

On The Dynamics And Evolution Of Supermassive Black Holes

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In Las Vegas, above an unpopular casino, in an apartment with plastic furniture and linoleum floors, once lived three brothers and a number of cockroaches. The brothers lived with their mother, who had never wanted to be a mother. Their father had wanted to be a father, so their mother, to please their father, had given birth to the oldest son, and then the middle son, and then the youngest son, and then their father had moved to a different country and had started a new family. Their father was living in Dubai, where their father had been born. Supposedly their father had been a mute, as a child, until the age of nine. Now their father was a genius. Their father was a physicist. Their father never called the apartment. Their mother, despite having never wanted to be a mother, lived with the brothers for many years—often standing in a bathrobe at the mirror in the bathroom, painting her hair with chemicals that would make it gold again, painting her teeth with chemicals that would make them white again—until the day she gathered the brothers in the kitchen and told them she was leaving. “I need my own space,” their mother said. Their mother would pay their rent, would pay their utilities, would mail money for their groceries, and they would have the apartment to themselves, which was what their mother imagined they had always wanted. The brothers were fifteen, thirteen, and eleven years old.

What the brothers wanted wasn't the apartment to themselves. From the day the movers their mother had hired carried their mother's boxes into their truck in the street, and their mother patted the brothers' heads, and their mother disappeared, what the brothers wanted was to find some way to bring their mother back again. Mahasim, the oldest brother, with wooly eyebrows and buckteeth, sat on the counter, watching the movers' truck blow through the stoplight at the street's end. Kajam, the middle brother, with a constellation of moles along his nose, stood staring at an actual stain on the fake tiles of the linoleum floor. Caph, the youngest brother, sat perched on the television. And Mahasim spoke to the others, then, about what would happen if anyone ever learned the brothers were living alone in the apartment—spoke of orphanages, foster parents, the end of everything. "We'll have to bring her back again," Mahasim scowled, "before that happens." Then the brothers ordered takeout, and sat on the floor, and ate with their hands, arguing about why she had left them.

How to bring their mother back again was the ultimate problem, but the immediate problem was how to be invisible: how to avoid the attention of social workers, police officers, nosy neighbors. Being invisible meant avoiding trouble, never missing school, never talking to anybody. The brothers hadn't had friends anyway. Their mother had. The apartment seemed unearthly quiet without their mother's friends drifting through the apartment night to night, playing music, clapping hands, dropping bottles. Nevertheless the brothers adapted. Weekdays they took the bus to and from school, walked to and from mosque, found themselves making the same orbits they had made before. None of them knew how to cook, but neither had their mother, so their diets hadn't changed: pizza, cereal, macaroni. Other things, though, had changed.

Within days Mahasim was hoarding. Mahasim had a pile of mustard packets on the table, had a pile of ketchup packets on the counter, had a pile of mayonnaise packets on

the television. It was like Mahasim was stockpiling for some apocalypse the brothers could survive only with condiments. Mahasim had a pile of honey packets on the toilet. Kajam would suck a honey packet whenever Kajam was peeing.

If Mahasim's change was neurotic, Kajam's change was malicious. Kajam had become a slob. The toilet was ringed with empty honey packets. The lamps were hung with stained underwear. The couch was scabbed with smears of snot. The kitchen was littered with half-eaten pears. All of this was intentional. Kajam would take a pear from the fridge, eat half of it, leave it on the microwave, take another pear from the fridge, eat half of it, leave it on the toaster. It was Kajam's way of saying that he didn't live by anybody's rules, that he did whatever he wanted, that he didn't need a mother. The whole lifestyle was a way of lying.

As for Caph, who always had been notoriously lazy—once had screamed at their mother¹ that having to carry his shoes to his closet would be “inhumane”—now Caph was like the tail to Kajam's comet, trailing Kajam through the apartment, sweeping and mopping and garbaging Kajam's debris. Caph had bought a pair of rubber gloves. He cleaned the apartment almost nightly. His brothers were baffled. The other change for Caph—despite that their mother was mailing them money for groceries and laundry and haircuts—was he had started giving himself haircuts with the scissors from the kitchen.² He was obsessing over fashion. Caph, nevertheless, didn't have any taste, as all of his influences either were animated or pixelated. The haircuts looked half-mohawk half-mullet. He wore size-too-small jeans. He wore size-too-large shirts. He wouldn't leave the apartment without a headband, made the headbands from shirtsleeves, wore them supposedly as tribute either to *TMNT* or to *TKK* or to that older brother from *The Goonies*.

Once a week, headband knotted to his head, pockets stuffed with coins, Caph would

¹ After having watched about five hours of television without even having to blink.

