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# The Inevitability of Collision: Creating Empathy Through Fiction

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# THE INEVITABILITY OF COLLISION: CREATING EMPATHY THROUGH FICTION

A Thesis submitted to

**Regis College** 

**The Honors Program** 

in partial fulfillment of the requirements for

**Graduation with Honors** 

by

Danielle Beckman

May 2021

|                       | Thesis written by  |  |
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|                       | Danielle Beckman   |  |
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|                       |                    |  |
|                       | Approved by        |  |
|                       |                    |  |
| Erin Winterrowd (elec | etronic signature) |  |
| Erin Winterrowd       |                    |  |
| Thesis Advisor        |                    |  |
| Mark Bruhn (electroni | ic signature)      |  |
| Mark Bruhn            |                    |  |
| Thesis Reader         |                    |  |

# Accepted by

Tom Howe (electronic signature)

Tom Howe
Director, University Honors Program

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#### Matthew

My roommate was watching me. He always watches me: when I sleep, when I eat, when I'm doing homework. He's always there. I've tried to get a new roommate but my fucking RA won't let me. He says that no one is watching me, but he is. I know it. I feel his eyes on me constantly. It makes it impossible to do anything. The other day, I was trying to do my Econ homework and I could have sworn that he was recording me on his phone. Only, when I turned around, I just saw the back of his brown-haired head, his body hunkered over his computer, light casting an illuminating shadow around his hoodie.

He had friends. I noticed them come and go, but they never stayed, always throwing side glances at me, like I was poisonous. And always whispering with heads bent as they walked out the door. I bet he told them that I was a freak or a weirdo or a psycho. At this point, it doesn't bother me. I have been called all of those things more times than I could count. I don't have friends. Never really did, but this never bothered me either. I went to school, I came home to an empty house, I hung out in the woods, and I read. But in college, all of those things felt the same: I lived where I went to school and there was no house and no woods and I had already read all the books I owned. It was harder. They became louder.

When I first got into KU, no one really cared. It was the state school that almost everyone from my high school attended, but I got in with a full ride academic scholarship so I kind of felt like someone should care. But my parents barely said a word about it.

They didn't care about anything that went on in my life, besides making sure I cleaned up

their shitty lives. They didn't care when I left for two days when I was seven (they probably didn't even notice), they didn't care when the dead mice under my bed started smelling up the house (which I was dissecting for research purposes), and they didn't care when I packed all my things and left for college without telling them (I haven't heard a word from them since). My parents are the products of hard-working immigrants from Mexico, but somehow that work ethic seemed to skip a generation. I think my grandparents would be disappointed if they saw their children passed out on the couch at 3pm on a Wednesday, bottles of beer littering the coffee table, cigarette butts still trailing smoke into the sky. Something in them must have broken long before I was born, but somehow, I was still left to clean up the pieces.

But that day.

He was watching me. I had to get away. I could hear them inside my head. Hear them telling me it was time to escape, before they got to me. They were right. They were coming. And he was a part of them. He's recording your every move and telling them. He's tracked your phone and your computer. Go. Now. I remember walking to my car, quickly and unsuspectingly, but I knew he was following me and I didn't dare look behind me. They kept telling me to go quicker, but I knew if I ran, he would run too. My head was spinning as faces and bodies blurred past me, and they kept telling me that everyone was in on it. They were all watching me, not just him. My face was wet, but it wasn't raining. Don't make eye contact, run. But I knew I couldn't run. By the time I reached my car, nothing made sense and the voices were shouting, shouting so loud. They were so loud. I couldn't think. They were so loud. I couldn't breathe or open my

eyes. They were so loud. *STOP. STOP. STOP.* I drove, but I don't remember where or for how long. I think my eyes were still closed.

I am in the woods now, and they have stopped again. It feels like home here, the only home that ever felt safe. As I limp through the quickly darkening trees, I think about my books. They also feel like home, and a sudden pang in my gut makes me miss the only inanimate objects that are really my own. I started reading because my parents wanted my English to be better than theirs. That must have been back when they were still trying, at least a little. But my books were my escape from them, from everything they represented, which is why I never really spoke Spanish and only read in English.

When I was in fifth grade, on one of my mom's good days, she came into my room at the break of dawn, light just starting to stream through the curtains. She whispered in my ear, the smell of stale alcohol on her breath, "Vamos a la librería hoy, hijo, tengo una sorpresa para ti." I knew it was a good day by the way she smiled down at me, with expectancy and a bit of mania in her eyes, long black hair tickling my skin. We went through the McDonalds drive-thru for breakfast sandwiches, something I have not done since that day. We never had enough money to eat out. Also, because those shitty sandwiches, with the chewy egg and dry biscuits, make me think of her. After that, she took me to Charlie's Antique Books and Things.

The smell of musty old paper somehow wafts through the air as I remember this and for some reason that makes them angry. They try to push it away, but the memory is too strong. She let me wander around for what felt like hours while she browsed in the small Spanish section. I tripped over books haphazardly stacked on the floor while

fingering every spine on the shelves that I could reach. While my fingers lazily glided over books of varying textures and thicknesses, I stopped at one. I distinctly remember that it had gold lettering indented into the dark green spine, so ornate it was almost impossible to read. I traced them and felt my hand bumping along the letters, the valleys of gold shiny and smooth between the hills. It read: *Behind the Attic Wall*. I pulled it off the shelf and, without even cracking it open, I went searching for my mother, knowing I needed to own this book. On her good days, she would buy me things. I don't remember her last good day, but I know there hasn't been one in a while.

Ever since then, whenever I got money from mowing the neighbor's lawns or stealing it off the coffee table in front of my incapacitated parents, I would walk (or drive in later years) the three miles to Charlie's and repeat that same ritual. I would wander around in circles, my hand sliding and bumping along the books on each shelf until one chose me. It always felt like they chose me, which I realize sounds dumb, but it was true. I rarely read the title, and never the summary, before bringing it to Charlie or his rotating cast of cashiers at the checkout.

The woods are dark now and I'm not sure how long I've been sitting here. I actually don't even remember sitting down. I don't know what day it is. I don't remember how I got here. Looking around, the roots of the tree I am sitting under are rolling in and out of the sea of damp, dark leaves. The branches above me hang low, almost low enough for me to touch while sitting on the ground. It smells like it just rained, though I'm pretty sure it didn't. I don't see any other signs of life, but I am sure I am not alone here. I look

up at the moonlight breaking through the seemingly black leaves and place my palms flat on the ground. It feels real and solid, but also soft and reassuring.

For the first time in a while I feel scared of myself. I don't know why, but I know I somehow got myself here. They are whispering now, but this time, that I am safe. They always seem to be saying the opposite of what I think I know. But I believe them. They are always right. We are right. We are truth. We are you. They were right. I am safe here, and I have to stay here. My eyelids feel heavy and the moonlight gets darker and darker as I struggle to stay awake.

They are coming for me. They are running at me, these creatures, these things. I can't get away fast enough. I know not to run, because they will just chase me faster, but they are so close. As my body trips over dead branches and crushes crumpled august leaves, my brain feels like it's doing the same thing; trying to catch up with my reality but I keep tripping and stepping on my thoughts before I can fully think them. Flashes of red. Glitter. Pain. Eyes. Watching me, always watching me.

Suddenly, just as suddenly as they told me to run, they were silent. They stopped shouting. I could breathe. I could open my eyes. But it hurt. It hurt so bad, I had to get out of there. I reached left, my brain instinctively knowing where the car door handle was, and fell out of my car. The ground glittered with broken glass, and I wondered where it came from. Maybe broken bottles left from college kids who didn't care. It still hurt. I tried to walk, but that hurt more. When I looked up, my vision was blurry and I saw a car. It was red. Then they were back. I knew something horrible had happened, but I wasn't sure what. They told me I needed to leave, quickly, because he saw me get in my car, he

saw where I went, and he was right behind me. But the horrible thing was right in front of me. I stared at the red. Maybe for hours, maybe for seconds. And then I walked away, as quickly as I could with the hurt still penetrating through the voices.

My mother was there. She was shaking me awake but all I could comprehend was the rustling of the leaves under her feet. Her hand felt urgent on my shoulder, and I knew there was something important she had to tell me, but I couldn't seem to open my eyes. It was like someone had glued them shut, and no matter how hard I rubbed them, I was still only surrounded by blackness.

"Mateo. Mateo, wake up," she said with hushed urgency. "Hiciste algo muy mal, Mateo. Tu eres responsable. Despierta." My eyes still shut, she then screamed at me "DESPIERTA, AHORA! VENGAN!"

