was a time-shifted map, an indication of the distance between reality and human perception.

Here was the starlight, come to dazzle his eyes and give Marie something to study.

It came to him that they were complete opposites, his young wife and he. She turned her gaze outward to these pinches of light from enormous burning suns while his turned to constellations within. He marveled again at how they had come together, his preoccupation and hers, his inner and her outer, in their skins and fleshes and couplings, so they made one coherent whole.

"Look, there's Cassiopeia," she said, and indeed, there she was.

"Unrivaled in beauty." Baird took the notebook from Marie's hands, drew her close across the chilly fabric of their sleeping bags, and kissed her. For the next three weeks, the Celestron remains in its case and the new bottle of bourbon unopened in its cabinet. Marie's notebook stays put in the bedside drawer.

Now Baird is back at the observatory, welcoming the eager families as if having a chance to say goodbye makes loss any easier.

"Mr. Whitman! Mr. Whitman!" A girl wearing a puffy parka with a fur-fringed hood runs up to him. He recognizes her as the one who noted the absence of the first star last month.

A woman arrives behind the girl. "Don't bother Mr. Whitman while he's setting up."

Baird makes a final adjustment and aims the telescope at Taurus. The old, reliable bull. "It's okay. I'm done."

The girl looks up at him, her face half in shadow. She's got her hands behind her back.

"Go on, show him," says the woman who must be her mother.

Baird squints at the piece of paper the girl holds out.

"It's the Seven Sisters," the girl says.

"She used the chart from the book you told us about," her mother adds. "She spent a long time getting the distances right."

He studies the various-sized circles, perfectly spaced.

"I used a protector to make the circles."

Baird laughs. "You mean a protractor."

The girl giggles.

"It's very accomplished. You could have a job as a star charter." He hands the paper back.

The girl shakes her head. "I made it for you. Mom said you aren't being our teacher anymore after today."

"Thank you."

Later, at home, he studies the drawing. He's not sure how old the girl is but she has, indeed, faithfully measured the distances and labeled the clusters. And they are all there, each accounted for, each in its rightful place.

He notices a signature at the bottom right, written in the wavering loops of someone just learning to sign her name.

Maia.

"Oh!" He tilts the drawing toward the light. When he leans closer, the letters resolve themselves into different forms.

Nara.

And now he's laughing, a gale of sound that echoes in the empty kitchen. His laughter goes on longer than it should until it morphs into sobbing mixed with the sound of star-names and people-names, the best he can come up with to call back the things he's lost.

* * *

Baird meets Kimmie in the graduate students' office. He feels safer here than in the observatory where the Celestron CGX-L 1400 betrayed him.

She spares him explaining his presence. "I heard about Friday stargazing. We'll miss you."

"Thanks. I'll miss it—you—too." He tugs on the collar of the new field coat, the corduroy still stiff from the factory. "But that's not what I wanted to talk to you about."

Kimmie runs a hand through her spiky hair. "Is everything okay?"

He has come to tell her no, everything is not okay. Everything is very much not okay. I am dying inside, the universe is dying, someone is messing with us, we're all going to die. He has come to open the notebook he's stowed in the interior pocket of the field jacket and show her how messed up everything is, to share the notes he took as the Seven Sisters dwindled to less than half of their former self, a barren constellation that looked nothing like sisters and nothing like seven. He has come to tell her of the solitary funerals he held after every disappearance, late into the

night with the bottle of bourbon balanced on the deck railing. He has come to tell her of the notes Marie—or someone, or something—leaves in the notebook alongside his, the sane and steady commentary the only thing keeping him from running screaming into the night.

Baird draws the room's stuffy air into his lungs. "Oh sure. I wanted to let you know I'll be gone for a bit. I'm planning a road trip. Camping in the Nevada desert—just me and the stars."

"That sounds amazing. Cold this time of year, though." Kimmie rests her elbows on the arms of the chair. "Can we count on you as a Friday night guest when you get back?"

The thought fills him with dread. But what can he say? Marie would remind him of commitment, of obligation, of the way a constellation is born not of a singular star but of clusters, groups, each one with its place and its role.

"Of course," he says.

Kimmie smiles.