² Caph used these same scissors to chop the bananas he ate with his cereal.

drag bags of laundry from their apartment, through the stairwell, along the sidewalk, to the laundromat at the street's end. His brothers were against doing laundry. Mahasim thought doing laundry was an unnecessary risk—thought somebody might start asking questions about kids being there sans parents. Kajam thought doing laundry was an unnecessary chore. Nevertheless Caph insisted on doing laundry. His brothers would trail him to the laundromat, lookout for the neighborhood's older kids. A kid with bags of laundry was a target. A kid in a headband was a target. An eleven-year-old kid was a target. Everything about Caph was a target. If Caph was ambushed, his brothers' plan was to snatch Caph and ditch the laundry—buying new clothes was better than nursing black eyes. At the laundromat, as the laundry spun in the machines and the suds made spirals against the glass, the brothers would perch on rickety chairs and plot how to win back their mother. What they knew was that their mother was living in a cabin in Pioche. What they knew was that their mother had been born in Pioche. What they knew was that Pioche was a former mining town³ several hours into the desert. That was all they knew. Although the brothers were speaking English, they were almost unintelligible when they were overheard. They had their own dialect. Their culture was their language. They spoke through idioms that were always, without exception, coined in reference to something they had seen on television. Notable idioms included *doing the doctor* (meaning “traveling through time,” its etymology in *Doctor Who*);⁴ *counting orloks* (meaning “intentionally walking extremely slowly,” its etymology in *Nosferatu*); *worry about the beard* (meaning “curses on you,” its etymology in *Seven Samurai*); *aisle twelve housewares* (meaning “prepare yourself for an attack,” its etymology in *Army Of Darkness*); and *John Carpenter's* (meaning “the quintessentially dreadful,” its etymology in John Carpenter's tendency to

³ Technically Pioche was an “unincorporated community,” but their mother always had said “town.”

⁴ If it seems like the brothers wouldn't have had the opportunity to use this idiom all that often, it's worth noting that these brothers' arguments, regardless of whatever the arguments supposedly originally had been about, always degenerated into arguments about time travel.

title each of his films beginning with his own name, such as *John Carpenter's Starman*, *John Carpenter's Vampires*, *John Carpenter's Ghosts Of Mars*, *John Carpenter's Village Of The Damned*, and *John Carpenter's In The Mouth Of Madness*).^{5 6 7} Leaving the laundromat, Mahasim would pocket any unused detergent packets forgotten on the machines.

Using the return address from the envelopes with the money, the brothers would mail their mother letters.

Aside from the money, there was never any contact from their mother.⁸

School was seven hours a day.

Homework took an average of three hours a day.

Sleeping was, for the brothers, an average of five hours a day.

That meant nine hours a day were utter boredom.

Avoiding trouble was becoming unbearable.

Mahasim had developed a twitch.

The five hours the brothers slept were between school and sundown. The brothers never slept at night. At night Mahasim would read their father's essays. Although their father lived in Dubai, their father still published essays in English magazines. Mahasim found the essays online by searching their father's name. The essays were about space. Mahasim, however, had a theory the essays were coded. Some overlap had to exist, he thought, between their father's ideas and their father's feelings.⁹ Mahasim's belief was that their father wrote about them, the brothers, through the essays. He would read about black holes—

⁵ Caph's favorite usage of this idiom was referring to the toilet as "John Carpenter's toilet" whenever the toilet had been plugged.

⁶ Other popular usages included "John Carpenter's weather," "John Carpenter's homework," and "John Carpenter's breath."

⁷ During an argument about John Carpenter, which later degenerated into an argument about time travel, the brothers unanimously declared John Carpenter "John Carpenter's John Carpenter"—meaning declared the film director John Carpenter, of all the world's John Carpenters, the quintessentially dreadful John Carpenter.

⁸ It wasn't totally unreasonable for their mother to have thought this setup was acceptable, as, for years, that had been the degree of their father's contact with their mother: for years their father had been mailing their mother money for the brothers' expenses, but otherwise had avoided contact with their mother altogether.

⁹ Mahasim's theory had some basis, statistically, considering their father had named the brothers for stars.

theoretically formed after massive stars had collapsed from the force of their own gravity—trying to understand what the essay actually was saying, whether their father was the black hole, or their mother was a black hole, or the brothers were black holes. He would read about quark stars, interstellar clouds, starburst galaxies, trying to make metaphor from nothing, symbol from nothing, sense from nothing. He memorized all of their father's footnotes. He hadn't told his brothers the theory about the codes.

Kajam's thing was conspiracies. As gamblers in the casino below their apartment tossed dice and cranked levers, Kajam would sprawl naked across the couch, sucking packets of honey, flipping through the books their mother had abandoned. When Kajam found something Kajam liked, Kajam would make notes on the apartment's walls. One month after their mother had disappeared, the apartment's walls said AREA 51, said THE MONTAUK PROJECT, said THE PHILADELPHIA EXPERIMENT. Two months after their mother had disappeared, PAN AM 103 and KOREAN AIR 007 and TRANS WORLD AIRLINES 800 had been added to the apartment's walls. Three months after their mother had disappeared, NEW WORLD ORDER and ILLUMINATI and TRYSTERO. Kajam had drawn diagrams above the toilet illustrating both that Elvis Presley had never died and that Paul McCartney was already dead.