The sound of her scream brought up something visceral inside me, and my eyes flew open. They were everywhere I looked, and my mother was one of them. Thousands of them, people, but not quite. They looked like humans but something about the way they moved, the way they walked, was distinctly un-human. Their bodies seemed a blurred black without eyes, yet somehow always watching me. This is what they were telling me about. They were right. They're here. I knew I had to get out of there, and I ran, finally, I ran. I didn't feel the pain, I didn't feel confused, I felt confident. They have finally arrived, in their true form. Now I know. Now I can run, because I know. I felt like I have already done this, already seen these things, but at the same time I know I have never experienced anything like this before. I know about them. They know what I did. For as long as I can run, I can outrun both them and myself.

I am groggy as I wake up under a canopy of trees. The details come back to me like fragmented pieces of a puzzle; kind of like some of the pieces are upside-down and all I can see is the cardboard side but I know what shape they are. My car, the woods, the hurt, the red, the glitter, the eyes. I know the shapes, but not the details. The pain comes back swiftly and suddenly as the light streams through broken blinds above me. It's morning, I guess. They were chasing me. Not anymore. I can hear the trees in my head, invading my thoughts. They're different than those that told me to run. Softly, quietly, they say I am not okay. They say I am not safe here, even though they told me I was. I need to get out of here.

I wander through the trees, directionless as to where I came from or where my car is. I know I got here in my car. But the red is invading my vision and the trees' whispers get louder as I listen for any sign of life outside myself. I don't know where the night went, but I know that it's morning from the smell of the air. The air at night smells better than the air in the day, and even better when it rains. The birds begin chirping, the somehow ominous sound ringing through my ears. They don't like that either. There was a bluebird that lived outside my window when I was a kid. It would chirp like this, like these birds, every morning and it would wake me up when my parents were still fast asleep and I needed to get to school. I didn't name it, I never name things, but we knew each other.

They don't let the memory last.

Don't you know it was all part of their plan? That bird, it was watching you, tracking you since you were a kid. They've been watching you this whole time.

I am punched back into this shitty life that has become my own and am somehow standing right in front of a road. There are no cars, just miles of tar. I don't see the glitter anywhere, or red. For the first time, I look down and discover the source of my pain. My leg is deeply sliced open at the shin, dried blood caked in dirt and dead leaves contrasts my smooth, brown skin. I don't know how I didn't notice. Why didn't I look down? Why didn't I recognize that I was severely hurt? What is happening? Fuck, what is happening to me? It felt like a thin cloud enveloped my brain and someone was playing puppet master under the fluff. Since yesterday, my thoughts and my actions have not been entirely my own. I know that.

Okay, things I do know: 1) I left my dorm because they told me he was following me. 2) I drove somewhere. I was afraid. 3) There was broken glass and a red car. 4) I somehow cut my leg open and didn't notice until right fucking now. 5) I slept in the forest. 6) I am standing on the road. I don't know if it's the same road where my car is or not. Since yesterday afternoon, they were controlling me. Next: things I need to do: 1) Find my car. 2) Go to the hospital. Like now. 3) Figure out what happened between the time I lost my car and now.

I figure that standing on the side of the road and waiting for a car is my best plan of action right now. Well, my only plan, seeing as I have no phone, wallet, or keys. I wait for about twenty minutes until finally a black truck pulls off to the side of the road as I wildly wave my hands and point to my slasher leg.

"You need some help son?" He's an older white man with a cowboy hat, not surprising seeing as the cornfields in front of me stretch on for miles in the same way the forest behind me seemed to last night. He looks me up and down, I'm sure wary of picking up a Mexican kid on the side of the road. God knows what he thinks of me.

"Uh, yeah," I think about how to explain my situation without sounding like a total lunatic, which I am realizing I might be. Maybe all those kids growing up were right. Maybe I should have listened to their taunts. I shake my head, trying to scramble loose from those thoughts and formulate an excuse. "I was just taking a walk in the woods and tripped over a log. I cut myself pretty bad," I say gesturing to my shin. "It's too far to walk back to my house. Is there any way you could take me to the nearest hospital?" He eyes my leg, skeptical of my lies, but doesn't question me.

"Hospital's the opposite direction of where I was plannin' on goin', but seems like you need it bad. Hop in." I grimace as I open the door to the truck and try to use my good leg to hoist myself into the stupidly-tall seat.

"Thanks a lot, I really appreciate this." Part of me is actually shocked that he picked me up without question. I would have expected less sympathy from a man like him.

"Just try not to get any blood on my car son." Again, he looks at my leg like it's poison, which it probably is at this point, all filled with dirt and bacteria and a layer of dried blood. I don't even want to think about what I'm going to tell the doctors when I get there. I stare lazily at the corn passing by, endless sheets of green still in the chaos. The nothingness of it all pulls my eyelids down. I'm not even sure if I slept last night. Everything feels so heavy and the tires lull along the tar, country music drifting faintly from the radio, the perfect backdrop for sleep.

### GET OUT! GET OUT! GET OUT!

They are back. It's taking every ounce of my will power to stay in the car. They yell at me and it is so loud that my vision blurs, and all my perceptions of the outside world slowly fade away. You have to stay in the car. You have to go to the hospital.

You're fine, don't listen to them, I tell myself. I grip the door handle with my right hand and the edge of the seat with my left, squeezing my eyes shut and trying to think about my back against the seat, my feet planted on the floor, my hands touching the solid car. I don't think about anything else. Just the feel of my body in this car. They still scream just as loud.

"You get car sick or somein'?" asked the man, pulling me out of haze briefly.

Maybe if we keep talking, they'll go away.

"Uh yeah a little bit, but don't worry I'm starting to feel better," I lie. I want to keep the conversation going, to see if that will make them go away, even though this man doesn't seem like the small talk type. "So, uh, are you a farmer around here?" I ask.

"Just a few miles down the road. Got some cattle and pigs," he replies shortly.

"Oh, that's cool. Do you like it?" He gives me a curious side glance.

"Don't think liking has anything to do with it. Just how I make a living. It's what my grandfather did, what my father did, and what I'll do." I'm not sure what else there is to ask him, but they stopped yelling, just a quiet, yet urgent whisper. *Get out*. We have to be close by now, we've been driving for almost 20 minutes.

"Um, how much farther is the hospital?"

"Don't you live near here son?" He gives me a side glance. "Only about five more minutes. Just right up the road," he says as we enter a small town I don't recognize.

"Oh, right right, of course. I forgot. Must be the pain or loss of blood or something." I laugh nervously but he doesn't comment. McDonalds passes by on my right and, as we drive down a run-down main street, I can't imagine where a hospital could be. Two minutes later, we turn down another small road, and surprisingly, there's a large hospital that looks like it was just plopped down in this rural town. The man drives me to the entrance and I say thanks as I maneuver my way out of the car. As soon as I am through the double doors, they tell me it's not safe at the hospital, but it's too late. A nurse notices me and my leg and starts to walk toward me before I have time to run away. This time, I have nothing concrete to hold on to and I simultaneously feel like I'm drowning while needing to run as far as I can from this place.

"Don't come near me! Stop! Stop! I know what you're trying to do! I know that you want to kill me! Leave me alone! Stop! Stop! I'll kill you if you come another step closer! I swear I will! They told me everything! I know everything! I swear I'll do it! STOP!"

Everything is black.

My head feels heavy and stuffed full of cotton. Maybe they are under the fluff again.

"Manic...disoriented...severely injured...don't know...just showed up..."

Voices drift in and out of my consciousness like distant bird calls.

I can't hear them. Just the beeping.

Beep. Beep. Beep.

I try to scratch my nose and realize I can't move my hands. I try my feet. No luck. Blackness overtakes me once again.

Red. Eyes. Run. Glitter. Run faster. Them. Pain. Run.

\*\*\*

I don't know how long it's been when I can finally open my eyes, but I am alone in a hospital room when I wake up. I survey my body, and see that my hands and feet are in restraints and my hurt leg is bandaged. I don't feel anything. I don't feel the pain of my leg. I don't feel upset that they tied me down like an animal. I don't care that I'm alone. I'm just glad they're not here. It's finally quiet.

"Hi, glad you're finally awake," someone says as they walk through the doorway.

"I'm Annie, I've been watching over you for the last few days. I have some questions to ask you, if you feel up to it."

"Okay," I reply my voice scratchy, sure that I will be unable to answer most of her questions. Finally awake enough, I immediately start thinking about how I'm supposed to pay for this hospital bill. I don't have medical insurance and my parents definitely don't either. But honestly, I'm not sure if I can think that far into the future right now.

"Let's start off simple, how are you feeling?"

"I don't really feel anything."

"Okay, that's alright, we have you on a lot of medication right now. That's totally normal." She smiles, I'm sure trying to reassure me, but I don't care. I don't care about anything.