Caph read horoscopes only. Caph bought five different newspapers a day, at the stand by the casino, for the horoscopes. Caph had started making his own, was writing them by night and selling them by day. Caph knew the kids at school as signs instead of names: ♃, ☿, ♀, ♁, ♂, ♋, ♌, ♍, ♎, ♏, ♐, ♑, ♒, ♓. His brothers didn't like that he was selling horoscopes. Selling horoscopes wasn't being invisible. His horoscopes for his brothers, typically, were grim.

After a few months of skimming from the money their mother mailed them, the broth-

ers had what they needed to buy a trio of tickets to Pioche.¹⁰ As they were packing their bags for the bus, somebody knocked on the door to their apartment. Hamburger hanging from his mouth, tickets in his hands, Mahasim unlocked the bolt. A woman in a suit was standing on their mat. The woman flashed a card. The woman introduced herself as a social worker. The hamburger dropped from Mahasim's mouth. Beyond Mahasim, Kajam drifted naked into the kitchen. Beyond Kajam, Caph was giving himself a haircut at the sink. The wall above the sink said FLUORIDE IS POISON.

Mahasim said their mother wasn't home. The woman had a jaw like a T-101's and a forehead like a Ferengi's. The woman wrote a note to their mother. The woman disappeared. The brothers waited until they couldn't wait anymore and then sprinted to the station with their bags.

The bus reeked of unwashed clothing and unwashed people. Somebody's headphones crooned electronica. Caph whispered, "That was John Carpenter's social worker." Kajam was eating half an apple. Mahasim's face kept twitching.

The bus blew along the highway, past horizons of yellow shrubs and brown shrubs, signs warning what could happen to trespassers.

Kajam splayed his hands across the window, pressed his face to the glass.

"That's Area 51," Kajam said.

"That's empty desert," Mahasim said.



Empty ore buckets hung from a tramway's cables. Shops with darkened windows stood between shops with boarded windows. An abandoned mill stood rusting beyond the

¹⁰ Caph's horoscopes for their signs, that day, were:

☿ (Mahasim) Avoid the sewers.

♊ (Kajam) Today you or someone close to you will vomit.

♊ (Caph) Today superpowers will be granted to you by a blind stranger.

Kids who shared their sign with Caph never had to worry, buying Caph's horoscopes.

cabins. Their mother's hometown was a ghosttown.¹¹

A rusted pickup braked. Dust clouds settled. The window was smudged with grime. Sunlight flashed against the glass as somebody cranked the window into its door. A grizzled man in a faded shirt leered at the brothers from the pickup. His face was as pitted as the surface of an asteroid. He squinted, frowned, spat, and then drove away.

The brothers wandered through town, counting orloks, stalling. Hens shrieked from a coop. A tin can blew clattering across the road. A pair of pale girls in white dresses stared at the brothers from a window, then vanished, their curtains swaying. The brothers had practiced what they were going to say to their mother—which phrases to stress, which phrases to underplay, who would say which lines. Now that they were here, though, the brothers were afraid. Caph, despite that he was wearing his lucky headband, was trembling.

Mahasim had the envelopes with the return address.

"This is the street," Mahasim said.

The brothers passed a row of rusted mailboxes, a wood cabin with a gray pickup, a dead gnarled tree, a wood cabin with a black station wagon, a creaking gate, a swarm of flies. Mahasim stopped at a cabin with an empty drive.

"This is the house?" Kajah said.

Mahasim nodded. They stepped onto the porch. They knocked at the door. Nobody answered. Something clanged. Mahasim nodded again, twisted the knob, and opened the door.

The cabin's backside had been gutted by a fire. Charred shingles dangled from the hole, the beams stained black. The kitchen was littered with bat droppings, scorched insulation, dirty cutlery, plates, saucers. Beyond the hole, in the desert, a speckled lizard was navigat-

¹¹ Technically Pioche wasn't a ghosttown, as Pioche was populated by almost a thousand living people. The brothers' definition for ghosttown, however, differed from ghosttown's actual definition, the brothers' definition being "a town where it isn't impossible for the streets actually to be occasionally empty."

ing a patch of wildflowers.

Mahasim stood in a daze in the kitchen. Kajam tossed rocks at a window somebody had already broken. Caph knelt at the fireplace, wiping a hand's worth of dust from the hearth.

"Where is she?" Caph said.

The brothers found their mother's mailbox in the row of rusted mailboxes. They peeked in the mailbox. Their letters weren't there. The mailbox was empty.

"So someone was getting the letters," Caph said.

"Would letters get delivered, even, to an empty house?" Kajam said.

"If they weren't delivered, wouldn't they have been sent back to us?" Mahasim said.

The brothers had planned on spending the night in Pioche. They didn't have return tickets for tonight. They had return tickets for tomorrow.

Mahasim stole a tarp from a shed. They spent the night in the cabin, huddled under the tarp together, whispering about scorpions. In the morning they rode the bus back to Vegas.



Mahasim found a new essay their father had published, an essay about dark matter. Dark matter neither emitted nor absorbed light—hence its name—so, unlike luminous matter, dark matter couldn't be seen, which was why the search for dark matter had become the obsession of so many physicists.¹² The essay emphasized that black holes weren't dark matter, as although black holes didn't emit light, black holes did absorb light—that was black holes' thing, was sucking the light into themselves, trapping the light, hoarding the light forever. Mahasim read and reread and rereread their father's words, trying to decode their father's codes.