"Do you know your name?"

"Matthew. Matthew Hernandez."

"Okay, Matthew, do you have any family that you would like us to contact?"

"No."

"Are you sure?"

"Yes."

"Alright, do you know how you got to the hospital a few days ago?" So, it's been a few days. I wonder exactly how many. It's only just occurring to me that I am supposed to be in college and doing class work. I'm not surprised no one has noticed, but a part of me wishes someone had. I actually like going to class and feel like college is the first time I can enjoy the learning part of school without having to deal with the social aspect. I'm realizing that I actually liked the routine of walking to the same classes under the oak trees, surrounded by ornate brick buildings and backpacked students. I liked learning about a variety of subjects and professors who cared enough to challenge my thinking. I liked the opportunity to read novels as homework and be able to have conversations with my peers about them, one of the only settings where I feel like I can actually talk to them.

"Some man drove me. He picked me up on the side of the road."

"Why were you on the side of the road with severe injuries, Matthew?" The way she says my name feels condescending.

"I don't know."

"What do you mean you don't know?"

"I mean. I. Don't. Know." I look at her for the first time since the conversation started, finally starting to feel angry. Angry that I don't know. Angry that I'm here.

Angry that my life can't be normal. Angry that instead of having a normal childhood with normal parents, I had to deal with lunatic alcoholics. Angry that once I get out of here, I'm going to be swamped in bills and debt. Angry that I'm not walking under the oak trees to British Literature, but tied down to a hospital bed. "I go to KU. And then they told me that I had to get away, so I drove away, but after that I don't remember anything but being in the woods and then coming here."

"Who are 'they' Matthew?" I hate that she keeps saying my name. I bet it's to make me feel like she cares, but I know she doesn't. She's probably afraid of me, like the rest of them.

"The voices." I say quietly. I have never told anyone about the voices. Not a soul.

"How long have you been hearing these voices?"

"I'm not really sure. In the last couple of months they've gotten bad but I didn't tell anyone. I still do fine in school. Well, at least I was doing fine until now, I guess."

I look over at the doorway and see a small child standing there, staring. Probably at the restraints on me. He looks curious and scared at the same time, his eyes locked with mine for a few seconds. I feel more ashamed than I ever have in my life. I look away. He walks away. I close my eyes, defeated, thinking it's best if I ignore Annie and just sleep forever.

#### Rose

She's on her way to pick me up and I think she should be here soon. Maybe she's running late, perhaps because of Jonathan. That boy can get lost in his own little world of play sometimes, a consequence of being an only child. I do wish they would have more kids. I think that would help Jonathan get out of his shell a bit. He's so shy and I know he has some trouble with the other boys at school.

I look at my wrist watch and quick run back inside and grab a sweater, remembering that office is always chilly. That waiting room always feels so ominous, with the uncomfortable blue chairs that are too big for any regular person, the air conditioner blasting no matter the season. I suppose it has more to do with me sitting in the waiting room knowing I have to go fail those tests and hear that everything is getting worse, than the waiting room itself. But nonetheless, I still hate it.

It's the afternoon, the sun high in the sky with scarcely a cloud in sight. I like these days; they always remind me of when I was a girl in the country on my parent's acres of land, farming already a dying art in the fifties. I didn't have a care in the world but completing my chores, as I was dutiful of course, and spending time with my animals. I had this horse, her name was Prancy. I named her when I was just a little girl. Oh, I would ride her around all day when I finished feeding the chickens and the pigs. My father would help hoist me onto her, smiling up at me. Every day before I rode off, he would tell me "Go out and explore. Have a grand adventure, and I'll be waiting to hear all about it when you get back." I miss him. But he was right, Prancy and I had so many

grand adventures together. We would ride for hours, through corn fields and sparse forests as I made up imaginary friends to explore along with us.

I hear the crunch of tires on my gravel driveway as I'm locking up my front door. I know she'll be rolling her eyes as she watches me do this. She claims no one would ever break into my house because it's in the middle of nowhere, but it makes me feel safer. Jacob died four...wait no, five years ago? No, it was four. I'm almost sure. But I still don't feel comfortable all alone in this big farm house. As I walk to the car, my daughter is scrolling through that phone of hers, likely checking emails because she had to take the day off to take me to my appointment. I know she doesn't resent me for this, but I can't help but feel guilty. I wish I could drive myself. I really do miss driving.

The sun flashes quick and bright on the windshield of the idling car, and I can see the big screen filling the front car window, the audio of the film scratchy through the car radio speakers. It was better then, in a lot of ways. Being a teenager in the 60s was simpler. All we worried about was whose letterman jacket we were going to wear to the Friday night football game or what movie was playing at the drive-in theater that weekend. Then again, we rarely watched the movie, but that was a lifetime ago. Finally at the car, I open the passenger door.

I've had a good life. I married my high school sweetheart, Jacob, had two beautiful children and now I have three grandchildren and one on the way. I went to college and got a law degree, which I used for a while before I got pregnant. Those days, when a woman got pregnant, it wasn't a choice as to whether you went back to work or not. You didn't. It was your job to stay home, raise your children right, and take care of

the home. I don't resent my children or my husband or even society because I didn't work much; it was the way things were. But now, sitting alone in my home with nothing to do, I really do wish I would have worked more or done something to stimulate my failing brain. For that short time, I loved being a lawyer. I don't remember any specific cases I worked on, but I remember feeling like I was really making a difference. Maybe if I had gone back, I would have stayed sharper and this would never have happened. But maybe not.

"Hi mom," she says setting her phone in the cupholder and offering me a tight smile as I buckle my seatbelt.

"Hi darling, how are you?"

"Oh fine," she says dismissively as she turns her head to back the car out of the driveway.

"Hi grandma," Jonathan says from the backseat, looking up from his iPad. He's such a sweet kid, sometimes I worry too sweet. Especially with that father of his. I know her husband wishes he was tougher, more of a boy's boy. I don't love that about him.

"Do you have the day off school, today?"

"We had a half day today," he says briefly then looks back down at his movie.

I'm sure she let him take it along because we'll be there for a while. She's normally pretty strict about screen time. I glance at her as she stares seriously at the road ahead. I know she can tell I'm questioning why she brought him along.

"I don't wanna talk about it. Christopher was being a complete—" she stops herself and glances in the rearview mirror. I can tell her heart hurts for Jonathan, but his headphones are back on and he seems engrossed in the animated film. She lowers her voice. "He was supposed to watch Jonny this afternoon so I wouldn't have to drag him along to your appointment. I mean, he's a patient kid, but I know he'll be complaining by the time we're done. Anyways, Chris said he had to go golfing with some work colleagues," she shoots me an irritated look and I nod along, "and he couldn't watch him anymore. I mean we talked about this weeks ago but I guarantee he wasn't listening. I have no idea why he planned this golfing outing, because he took the day off for this specific reason. I'm just so frustrated. And I don't even know why they have a half day anyways. Some sports game for the high school or something. Ugh and work has been a total bitch lately..." she trails off looking at me. "I'm sorry mom. How have you been feeling the last two weeks? Sorry I haven't been able to stop by more often, things are crazy..."

She was talking so fast and used too many details, I lost her in the middle for a while, but I know she just needs a sympathetic ear, and that's what mothers are for. I smile at her side profile, loving this human I created with all her complexities.

"I am doing okay. I've been doing more silly things lately like putting my book in the microwave or forgetting to check the mail for days at a time, but other than that, I'm okay. I try not to leave too much because I'm afraid I'll get lost. But, you know, I take my daily walks around the property because I can usually keep the house in sight. I enjoy my walks," I tell her. It's been lonely around the house lately and each day I get more and more worried about my ability to live alone. I've been...oh what's the word? Collaging?

No that's not it. It's something like that, gluing pictures down and writing things around

them. I know there's a word for it, but what is it? My mind feels completely empty, not even a hint of the word I'm looking for hiding somewhere in the recesses. Well, anyways, I haven't told her about my project yet. I just figured I have all this free time on my hands and so many pictures of my life and the kids' lives that I want to have something concrete to look at. Later, when things get worse. It's a good way to pass the time, sitting at my big kitchen table with scraps of paper, photos, glue, and markers exploding across the entire thing. And looking at the photos helps me. Sometimes I test myself to see if I can remember what we were doing when the photo was taken or how old everyone is. I'm usually pretty good at it, but lately it's been a little harder. I need to finish that project sooner than later.

"That's good, mom. I'm glad. I think it's good that you're getting out of the house, but I do think you should be careful. We might have to think about having someone move in with you soon..." she glances at me. I know she's right, but it makes me angry to think about not being competent. I have been on my own since college. I can't imagine not having a life under my own control anymore.