Kajam was writing above the television, OUR SENATORS ARE SHAPESHIFTING ALIENS.¹³

¹² Hypothetically dark matter formed its own galaxies, known as dark galaxies.

¹³ Kajam's theories always seemed far more valid when they were read, rather than literally, figuratively.

Caph, meanwhile, was asking questions about other conspiracies.

“Why’d Dad leave if Dad was the one who wanted us?” Caph said.

Kajam had a number of theories for Caph: that their father had been infected with an experimental disease and to protect the family had volunteered to be quarantined; that their father had been hypnotized by a rival physicist seeking revenge; that their father, once he’d gotten what he’d wanted, hadn’t wanted what he’d wanted.

“Why’d Mom leave now if Mom had always wanted to?” Caph said.

Kajam had a number of theories for Caph: that their mother had been blackmailed by gangsters and imprisoned in a brothel; that a government agency had brainwashed their mother as part of a classified experiment; that their mother had a new boyfriend somewhere in Pioche.

“Do they love us?” Caph said.

Kajam didn’t know.



Envelopes kept appearing, their corners scrawled with the address of the burned cabin. Once a week, Caph would drag their laundry to the laundromat, his brothers trailing him, the neighborhood’s older kids eyeing him with stares like Gort’s. Every few weeks, the orbits of John Carpenter’s social worker would bring her to the door, asking about their mother.

Kajam didn’t cause that much trouble around the apartment, aside from the messes, but his routine did include a certain number of unprovoked disturbances, usually when he was bored. Caph was always the target. Caph would be sprawled on the couch, reading the legends behind different astrological constellations, drinking some milk, relaxing, when Kajam would appear in the doorway. Kajam would stand there, staring at Caph, for maybe a minute, waiting for him to look at him. Caph wouldn’t. Kajam would disappear.

Moments later Kajam would reappear, skidding into the doorway on his socks, shouting, “Ah! After ten thousand years, I’m finally free! It’s time to conquer Earth!” and then stare at Caph, waiting, and then disappear again, and then reappear in the doorway shouting, “Tetsuooo! Kanedaaa!” and then stare at Caph, waiting, and then disappear again, and then reappear in the doorway, and creep toward the couch, and bend over Caph’s face, and whisper, “Radiator,” but before Kajam could blow in Caph’s face, Caph finally would snap and wrestle Kajam to the floor.¹⁴

Kajam and Caph were tangled together on the floor—Caph in a headlock, Kajam’s legs pinned—when somebody knocked at the door.¹⁵ While Mahasim flushed the toilet, washed his hands, found some pants, his brothers went through the same drill they always did for the social worker. Kajam draped a dress over a chair. Caph set a box of tampons on the counter. Caph squirted perfume in the air to make it smell as if their mother had just swept out the door. The dresses and the tampons and the perfume weren’t their mother’s. Their mother had taken her dresses. The brothers had bought all of it themselves, as props for the social worker. Kajam hid the perfume bottle. Mahasim opened the door.

A man stood in the stairwell wearing black jeans and a suit jacket with torn-off arms. Diamonds twinkled in his earlobes. His arms had been tattooed with the symbols of various currencies: ₩, ¢, ₪, ₤, €, ₤, ¥, ₯, \$. He was squat and veiny.

“So, hey, I’m Zolt,” the man said.

He smelled like the inside of a tauntaun. He stepped into the kitchen.

“Who?” Mahasim said.

“Zoltan. Mr. Zoltan. A friend of your mother’s,” the man said.

¹⁴ From *MMPR*, and *Akira*, and *The City Of Lost Children*, but these weren’t idioms, Kajam was only quoting (or misquoting).

¹⁵ Caph’s horoscopes for their signs, that day, were:

☿ (Mahasim) Skip lunch.
♄ (Kajam) Today you or someone close to you will combust.
♌ (Caph) Today about nineteen kids will ask to touch your hair.

The brothers hadn't seen him before. He gave off a seedy, sleazy, pon-farr sort of vibe.

"So, hey, do you need anything?" Zolt said.

"Where is she?" Kajam said.

"Who?" Zolt said.

"Our mom," Kajam said.

"Where is she? What a question! So, hey, the answer to that isn't so much physical as metaphysical," Zolt said.

He laughed, like he thought the brothers wouldn't know the meaning of metaphysical.

"Kids like you probably won't understand this, but your mother has transcended things like location. Where she is—how can you explain this?—it's more of a concept than a place. There are characteristics, but there aren't coordinates," Zolt said.

"What characteristics?" Caph said.

"Ecstasy, mainly," Zolt said.

"Are you her boyfriend?" Caph said.

"No. Your mother is transcendental, but your mother is old. Also, your mother is a woman, which doesn't work for me," Zolt said.

"Do you have her number?" Caph said.

"Your mother doesn't like phones. Sorry, but that's the truth. Don't blame me. I don't run your mother's life. And I sympathize with you kids, actually, which is why I came," Zolt said.

Zolt clapped his hands together.

"So, hey, do you need anything? Permission slip signatures? Bedtimes? Hugs?" Zolt said.

"A ladder," Caph said.

Zolt frowned.

“For the light bulbs,” Caph said.

Zolt drove away in a silver hatchback, drove back again with a wooden ladder and a box of light bulbs. Then he took a box of their mother’s paperwork and drove away again.

Caph changed the bulbs, lights flickering to life in sockets that had been dark for months.

That night the brothers hitchhiked from the city into the desert, sat on a rocky hill across from the trespassing warnings. The sky shimmered with cosmic, asteroidal, interplanetary dust. Wind thrashed the shrubs. Kajam was vague about what to watch for—an alien, a starship, something extraterrestrial. While they waited, Kajam rambled about all of the alien abductions that had been reported along this stretch of highway. Kajam sounded almost manic. His brothers stared at the silhouettes of signs, boulders, cactuses beyond the road. They didn’t believe in alien abductions, but they could understand his obsession with stories of vanishing people.



Avoiding trouble had become impossible. Mahasim wasn’t hoarding just giveaways anymore. Mahasim was hoarding other people’s belongings. He was bringing boxes of paperclips, packs of cigarettes, strangers’ wallets to the apartment. He didn’t use the paperclips, he didn’t smoke the cigarettes, he didn’t use the money from the wallets. Even he didn’t understand why he stealing. He wore a trenchcoat everywhere, kept the collar at his face so all anybody could see of him were the wooly eyebrows. It was like he was trying to advertise that he was a thief. After the brothers ate the macaroni or cereal or pizza or whatever they ate for supper, Mahasim would take a bus to the strip and prowl the crowds. Spacetime had unusual properties around downtown Vegas: walking the strip was like doing the doctor. Within seconds Mahasim would travel from the Sphinx to the Eiffel

Tower to the Colosseum to the Statue Of Liberty to King Arthur's Castle,¹⁶ each of them in their prime, none of them in ruins. Pirates would fire cannons at pirates. A volcano would erupt. Mahasim would dip into a tourist's purse.

Kajam, meanwhile, had tired of making apartment-sized messes. Kajam was making neighborhood-sized messes. He had started wearing a plastic alien mask everywhere,¹⁷ had started carrying rocks. After the brothers ate the macaroni or cereal or pizza or whatever they ate for supper, Kajam would take a bus to the sort of neighborhood where all of the kids had parents and prowl the streets alone. Kajam would overturn trashcans, tear the mufflers from trucks, toss rocks through the windows of houses. If Kajam had liked being a slob, Kajam loved being a vandal. It was Kajam's way of telling people that the things they loved could be broken. Kajam thought this was something people needed to hear.

After the brothers ate the macaroni or cereal or pizza or whatever they ate for supper, Caph would clean the apartment, write his horoscopes, and then watch television, in the dark, alone. Cross-legged. Hunchbacked. Slack-jawed. Face awash with flickering light. Eyes glassy, unblinking, reflecting bright whirling images.

One night, while Caph was alone, John Carpenter's social worker stopped at the apartment. Her mascara was smeared, like she had been crying, or swimming somewhere.

"Isn't here," Caph muttered.

"How about I talk to you then?" the social worker said.

"Next time," Caph muttered.

Caph sometimes had these moods where he would purposefully do dangerous things. He didn't shut the door. Instead, he motioned at the social worker to enter. It hadn't

¹⁶ For Mahasim's whole life the wizard Merlin had stood in a turret of the castle, waving at Mahasim as Mahasim walked the strip, until a year ago the wizard Merlin has been replaced by the mascot of a chain of restaurants, and that's what lived in the turret now, an advertisement instead of a wizard, which had forced Mahasim to rename the casino John Carpenter's Castle.

¹⁷ Even at school, when teachers weren't around to enforce the dresscode—his beady eyes, his broad nose, the moles scattered along his nose, disappearing, suddenly, under a mask of gray skin and oval eyes. Expressionless. Unchanging. A creature seemingly devoid of any feeling.

occurred to him, or any of the brothers, yet, that she might not have been what she said she was.

The wall above the toaster said, THE ASTRONAUTS FOUND HUMAN SKELETONS ON THE MOON.¹⁸ The television was still on, birthing disembodied voices. He poured her some milk. She asked him some questions. He told only lies, except when she asked about his brothers.

“Do they ever hurt you?” the social worker said.

Caph snorted.

“They protect me,” Caph said.

Caph chewed a bite of cereal, thinking.

“And that’s the problem,” Caph said.

She said next time she could bring coffee, donuts, whatever. He had never had coffee, but he had made a sort of pact with himself to lie to her whenever possible, so he said he loved it.

Caph shut the door, thumbed the lock, fell asleep Mulder-style on the couch.

Kajam came home in his mask, his elbows crusted with dried mud, his stubby fingers streaked with oil.