I look out the window at the corn slowly dancing in waves in the distance, anger and confusion blurring my thoughts. I'm upset that our parents forced us to drag Adam along to the annual carnival, but Elaine and I already talked about ditching him as soon as we get there. Adam will be fine, though. He'll find his friends and goof off in the arcade the whole night, losing money to try and win cute girls stuffed animals. Elaine and I are so excited because this is the first year we get to go without mom and dad, and there's these boys on the football team that we want to talk to. Elaine, of course, has her eye on

the quarterback, Tommy, but I have a soft spot for the kicker, Jacob. I know that it's a long shot that he'll even talk to me, especially with Elaine standing right next to me. She was always the pretty one, with that natural blonde hair and a smile that could charm just about anyone into giving her just about anything. Of course, she was also the clichéd cheerleading captain, so it was almost fate that her and Tommy go out. The perfect American couple at the perfect American high school with their perfect American bodies. I'm not jealous or anything. I have my own qualities. Sure, my hair is somewhere between her perfect blonde and brown so it looks kind of like dirty straw, and I can barely touch my toes, let alone be on the cheer team, but I am smart. I am really smart. I actually want to go to college to have a career, not just get married. And I go to school to learn, not just to sneak lunchtime smokes in the bathroom with my friends. So, none of that matters to me. The only problem is that it matters to pretty much everyone else. I'm sure it matters to Jacob. But I guess we'll see tonight. I turn to the left to ask Elaine how I should start my conversation with Jacob, but she suddenly screams and everything goes dark.

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I have no idea why or how we got to the hospital, but I am sitting in the waiting room and I can't find Elaine or Adam anywhere. I look around at nurses rushing through hallways and doctors engaged in hushed conversations with crying families. I thought we were going to the carnival? Why are we here?

I look down and I'm sitting in one of those horrid chairs I hate, the blue ones. The waiting room is frantic, people around me looking intensely concerned, which is slightly

odd for a regular doctors' office. I don't sit for long, feeling agitated by all these people's faces and thirsty and decide to take a walk while I wait for my appointment. Maybe find a mediocre cup of coffee, even though I'm not technically supposed to be drinking that anymore. I should really find some tea instead. Yes, tea. Tea is perfect for the old folks, and that is, after all, what I am.

I'm not sure where she went, but I know she drove me here. I hope that Jonathan is with her because I don't remember seeing him. I'm sure he is. I wander through the hallways, not really remembering what I went searching for. I bet I'll know it when I see it. That always helps. It's like walking back to where you were to help you remember why you left the room in the first place. I am finding that I have to do that more and more often these days, and it usually doesn't work the way it used to. There are so many rooms on each side of the hospital, and I see glimpses of sleeping people, people animatedly talking to family or friends, oblivious to their current situation, and people watching bad reality TV alone. I feel sad for them suddenly, and I am not quite sure why. Somehow, I feel like I'm one of them. Why do I feel like that? It seems larger than before. Usually when I come for my appointments, it's just the constricted waiting room with small examination rooms behind the nurses' station.

As I wander the too big halls trying to find that thing I was looking for, I see frantic looking doctors and nurses in blue scrubs and I'm reminded of my father. He was a doctor and, while my mother stayed home on the farm with us, he was always very present. He made sure to eat breakfast and dinner with the family when he could and, no matter what time he got home, he would come in my room to wake me up and say

goodnight. I almost became a doctor because of him, but I couldn't get over the blood part. I could always tell how much he loved his work by the way he would talk about interesting cases to my mother when he got home. Or when I would hear him crying softly in his office after a hard day. He cared so much. I miss them, sometimes so much it hurts, even though they've been gone a long time and I'm a grown woman. I don't think you ever get to the point where you stop missing your parents.

I spot a vending machine as I continue to stroll down the suddenly empty fluorescent-lit hallways. I think that's what I was looking for, food! I walk over and quickly realize I have no money. Why don't I have my purse? I could have sworn that I brought it with me when she picked me up. I couldn't have forgotten something as essential as that. Could I? Well, drat. I suppose I should probably make my way back to the waiting room. I'm sure my appointment is soon. I feel like I've been walking forever. Maybe I shouldn't have left. I turn to go back the way I came from, but I'm not sure where the waiting room is. I spin in a circle. Nothing looks familiar. I feel my heart irregularly pounding in my chest and perspiration gathers under my arms as my breathing becomes short and shallow. Nurses and doctors and frazzled looking wives and husbands are suddenly rushing all around me. I don't remember all these people being here before.

Thank goodness, there's father! But he's talking to a family. I know I'm not supposed to interrupt him when he's with patients. I always get in trouble when I do that. I remember one time he got so mad that he screamed at me on the car ride home until I cried, but I know he had just had a long, hard day. He would sometimes take me to the hospital with him when I begged him. I spent most of my time wandering around like this

but sometimes he would let me sit in the gallery for his surgeries or swivel on his office chair while he charted notes. The family finally walks away and I run towards him, ready for him to swoop me up and spin me around like he always does.

"Dad!" I shout as I approach him. My father gives me a curious and concerned look. Maybe I'm not supposed to say hi to him yet. I slow down to a walk, arms outstretched to give him a hug. He instinctively takes a step back, a puzzled look still masking his face.

"I'm sorry, do I know you?" he asks. At first, I think it's some horrible joke. Of course, he's joking. But his voice sounds a little different than it normally does. Deeper and raspier somehow. I look right and left, suddenly feeling intensely lost. Nothing is familiar as I scan the hallways around me, and I feel scared, like a child. I think I was looking for tea; maybe this doctor knows where some is.

"I'm sorry sir, could you please point me the direction of some tea? I could really go for a cup of hot earl grey with some cream and sugar." That drink always comforts me.

"Of course," he replies, looking confused. I'm not really sure why. Odd. He gently takes a hold of my elbow and guides me about thirty feet away to a coffee station.

"Oh, I am such a silly woman, it was right there!" I exclaim, lightly laughing and looking at him. He smiles back softly and looks around. Lukewarm water from an old-looking hot water tap splashes into a Styrofoam cup, and I add my tea bag, cream, and sugar and top it off with a lid. The man is still standing next to me, expectant or

something. I turn back to him and say, "That was all I needed, thank you," his indication to leave.

"If you don't mind me asking, what brings you here today?" he asks casually.

"Oh um, hmm..." all that comes to mind is the waiting room, but I don't remember what that means. "Well, I was in the waiting room..."

"Waiting for what?" he asks gently.

"You know," I say with nervous laughter, "I am not quite sure I remember that."

"Did you come to the emergency room with anyone else?" he replies.

"Oh, no I wasn't here for an emer—" Images suddenly appear in my head. Maybe there was an emergency. Blue and red flashing lights appear like something out of the corner of my eye. I am not sure if they are real. She picked me up and drove me to my appointment. I don't know what I'm remembering. I hate myself in this moment. I hate myself for not being sure of anything I think or remember anymore. I hate that I can't trust my own head. I feel like it's betraying me. I hate that my wrinkled face feels damp, as I just now realize I'm crying in front of this man.

"I'm sorry, who are you?" I ask, wishing I had a tissue. I don't know where my purse is. I can't imagine I would have forgotten it.

"I'm Doctor Fairfield. I work in neurology."

"Oh, that's very interesting," I reply. "My father was a general surgeon when he was alive."

"Quite respectable. I'm sorry for your loss. May I ask your name?"

"Rose. Rose Thatcher."

"Very nice to meet you Rose. How about we go back down to the ER waiting room?"

"Alright," I reply, simply because I have no other options at this point. I don't know where my daughter or Jonathan went, and I'm sure I'm not where I am supposed to be. I follow Dr. Fairfield, my tea already cold in my hand. I haven't even taken a sip yet. We make our way down various corridors and a flight of stairs, none of which I remember. Finally, we emerge in a waiting room and everyone looks scared or frantic. I spot Jonathan sitting with a young nurse and rush towards him.

"Oh, my dear!" I say as I bend down to hug him.

"Hi grandma," he replies with a small smile. I can tell he's upset.

"You got this?" the man asks the nurse.

"Yeah, we're good," the nurse replies, glancing at me.

"Nice to meet you, Rose," he looks at me with smile, which I gratefully return and he walks back the way we came.

"I noticed Jonathan was sitting alone so I've been talking with him for a few minutes. He says you he couldn't find you."

"I'm so sorry sweetie. Grandma just went on a walk to get some tea while we wait." I say holding up the small cup.

"It's okay," he says robotically. He seems off, but I'm not sure why. I wonder where his iPad went and why he's not watching his movie anymore.

"Ma'am, why are you and your grandson here?"

"Well, my appointment." I say matter-of-factly, a little flustered, heat rising into my cheeks, that this young man is questioning me like this. He looks at me skeptically.

"Jonathan, are you here because of your grandmother's appointment?" I pull back in shock that he would trust an eight-year-old's word over mine.

Slowly, Jonathan shakes his head no.

#### **Elise**

I can't remember. They haven't told me why I'm here and there's this man who has been perpetually sitting in the corner claiming he's my husband and I feel so trapped. They haven't told me why I'm here. I have a raging headache and the hospital room is dim around me. I think it's nighttime. There's a steady beeping in the background, so constant I almost forget it's there. I feel warm and greasy, like I've been laying in this bed for a while now. I don't know how long it's been, but I desperately want a hot shower. I don't see why I can't take one, so I slowly sit up, waiting for alarms to go off and nurses in blue scrubs to come rushing in.

No alarms go off. Nothing happens. I'm alone in the room, besides the man sleeping upright in the chair in the corner. The hallway lights are dimmed and I hear faint whispers, urgency laced in the voices, just outside my semi-translucent door. I look down at my hand, follow the tube from the needle in the back of my hand up to the IV standing next to my bed. Clear fluid slowly drips from the bag down into the tube, almost in sync with the beeps. I now realize, sitting up in the white scratchy sheets, a thin blue blanket atop, that I am connected to about seven things that will prevent me from getting out of bed to go to the bathroom. How have I been going to the bathroom if I can't get up?

It comes to me suddenly, my limited knowledge about medicine prompting my eyes to look down at the side of the bed. But thankfully, I don't see a bag full of my own pee, meaning I must be competent enough to go to the bathroom. Showering may be another story, though. I lie back down, feeling terrified that I remember what a catheter is but I don't remember my name, or who that man is, or why the hell I am lying in this bed.

I close my eyes again, unsure of why I sat up in the first place, my eyes blinking heavily, the weight of it all pushing me into the bed.

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It's light but I have no idea how much time has passed. My head feels heavy and fuzzy and there's a man sitting in corner. I have no idea who he is. A nurse knocks and, without waiting for an answer, slides the glass door open with a too-bright smile on his face. He's wearing those classic light blue scrubs with sensible shoes, and looks young, maybe like he just graduated college. His brunette hair is wavy and falls into his eyes, and he's wearing glasses that reflect the light of the iPad he is holding.

"Hi, Elise!" So that's my name. Elise. I like the sound of it on my tongue. I think it's a nice name. I feel like this should be a whole-body reaction, me just learning my name, but it feels mundane in a way. Boring, even. Maybe a part of me that I can't reach is used to the name. The man in the corner stirs awake at the sound of the nurse's voice and rubs his eyes, yawning simultaneously. I wonder why he's here. He must know me.

"Hi," I repeat slowly, unsure of my vocal abilities. Minus a little raspiness, it sounds fine in my ears.

"How are you feeling?" he asks, a slight Boston accent laced behind his words.

Are we in Boston? That doesn't really seem right.

"Fine, I guess. I mean my head hurts," I feel suddenly annoyed at his questioning.

"Who is he? I don't know him. Get him out," I say calmly even though I feel terrified.

"Elise, that is your husband, Chris," he says slowly and softly. The man looks defeated and rubs a hand across his face. He is wearing a blue cable-knit sweater and

khakis, brown hair slightly messy atop his head and dark bags sitting below his brown eyes. It looks like he's been sleeping in that chair for days now. A part of me feels thankful that someone's here. But more of me feels terrified because I don't know who he is.

"I don't care. Get him out," he looks between me and the man, as if asking his permission, even though this is my room. "Now!" He stands up and, without looking my way, walks out of the room, sliding the door shut behind him. "What happened? Why am I here?"

"Elise, you suffered a traumatic brain injury. You were in a car accident." For some reason, it feels like he's slightly exasperated, like he's said this before.

"How many times have you told me that?"

"Only about three. You've been here for about a week, but you just started to regain consciousness yesterday evening. Things should start sticking soon. Do you remember the accident?" I rack my brain for something, anything, but nothing new about my past creeps back into my mind.

"I didn't even remember my name until you said it." He gives me a sympathetic head tilt. It doesn't feel genuine. He probably looks at people like that all day, though, so he's perfected it.

"It's okay. Brain injuries take a lot of time and healing. You'll get there. The neurologist should be here in a few minutes to give you a quick exam. Do you need anything from me?"

I shake my head, the reality of it all again pressing down on me, like a physical weight on my whole body. Only after he leaves do I remember something about showering.

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I wake up from a nap later in the day with a memory of my husband. It was our first date and we were both in college. He came up to me after our Philosophy class junior year while I was putting away my things in my backpack. The backpack was light blue, but I don't remember what I was wearing or what he was wearing. It was a big lecture hall with rows of chalkboards at the front of the classroom, a podium placed neatly in the center in front of them.

He seemed nervous at first, almost shy, and didn't say anything for a while. I recognized his face from class, as I would sometimes admire him from afar. He was handsome. I was a little shocked that he was standing in front of me of all people. Me with my plain brown hair and my plain brown eyes, my only distinguishing feature my height at 5'10". Christopher was taller, though, at least by 4 inches. I liked that. I finally turned towards him, the amount of time he was standing there not saying anything becoming increasingly awkward. Maybe he was waiting for me to finish packing up?

"Hi," I said. "Did you have a question about the notes or the homework or something?" I assumed my reputation as current valedictorian had proceeded me and that was the only reason he was talking to me.

"Chris," he replied formally, reaching out his hand for me to shake.

"Elise."

"I know," he says with a shy smile. Pink creeps into his cheeks. He's cute, I decide. "Um, I was wondering if you're free Friday afternoon? I wanna take you on a date." Again, that smile.

"Yeah, actually, I am. I would love that," I smile shyly back.

I am sure days passed, but I don't remember the in between bits. He picked me up on Friday from my apartment near campus and, when I got in the car, there was a picnic basket and a blanket sitting on the backseat.

"A picnic?" I asked

"Yeah, I thought it would be nice. It's been such a nice fall. Do you like it? We can do something else if you want. Whatever, really."

I reached out and put a hand on his arm. "No, this is amazing. Thank you." No one had ever done anything like that for me before. I couldn't believe he thought about our date this much. The details of the date itself feel fuzzy, like its playing on fast forward in my head. We laughed and talked about any and everything and sat at that park for hours, the scraps of our food left on lonely plates. We were enchanted in our own world. But the feeling. I remember that the most. The giddiness and excitement of the first date and getting to know him. I remember really liking him. I called my mom afterword and told her all about him, something I feel like I rarely did when I went on dates in college. I wonder what happened, because when I try to think about him now, even though I don't know what our life has looked like these past years, I don't feel anything. Something must have shifted. Or maybe I just don't feel anything because I don't remember anything...

Time has passed. I only know that because the setting sun casts an orange hue over the small room. I don't know what happened in that time. A woman dressed in a crisp white blouse and slacks with a white coat comes in. I'm assuming she's the doctor.

"Hi, Elise," So that's my name. Huh. I think I like it, but I'll have to get used to the feeling on my tongue. It feels a little boring though. "How do you feel?"

"Fine, I guess. My head really hurts. Can you give me anything for that?" She looks down at the iPad in his hands, scrolling a little.

"It looks like you're already on the maximum dosage of pain killers that we would recommend. I'm sorry. How much does it hurt on a scale of one to ten?"

"Probably only about a seven," I say and roll my eyes. Of course, she's not going to help. All doctors do nowadays is push drugs, but when you really need them, they're not going to give them to you. My mother has an incurable disease and all they want to do is put her on all these experimental drugs that will probably do nothing for her in the long run. She's dying and her memory is dying along with her and that's just something everyone has to accept.

Wait.

I just remembered my mother. And that she's dying. I couldn't say what her name is or what she looks like but I know she has Alzheimer's and remembering that makes me eternally sad. It sits heavy and nagging in my brain, like something I'm dreading but can't bear to think about.

"Okay, well that's not a major cause of concern for me, that should be normal after what happened to you."

"Ugh," I roll my eyes again, still frustrated but also reeling that I remembered something. Maybe I'll remember everything. Maybe it'll all come back to me. Hopefully. I know my name and that my mother is dying. And somehow now we're in this together, this whole not remembering thing. Who is supposed to take care of her now?

"I'm just going to have a look under your bandages and see how everything is healing, okay?"

I shrug.

She walks over and reaches for my head. I immediately lurch back.

"What the fuck are you doing? Who are you?"

"Elise, I'm your doctor. You're in the hospital. You suffered a head injury. I need to check the bandages on your head. You recently had brain surgery." She says this slowly and clearly, taking a step back from me and frowning slightly. But it seems like she's trying to give me space and I think I should trust her.