Mahasim reappeared, dumping strangers’ wallets onto the pile of strangers’ wallets by the toaster, murmured, “Equivalent exchange.”¹⁹

That night Mahasim found an essay their father had published years ago that Mahasim hadn’t found before. The essay was about white holes: hypothetically something could exist in the universe, white holes, that could emit but couldn’t absorb light. White holes were the inverse of black holes—you could leave them but you couldn’t enter them. Where

¹⁸ Weeks earlier Kajam had written onto a different wall, THE MOON LANDINGS NEVER HAPPENED. When Caph asked him if it had occurred to him that those theories were totally contradictory, Kajam took a marker, and stood on the couch, and wrote onto the wall, THEY NEVER MEANT TO HAVE CAPH.

¹⁹ Meaning “We’re owed that,” its etymology in *Fullmetal Alchemist*.

Mahasim thought their father's message was hidden, however, was in one of the final footnotes, a footnote that explained the orbits of the universe's galaxies. At the center of every galaxy, said their father, existed a supermassive black hole: a black hole that had absorbed planets, stars, even other black holes, grown to an unimaginable size. But intergalactic space—the space between galaxies—was void, vacuum, nothingness. So either you were orbiting a supermassive black hole or you were drifting through nothingness. There wasn't an alternative. The footnote ended there.²⁰



Weekends the brothers hitchhiked into the desert, sat on a rocky hill across from the trespassing warnings, waited for starships that never came. Caph would whine about being bored. Kajam would mutter, "You're bored now, but when they come for us, you're going to wish they hadn't."²¹ After a month of this the brothers got tired of hitchhiking. Kajam found a cheap sedan in the newspaper. Mahasim emptied the strangers' wallets by the toaster, wrapped the money with a rubberband.

The brothers met the women in the parking lot of a shopping mall. Crumpled takeout bags blew tumbling across the pavement. Above a shop with barred windows a neon sign blinked ♥, ♣, ♦, ♠. The women had buzzed hair, nose piercings, black lipstick. Their default expression was the grimace. They would have flunked a Voight-Kampff on the first question.

"Does it work?" Kajam said.

The leader shook a ring of keys, stuck a key in the ignition. The sedan started. The sedan had four tires and zero hubcaps. The body gray, the hood black, the driver's door

²⁰ Was their father sorry? How would he have said it, if he were? Would he have said, boys, I am so so so sorry, please forgive me for all of the years we spent apart, for all of the years we could have had together, for the lives we could have led? Where would their father have said it? To their faces? Or through the telephone? Or in a footnote, like an afterthought, like a fucking coward?

²¹ Hitchhiking home, Mahasim would sit up front, suffering through the driver's chitchat, while his brothers sprawled out in the backseat of the sedan, or crammed in the backwards seats of the station wagon, or jolted around the bed of the pickup. Sometimes the driver smelled like stale perfume, sometimes greased tools. Sometimes nothing. As the vehicle hummed, or rattled, or sputtered along the highway, the night sky would begin to glow beyond the windshield. Vega was a star that shone white in an empty system; Vegas was a city that shone neon in an empty state.

lime green.

The leader stuck the keys back in her jacket pocket.

“You don’t have any DeLoreans?” Caph said.

“Just this,” the leader said.

Mahasim counted the money. Mahasim counted the money again.

“I’ll give you half, then you give me the keys, then I’ll give you the other half,” Mahasim said.

“Just give me the money,” the leader said.

Mahasim gave the money to the leader. The leader gave the keys to Mahasim.

“Do you have a license?” the leader said.

Mahasim stared at her.

“If you don’t tell anyone we never had a deed, we won’t tell anyone you never had a license,” the leader said.

The air didn’t work, the radio didn’t work, the seats were leaking stuffing, but driving to their neighborhood Mahasim couldn’t stop smiling. The brothers parked the sedan at the casino under their apartment.

Mahasim sprawled across the linoleum, still wearing his trenchcoat. Kajam rooted through the fridge, shouting, “Toys in the attic!”²² Caph was dancing on an armchair with the keys. The phone rang. Caph leapt from the armchair, danced to the phone, lifted the handset from its cradle, listened.

Caph dropped the keys.

The brothers huddled around the phone. The voice was tinny, scratchy, oddly muffled, as if calling from somewhere very far away. Each of the brothers had a hand on the handset.

²² Meaning “the food has expired,” its etymology in *Cowboy Bebop*.

“What do you want?” Kajam said.

Mahasim punched Kajam. Kajam punched Mahasim. Caph was staring at nothing, eyes glazed over, swept away by the sound.

“Just to talk,” their mother said.

Her voice sounded creepier than Hal 9000’s. Dizzy, or sleepy, or somehow unusual.

“Where have you been?” Mahasim said.

“Moving around,” their mother said.

“Where?” Mahasim said.

Whatever their mother said next got scrambled, was more static than voice.

“Did you get our letters?” Caph said.

“Yes,” their mother said.

“Who burned the house?” Caph said.

Other people’s voices cut into the line. A man reading something aloud. A woman cackling. Fizzing static.

“Your grandma’s. I’ve been using the address. I grab the mail when I’m passing through,” their mother said.

“How often is that?” Mahasim said.

“Every few days,” their mother said.

“Who’s Zolt?” Mahasim said.

“Zolt?” their mother said.