"Okay." My mind spins. Head injury. Brain surgery. I bring my awareness to my head, and I can feel her unwrapping gauze, the pain tangible.

"Looks good here. You're healing quite nicely," she smiles at me and takes a few steps back. Is she afraid of me? "I'll be back tomorrow morning to check on you again." With that, she looks down at her iPad, typing and walking as she slips out the door. I'm alone.

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"Morning, Elise."

"Good morning." The woman in the white lab coat walks in. "I missed you." She smiles down at her iPad, but there's a distance between us, like we're not friends anymore.

"How are you feeling?"

"Oh, just fine. Little headache," I lie. I don't want her to feel concerned about me. She worries so much. "How are you?"

"I'm just fine, Elise. Thanks for asking." Again, that tight smile.

"Why are you being weird? Are we fighting or something?" I say half-jokingly, half serious. I know I don't remember some things, but I would think I would remember us fighting.

"Elise, I'm your doctor. Your husband is grabbing some coffee. I'm sure he'll be back soon." A man entering the room grabs our attention, the man that's been sitting in the corner. Chris. My husband.

"Hi sweetie," he says looking at me. I remembered a past version of him but somehow now, I feel closer to the doctor. I feel so conflicted. I sit there, staring blankly between the two of them.

"Um, hi," I finally reply to Chris. He's holding a Styrofoam cup of what I'm guessing is coffee. I wonder how he takes it. I wonder how I take it.

"I'm your husband, Chris." I can't form the words to tell him I remembered our first date. That he looks familiar. I just sit there unmoving. "I think Jonathan should be here soon." I stare again, no clue who Jonathan is. He must pick up on this because he

gives me a sad smile and says, "Jonathan is our son." My heart drops to the bottom of my stomach. I have a son. And I have no idea what he looks like or how old he is or anything about him.

"Oh," I say quietly. Chris looks at the doctor and asks if he can talk to her in the hallway. I overhear snippets of hushed whispers in the hallway, the conversation snaking softly through the door so I can listen in.

Chris: "... you think?"

Doctor: "hostile and aggressive...becoming emotionally attached to her caregivers... traumatic brain injuries...how much the patient will remember... remembers at all."

Chris: "... may never remember me? ...son?"

Doctor: "... yes...stay strong for her...reminding her...tell stories...jog her memory, photo albums... a lot for you...your wife needs..."

Chris: "Thank you..."

Doctor: "...be back later tonight...go home...some rest."

I may never remember them. They were my boys, my family. I don't know how we'll get through this. I shut my eyes, wishing to go back in time, for everything to be normal again.

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In the middle of the night, it suddenly comes back to me, like a movie playing in my head. Like I was watching this unfold from an outside perspective even though I'm pretty sure happened to me.

"You said you could watch him. I don't understand what else you have to do when you took the day off." I glared at my husband as I finished unloading the dishwasher. Of course, he just sat there eating his lunch of leftover chicken tacos, scrolling on his phone. Never mind that I was already late and he claimed to be too busy to watch our son even though we arranged this weeks ago.

"I know, I know, Elise," he said in a demeaning tone. "But I have to go shoot nine rounds with some potential clients and I can't bring him with me obviously. It's for work." He tilted his head toward Jonathan sitting on the carpet of the living room. I took a deep breath and continued to carefully sort forks, spoons, and knives into their respective beds in the silverware drawer. It took every ounce of energy I had not to throw something. On top of everything, this was the last thing I needed to deal with. My boss was breathing down my neck to get the stack of books on my desk edited, but it was impossible. I read every night, into the late hours where owls coo outside my window and slight shifts in the breeze make me slowly look around my home. Even then, red pen in hand, marking up page after page, I'm still always behind. Last night, I was up until at least 2:30am and woke up at 5:30am to go to spin class before coming home to get some work done. Of course, my husband fell asleep with Family Feud slowly casting blue shadows across his face, probably at 10pm after putting Jonathan to bed.

He's not all bad. Christopher. Just selfish. Selfish with his time and his money and almost everything else. But he's a good father to Jonathan. He bonds with Jonathan in ways that he knows how, like teaching him the rules of football or falling asleep on the couch with him as they read. It's sweet, these moments between them, but I know that

Jonathan is never going to be who his father wants him to be and that is going to hurt their relationship later in life. He's only eight, but a mother knows. I hate that my husband will look at our son differently if he's gay.

"Fine," I said slowly and deliberately. "I'll just drag him along."

"He'll be fine." A dismissive wave of the hand, and he didn't even look up from his phone. I took another deep breath and checked the Apple Watch on my left wrist. I was supposed to leave 10 minutes ago, but I was hoping I could convince Christopher.

Obviously, I couldn't just fight with him and do nothing else, so I unloaded the dishwasher. And then of course, I couldn't leave until that was done because there was no way he would do it.

"Sweetie," I called into the living room where Jonny was assembling an intricate Lego kit Christopher brought home from the store the day before. "You're gonna have to come with me. Go grab some shoes and meet me in the car," he looked up unbothered, bless his little soul.

"Okay," he said and I could tell he wanted to keep building his Legos. But he would never protest, not about this anyways. He knew it was important that I had to be there, and he was already so thoughtful and respectful.

Then the memory was over. I don't know where I was going or why it was so important, but I remember the frustration I felt towards Chris and the love I felt towards Jonathan. I remember my son again, and his sweet face. I remember the feelings and the unimportant details like the silverware glinting at me in the drawer, but nothing else. I

stare into the semi-darkness of my room. Chris is still sleeping in that chair. And I'm lying here.

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I am putting away some wine glasses that Chris and I used last and thinking about the past few weeks since I got out of the hospital. Things are slowly coming back to me. I know my son, my sweet son. I couldn't tell you much about my pregnancy. I remember the birth in foggy flashes, but I feel like that would be the case even if I didn't suffer from a brain injury. I remember his second birthday vividly for some reason, but things in between are foggy. Memory is tricky like that. I never thought about it much before now, but how much could I have really recalled, I mean the specific details, before this happened? It's like I am living my life in every moment but then those memories immediately slip away when I move onto the next moment. So, ever since this happened, I am trying to just be. To not focus too much on remembering every single detail of the life I once led, but be present with my boys now. Its horribly cliché, of course, to have this kind of shift in perspective after an accident, but it's what happened.

I am remembering more things about Chris every day, but those memories are often accompanied by the tension that has been present in our marriage for a while now. We've been slowly talking through things, and I am realizing the disconnect that existed between us was not just his fault. Things are in no way perfect, but they never were. Not even that first date. Chris and I were talking the other night, and he said our first date was actually kind of tragic. The grass was wet, and dirty water seeped through the blanket and into our jeans. The food Chris made was really horrible and he said we both took two

bites and then disregarded it for the rest of the afternoon. He also says there were some awkward silences that both of us tried to fill with choppy, uncomfortable conversation. But we both had that feeling. That hope and excitement about one another. Nothing was ever perfect. I think that's okay.

I am reaching to put the glasses away in the top cupboard when a bird suddenly hits the window above the sink. I jump, the glasses shattering on the granite countertops, glass spilling onto the floor. The memory rushes through my head like a wave, and I know that I had seen glass glitter like that before. I was in the car with my mother and Jonathan, taking my mother to her doctor's appointment. My phone buzzed in the cupholder and I reached for it. That must have been when the accident happened. Then nothing, besides the broken glass and the figure of a boy. Not Jonathan, but someone else. And that's it. The memory rushes back out to sea like the shifting tide and I go to grab a broom and a bag to put the glass in.

# Jonathan

"Jonathan, can you tell me how you and your grandmother got here today?" the boy nurse asked me. My face got hot when he talked to me and I felt nervous. I looked down at my hands in my lap. He was sitting with me because my grandma left me earlier. We were sitting in the emergency room and all of the sudden she just left. I tried to call after her but I don't think she heard me. Mom says she has some kind of disease. Allssomething. But it makes her not remember things so I think she forgot about me. The nurse came and sat with me while grandma was gone. She's back now, though. She remembers me again, but when the nurse asked her why we were at the hospital, she thought it was for her doctor's appointment. That's why we were in the car, but that's not why we're in the emergency room.

I had a half day at school because of the high school basketball game. I don't know why they let us leave early, because I am not in high school, but I got the day off school, which I like. When mom picked me up, she seemed mad. Her eyebrows were doing that crinkly thing that she usually does when dad is late for dinner and she wasn't as nice to me as she usually is. She made me mac and cheese for lunch, though, which is my favorite, even though mom says it's not good for me. After lunch, I was building my new Star Wars Lego set and mom and dad were arguing in the kitchen. They do that a lot, but most of the time they do it when they think I'm sleeping. I can hear them, though. I try to put my pillows over my ears but it doesn't really help. Dad was supposed to stay home with me while mom took grandma to the doctor, but he told mom he had to golf instead. He golfs a lot. I don't know why I couldn't just stay home alone, I mean I'm

almost nine. But mom won't let me. She told me to grab my shoes, so I did. I try not to argue with them too much because I don't want them to yell at me the way they yell at each other.