“Zoltan. Mr. Zoltan. Your friend,” Mahasim said.

“Who?” their mother said.

Whatever their mother said next got scrambled.

“We want to see you,” Caph said.

“I know,” their mother said.

People's voices cut into the line. Children cheering. The line went dead.

Caph slumped against the fridge with the phone. Kajam pursed his lips, shrugged, pretended to be searching the cabinets for something to eat. Mahasim hung the keys from a hook.

"She isn't coming back," Caph said.

"I'm actually glad she isn't," Kajam said.

"If we can make it until I'm eighteen, nobody will split us apart," Mahasim said.

That night Mahasim began writing an essay of his own, a compulsion he would suffer from all of his life, the compulsion to write and rewrite and rerewrite about his family. Essays about what had happened to the brothers—the ways they had been wronged, the ways they had wronged themselves—searching for the moment that defined them.

It was only after Mahasim began writing essays of his own that Mahasim realized that their father's essays weren't coded. None of it was metaphor. None of it was symbol. All of it had actually happened. All of it was beyond understanding.



The brothers stopped talking about their mother. They forgot her, or acted as if they had forgotten her,²³ which felt the same as forgetting.

Zolt drove over a week later. He never made it into the building. Caph spotted him parking from the window above the sink. Kajam was cooking macaroni. Mahasim grabbed the pot, leaned out the window, waited, and then dumped the macaroni from a floor above.

"Who are you?" Mahasim shouted.

The macaroni had splattered onto the sidewalk a step ahead of Zolt. A warning. Zolt kicked beads of sauce from a shoe, craned upward at the window.

²³ Acted as if they were their own constellation, rather than merely an asterism within some larger thing.

“You know who I am,” Zolt shouted.

“Our mom’s never heard of you,” Mahasim shouted.

“I’ve known your mother for years,” Zolt shouted.

Mahasim scowled, the wooly eyebrows pinching together.

Kajam readied the carton of milk.

“I’m trying to help you,” Zolt shouted.

Kajam bombed him with the milk. The carton exploded on the sidewalk. Zolt shouted, waved his hands in surrender, leapt into his hatchback, drove away again.

Either Zolt was a liar, or in some sort of Tuttle-Buttle slipup their mother had gotten the wrong name. They didn’t care. They cooked another pot of macaroni. They ate it. When the others left, Caph was washing dishes in the sink. Kajam tugged the alien mask over his face, trotted into an alley. Mahasim hopped a bus to the strip, wandered the crowds in his trenchcoat. Gondoliers steered gondolas of newlyweds. Circus clowns signed autographs for a mother’s toddlers. A family had gathered around a fountain, counting from ten to zero, urging their exchange student to leap into the fountain from the edge. A tanned father, a tanner mother, three girls with ironed hair. At zero, as the exchange student leapt, Mahasim lifted a wallet from the purse on the fountain. Later, across from the Empire State Building, Mahasim peeked inside. The exchange student hadn’t had any money. Still, Mahasim felt like he had gotten what he needed.



That night, instead of hopping a bus, Mahasim walked home.²⁴ Their neighborhood was quiet. The sunset was bloody. Mahasim stepped past beggars rattling cups of coins. Soggy flyers, tied-off trash bags, rumpled laundry strewn across the sidewalk. Jeans. Sweatshirts.

²⁴ Caph’s horoscopes for their signs, that day, were:

♍ (Mahasim) You will die a virgin.
♏ (Kajam) Today you or someone close to you will disappear.
♎ (Caph) Expect the unexpected.

Gold-toed socks. Mahasim's own underwear.

The laundry was theirs.

Mahasim ran. Kajam was following the same trail, wearing his alien mask, gathering dropped clothes. The laundry led to the mouth of an alley. Sleeves torn, headband knotted to his head, Caph was propped against a dumpster.

They knelt at him.

"What were you doing?" Mahasim hissed.

"We were out of clean socks," Caph grunted.

Caph's lips were split. Caph's palms were scraped. There was blood on his sweatshirt where somebody had cut him with a knife. The neighborhood's older kids had scattered.

Kajam was cursing in Klingon, Caprican, Goa'uld, simultaneously.

"You can't bring me to the hospital," Caph begged.

They shouldered his armpits.

"They'll know," Caph gasped.

They lugged him to their building.

"They'll split us apart," Caph mumbled.

They dumped him on a chair in the kitchen. Caph sat slumped in the chair, panting. Kajam tossed his mask at the fridge. Mahasim unbuttoned his trenchcoat.

"Show us the cut," Mahasim said.

Caph lifted the sweatshirt. Kajam paled. Mahasim held a hand over his mouth, motioned to lower the sweatshirt.

They left Caph in the kitchen, shut themselves in the bathroom.

"What are we going to do?" Kajam whispered.

"We need to help him to the car," Mahasim said.

"We can't bring him to the hospital," Kajam whispered.

“We can’t,” Mahasim said.

Kajam cocked his head.

“No,” Kajam said.

“She can,” Mahasim said.

“No, no, no,” Kajam said.

“We’ll wait for her,” Mahasim said.

Kajam kicked the toilet.

“No!” Kajam shouted.

“At the cabin,” Mahasim said.

“She isn’t there!” Kajam shouted.

“She’ll come for the mail,” Mahasim said.

“She doesn’t want us to come!” Kajam shouted.

“You’re right,” Mahasim said.

Mahasim buttoned the trenchcoat.

“But she’s going to do this one thing for us,” Mahasim said.

Kajam shook his head, sat on the bathtub. Mahasim swept into the kitchen, began emptying strangers’ wallets into the sink, shoving fistfuls of money into the trenchcoat.

“What’s happening?” Caph said.

“We’re going chief toad,” Mahasim said.²⁵

Caph gaped.

Mahasim grabbed the ring of keys. Kajam slunk into the kitchen, tugged his mask over his face. They lugged Caph from the apartment, through the stairwell, along the sidewalk, toward the sedan. The streetlights had been lit. Men carrying bags of liquor were trampling their laundry. A siren squealed in the casino. Somebody’s jackpot.

²⁵ Meaning “taking things to the max,” its etymology in *Naruto*.

“John Carpenter’s,” Kajam grunted, jerking his head at something.

“What?” Mahasim grunted.

John Carpenter’s social worker was hurrying toward their apartment with steaming coffee in paper cups. The social worker spotted the brothers. She stopped. She frowned. She suddenly seemed to realize the stain on Caph’s sweatshirt wasn’t sauce but blood.

The social worker began jogging, spilled coffee on her skirt, threw the cups into a bin of trash, began running. Kajam dumped Caph into the back. Mahasim stuck the key in the ignition. The radio worked again. Somebody dropped a handful of coins. The sedan swung into the road as the social worker stumbled into the spot where it had been parked.



The brothers passed a pickup loaded with tattooed teenagers, a blur of anonymous automobiles, an ambulance’s streak of flashing lights. A neighborhood of bankrupt casinos. A neighborhood of abandoned shopping carts, deserted tricycles, strays. From the city into the desert. The radio died again. The fuel gauge wasn’t working. There were other headlights on the road, then few, none. The air was frigid. The moon new. The mountains silhouettes. Caph was sweating through his headband, bleeding through his sweatshirt. Kajam was still wearing his mask, staring at the dashboard, quiet. Mahasim seemed to be trying to activate the sedan’s hyperdrive by pinning the accelerator to the floor.

“We can’t go back,” Kajam said.

Mahasim gripped the cracked plastic of the steering wheel.

“Then we won’t,” Mahasim said.

The sky was dusted with spiral, elliptical, lenticular galaxies. Wind battered the trench-coat. Shrubs appeared and disappeared as the headlights flew past. Trespassing warnings. Cactuses the shapes of people.

Caph was mumbling.

“The stars,” Caph said.

“Caph,” Mahasim said.

“They’re the future,” Caph said.

“Caph don’t pass out,” Mahasim said.

“They already know if we’ll make it,” Caph said.

Caph was grinning, and then the grin vanished.

It was more absence than presence. Caph was sprawled on the backseat, the soles of his shoes planted against the window. And, beyond the window, where stars should have been, there was now a shimmering blackness.

It hadn’t been built with lights. Something beneath it—its jets, its rotors, its rocket—was spraying clouds of dust. As it flew, stars disappeared and reappeared around its edges. Caph stared, slack-jawed, unable to breathe. The machine was massive. It rose, flying above them, blotting out the stars there, and then plunged to their level again, dust and pebbles and sand pinging against the sedan, a blast of wind, and now all of the brothers had seen it, Mahasim was staring at the machine instead of the highway, and Kajam had torn the mask from his face shouting, “Whoa, whoa, whoa!” and Caph was scooting backward screaming, “It’s going to take us, is it going to take us?” and Kajam was banging on the dashboard shouting, “It’s so amazing, it’s so amazing, it’s so amazing!” and Mahasim was shrieking and laughing and pinning the accelerator to the floor as the machine flew alongside the highway, totally soundless, at the same speed as their sedan.

When an object falls into a black hole, the object appears to freeze there, at the edge, for infinity. Even after the object has passed beyond the edge—passed beyond the event horizon—the object appears to hover there forever.

There was a moment where the brothers were shooting along the highway, gripping each other’s arms, staring at the machine. They aren’t there, anymore. They’ve passed

beyond. Caph waking later in a room of bright lights, blurry figures. Kajam standing alone at the trespassing warnings, mustached, cologned, strapped to a bulky camera. Mahasim hunched at a keyboard, hands wrinkled, skin weathered, mug swirling with cream and tea, writing another essay about his family. Still, for those who were there, time stops at that moment. The brothers shrieking and laughing. Gripping each other's arms. Hurling together through the darkness. Able, for once, to believe that something in this universe wanted them.

About The Author

Matthew Baker is the author of the graphic novel *The Sentence*, the story collections *Why Visit America* and *Hybrid Creatures*, and the children's novel *Key Of X*. Digital experiments include the temporal fiction "Ephemeral," the interlinked novel *Untold*, the randomized novel *Verses*, and the intentionally posthumous *Afterthought*.

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