As we walked into the garage, mom told me I could take the iPad and watch a movie. I didn't mind going along with her to grandma's doctor's appointments, but it gets pretty boring after a while because we usually have to wait forever for the doctor to come get grandma. She goes to the doctor a lot lately. I think it's because of the forgetting disease she has. But as long as I can watch movies, I don't really care.

Grandma was standing outside her house when we got there. She lives in this big farm house with lots of land. I wish I got to go there more often. When grandma wasn't sick and grandpa was alive, mom tells me I would play at their house all day and run around outside with them. I don't remember that, though. I don't even really remember when grandma wasn't sick. I was too little. She got in the car and I said hi and then went back to watching Kung Fu Panda. I wish mom and dad would let me do karate, but dad says it's not a real sport and mom says it's too dangerous. I told them I don't know how it can be not a real sport and dangerous, but they still said no. Dad wants me to play football or baseball, but those don't really seem that fun. All the boys I go to school with who play those aren't very nice. They bully me sometimes because they think I act like a girl.

"Well, mom and I picked up grandma at her house because she had to go to a doctor's appointment." I'm sitting next to the nurse and grandma on blue, itchy chairs. They're the same ones that are in the waiting room when we go to grandma's

appointments. They aren't comfortable and I don't like them. There aren't a lot of other people in here, and none of them look like they're here for emergencies. But they all look kind of sad.

"But you said you're not here for her doctor's appointment?"

I look at grandma and she looks confused, her eyebrows bunched together and her lips in a weird shape. I don't want to make her mad, but I know what happened. "No," I say quietly. I look down at my tennis shoes. There's blood on the corner of them.

"Grandma's appointments aren't at the hospital."

"Ma'am, is this true?" the nurse looks at grandma again.

"Please, call me Rose. And yes...I guess now that I think about it...I think my appointments are at an office building on the other side of town. I don't remember what it's called."

"So, Jonathan, why are you here in the emergency room instead of your grandma's appointment across town?"

"We got in an accident." I feel scared remembering it. I feel like I do when mom and dad yell and I am not sure if we're gonna be a family anymore.

"Like a car accident?"

"Yeah."

"Did you come here in an ambulance?"

"Yeah." The nurse looks around. I think he looks scared, but I don't know why.

"Are you okay? Are you bleeding anywhere? Does it hurt anywhere?" He looks at me, I think checking if I'm okay. He's a really nice nurse. I like his eyes. They are green, like mine.

"An accident! That can't be! Where is my daughter? What is happening?" The nurse reaches across me and squeezes grandma's hand.

"Rose, it'll be okay. We'll find your daughter. I don't know where things got lost in communication, but we'll find her." The nurse smiles at me. I know my mom isn't okay. I remember what she looked like after. "Rose, does this mean you don't remember the car accident or the ambulance ride here?"

"Well, I remember flashing lights and a scream, I think, but nothing else. Oh, dear god, how could I have forgotten something like this? How could I have forgotten my own child and grandchild?" Grandmas eyes go big and she starts looking all around the emergency room. Mom says when she starts looking scared and searching around, it means she forgot again. It means she gets lost, kind of like I used to when I was a little kid.

"Rose, it's gonna be okay. Can you take some deep breaths for me?" Grandma shuts her eyes and nods. I think she is trying not to cry in front of me.

"Jonathan, are you hurt?" he asks me again.

"I'm fine. But my mom isn't." I look at grandma and she grabs my hand. Now she's crying. I feel really scared. Mom isn't okay.

"I'm going to go call the police. You guys just hand tight, I'll be right back." I stare at my shoes for a while.

Suddenly, there's an old black man standing in front of me with a notepad. His feet are standing far apart and he's not smiling. The nurse must have come back at some point because he is sitting next to us again. "Do you think you can tell this detective what happened? I know this is hard, but you've been so brave, buddy."

"Hi, Jonathan. I'm Detective Wallis. I just need you to tell me exactly what happened in the car accident so we can all help you." I look at the nurse again and grab his hand. I don't want to talk to the police, but I know I have to. For mom.

"Well, we were driving and then mom looked down at her phone, I think, and then this car hit us. I think the car was blue."

"What happened after the car hit you?" he asked.

"There was blood on mom's seat and she was quiet, but I couldn't see her.

Grandma didn't say anything. We sat in the car for a while before anyone saw us. I left my seatbelt on."

"Where was the person driving the other car?"

"I saw a man get out and he stared at us for a while...but then he ran away into the woods. He looked like he got hurt, so I don't know why he ran away. I saw his leg bleeding."

"Hmm, we'll have to look into that." He wrote something down on his pad. "Do you know how long it was until the ambulance showed up?"

"I don't know, but I didn't move out of my seat because I didn't know what to do.

When the ambulance got there, they pulled mom out of the car and did a lot of stuff to
her. Grandma got out too and started talking to one of them."

"Did anyone realize you were in the car too?"

"After a little, a lady finally came and got me out of the car. She said no one realized I was back there."

"I'm very sorry Jonathan. You're doing a great job. Can you tell me what happened next?" I guess the detective wasn't too bad.

"Well, then we all got in the ambulance and the sirens and lights were on when we drove here. Mom was lying down in the middle and we were sitting next to her. She was still really bloody and the people in the ambulance were saying a lot of things really fast and doing a bunch of stuff to her. The lady that got me out of the car told me not to look at mom. She told me to shut my eyes until we got to the hospital. So, I did."

"Thank you, Jonathan. I know you are probably scared right now, but you are being very strong for your grandma and your mom. What happened when you got here?"

"How did no one realize there was a little boy who witnessed this? What is going on in this hospital? Oh, dear God, how could I have forgotten all this? Oh, dear."

Grandma lets go of my hand and starts rocking back and forth with her hands over her eyes. The nurse calls to his friend who is sitting at the desk. He is still holding my other hand, but my body feels really cold. Kind of like when I got the flu last year and I had to stay in bed all week. I got to miss school, but I felt horrible. The other nurse comes over and sits next to grandma. She whispers to her and rubs her back. The nurse looks back at me, then at the detective.

"What happened when you got here Jonathan?" the detective asked.

"The ambulance people rushed away with mom through those doors." I point to the swing-open doors next to the desk. "Then it was just me and grandma. No one was at the desk, so we just sat down here, but grandma didn't say anything. Then she just got up and walked away. That's it." I close my eyes. "I wanna go home. I want my mom and dad." I start crying. Everything is so scary and I don't know where I am or where mom is or where dad is and grandma doesn't remember anything. "Where's mom?"

"Oh buddy," the nurse rubs my back and I feel slightly better. The other nurse is rubbing grandma's back. We're crying. "Do you know your parents' names? We'll find out where your mom is and try to call your dad."

"Elise and Christopher. My last name is Mattson." The detective writes this down then nods to the nurse and walks away. The skin above my lips is all sticky with snot. I wipe my nose on my shirt sleeve. Mom would be mad. She says that's gross and I should use a tissue. But she's not here.

"Okay, Jonathan. Are you gonna be okay staying here with your grandma and nurse Susan?" I look over at them. Grandma isn't crying anymore, just staring at the wall across the waiting room. "I'll just be a few minutes while I find out what's going on with your mom and try to contact your dad. Do you know your dad's phone number?" Mom made me memorize her and dad's phone numbers in case of emergencies. She'll be glad I remember.

"785-272-3900." He grabs a little notepad and pen out of the pocket on his shirt and writes the number down.

"I'll be right back." He squeezes my hand and walks back behind the desk. I feel all alone again.

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I'm getting kind of hungry and it's dark outside now. Grandma is still staring at the wall and that other nurse Susan is sitting next to her writing stuff down on an iPad with this fancy pencil. Nobody has asked me anything in a while, which is good. I don't really feel like talking anymore. The emergency room is very quiet and there's TVs on the walls but they don't have sound so I don't know what's going on. They look like adult TV shows anyways. I'm bored. I swing my legs in the itchy blue chair because they don't touch the dirty-looking floor. A pair of shoes shows up on the floor where I'm looking. I look up. There's an older lady with gray hair standing in front of me. She's wearing some kind of suit, kind of like mom wears when she goes to work. I think mom would say it's not very flattering on her. That's what I'm supposed to say instead of saying something mean.

"Hi, are you Jonathan?"

"Yeah."

"My name is Nancy, I'm a social worker." She squats in front of me. She smells too much like perfume. "Do you know what that is?"

I shake my head. "Not really."

"I'm just here to look after you until one of your parents can. Kind of like a babysitter."

"But my grandma is here."

"Yes, she is. Did your parents tell you about the disease your grandma has? Right now, it doesn't seem like she's in the best state to take care of you."

"Yeah. Alls-something. She forgets."

"Alzheimer's, yes. Right now, there are a lot of scary things that have happened and your grandma is a little overwhelmed by everything. So, we just want to make sure you have someone to watch over you. I just talked to nurse Nick over there," she points to the boy nurse sitting behind the front desk, "and he said he called your dad and he's on his way. I heard you remembered his phone number and told the detective everything that happened. You have been so helpful today, Jonathan."

"Okay."

"Can I get you anything? Are you hungry? Thirsty?"

"I'm a little hungry."

"How about we go find a vending machine?" She stands up and reaches out her hand. I don't know why everyone thinks they need to hold my hand. I'm not a baby. I ignore it and stand up to follow her. We walk through the doors that mom went through earlier. And then grandma after her. I thought it'd be scarier back here, but it pretty much looks the same.

"Where's my mom?" I look up at her.

"I talked to nurse Nick and it sounds like your mom had to get surgery on her brain. I think she's still in surgery but we'll tell your dad everything once he gets here and he can give you more details." "Okay." Brain surgery sounds scary. I'm pretty sure that's when they cut your head open. I don't want to think about mom's head being cut open. There's a big lump in my throat and my eyes burn, like I'm about to cry again, but I hold it in. I've gotten pretty good at not crying, especially at school when the other kids would make fun of me if I did. It's not that hard, really, you just have to concentrate really hard on keeping the water in your eyes.

"Let's find some snacks," she puts her hand on my back like she's leading me there. I don't want her to touch me. I want my parents.

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I got a bag of potato chips from the vending machine that Nancy brought me to, but I didn't like walking past all those hospital rooms on the way there. They sometimes left the doors open and I could see people laying in their beds with tubes connected to them. That looks scary. I wonder if mom has a bunch of tubes. I wonder if she's still getting brain surgery. I hope she's okay. I hope the doctors are saving her. We are walking back to the waiting room, but this time I know to keep my head down and just look at my shoes. Except I can't stop staring at the blood on my shoe. I also don't want to look up, though. I just want my parents and I don't want to be with Nancy because she treats me like I'm five and I don't want to be here anymore and I want grandma to remember and grandpa to be alive.

When we walk back through the doors to the waiting room, dad is yelling at my nurse behind the desk. The one who was really nice to me. I think his name is Nick. I like

that name. I like the noise the "ick" part of the word makes on the roof of my mouth. I say it over and over again under my breath.

# "...SOCIAL WORKER? YOU THINK I'M INCOMPETENT OR SOMETHING? WHERE IS HE?"

I don't know what incompetent means, but everyone in the waiting room is staring at them, and Nick looks scared again and also kind of mad.

"Dad!" I want him to stop yelling. He turns around fast and runs toward me. He hugs me too hard and it hurts my chest. "I'm fine, I swear," but I start crying. "Mom is in brain surgery." It's sometimes hard to breathe when I cry this hard, but this time dad hugs me and it doesn't hurt anymore. He's so tall that when he hugs me, it's like I'm in a cave and I don't see anything that's happening outside of my cave. But then he lets go of me and I don't like being outside my cave again. It felt okay and safe in there. Everything has been so scary today.

"Hey bud," he holds both of my arms and squats in front of me. "Mom is gonna be okay, I...promise. Let's see where she is." Dad stands up and looks at Nancy. "Thank you, but I think I can take it from here."

"Sir, we were not trying to undermine you, but you must understand your...mother? Mother-in-law?"

"Mother-in-law."

"Well, after the accident your mother-in-law has not been capable of watching over Jonathan and the nurses aren't babysitters, so I just came by to sit with him and get him a snack before you arrived."

"Oh...alright. Well thank you, then."

"You're quite welcome." She sounds kind of upset, but then turns around and checks her phone before walking back through those doors. Dad walks back over to Nick and I follow him. I don't want to be alone anymore.

"I just don't understand how my wife, son, and mother-in-law could have gotten in an accident and nobody told me about it until six hours later?" he's not yelling anymore, but he still sounds mad.

"I am not exactly sure what happened, but I just talked to the paramedics and they said they received an anonymous call about an accident. When they arrived, your wife was severely injured and your mother-in-law and son seemed to be in shock. Your wife's phone was shattered and they didn't find her purse or any sort of identification on her."

"What about the license plate? The car is registered in her name."

"I am not sure, I'm sorry. I think they were mainly focused on getting your wife help as soon as possible. And lucky they did. It looks like she just got out of surgery and the attending neurosurgeon should be by any minute to come update you. They are examining your mother-in-law right now, and Jonathan told us about the Alzheimer's. She may have some minor whiplash or scrapes, but it's honestly a miracle that her and Jonathan have no significant injuries." He smiles at me.

"Okay, well thank you. I guess we'll just wait here then."

"Let me know if you have any other questions."

"I will, thanks." Dad and I walk back to the blue chairs and he doesn't say anything. He puts his face in his hands like grandma did earlier. "Dad?" He looks up at me and he's crying. I've never seen him cry before. "You really think mom is gonna be okay?"

"We can only hope, bud." He puts his arm around me and we watch the silent TVs on the wall.

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The day of the accident, the doctor told us that mom still hadn't woken up from her surgery yet. I don't really understand how that works, but dad said it's called a coma, which is like a super long nap that's hard to wake up from. Dad said it might be too scary to see her when we were at the hospital, so I waited with grandma in the waiting room while dad visited her. When we left the hospital with grandma, I was starving so dad got us chick-fil-a. He let me sleep with him on mom's side of the bed, but I didn't sleep very well. I don't think dad did either. Grandma slept in the guest bedroom and dad said she'll probably stay with us for a while. We ate soggy cheerios for breakfast the next day and dad hasn't really said much in the past few days. Dad goes back to the hospital every day, but he still won't let me come with him. Grandma and Aunt Mariah have been staying with me. I didn't go to school most of this week.

Finally, a few days later, dad lets me come with him because he says mom looks better. This time when we get here, we don't go to the emergency room. We park in a parking garage and take an elevator that goes right into the hospital. I follow dad, but I don't want to have to see all those people in beds again, and I especially don't want to see mom. She looked so bad last time I saw her. I walk slowly and dad keeps turning around to tell me to hurry up.

I hear a nurse that sounds familiar, so I look into the room to my right. It's not anyone I recognized, but she's talking to this guy. He looks like a teenager and his leg is all bandaged up. But the weirdest thing is that he has things holding down his arms and legs, like an animal. He looks scared. I know he looks familiar. I think I've looked at him like this before.

"Jonathan, stop staring. Let's go!" Dad says from in front of me. I run after him to go see mom.

"Dad, I think that was the guy that hit -"

He grabs my hand and we walk into mom's room.

# **Appendix**

#### Characters

In the collection of short stories, Matthew, the narrator of the first story, has schizophrenia. Rose, the narrator of the second story, has Alzheimer disease. Elise, the narrator of the third story, has post-traumatic amnesia from the traumatic brain injury she incurred in the car accident. Jonathan, the narrator of the final story, has no neurological deficits. The symptomology for each of the characters was largely informed by personal memoirs and accounts of the diseases. Below, I will give a detailed overview of each disease, along with how fiction writing creates empathy, which is the main significance of this thesis.

# **Schizophrenia**

# History

Harald Sontheimer, in his book *Diseases of the Nervous System* (2015), gives a detailed account of the early history of schizophrenia. Due to its psychological nature, schizophrenia has often been dismissed as "madness" or "insanity." Hippocrates, the Greek physician, questioned this claim and thought the disease was not only due to abnormal brain functioning, but also that it could be treated. While Hippocrates looked at treatment through the four humors, a previously accepted notion that the body contains blood, black bile, yellow bile, and phlegm, we now know this is untrue and the nature of the disease is much more complicated. Thus, treatment in ancient Greece included bloodletting, diet, and purgatives.

Philippe Pinel, a French physician in the late 1700s, studied syphilis and cholera patients and saw a similar affection between them and patients he saw in the asylum (Weiner, 1992). Because of this link, Pinel recognized that mental illness can stem from an underlying biological condition, and thus patients in mental hospitals should be treated with compassion; this changed how the patients in the asylum were treated, allowing them out of their dungeon-like rooms and chains and into the sunshine (Bridley & Daffin, 2018). As one of the founders of moral treatment, Pinel was one of the first to recognize this link and treat those in mental hospitals with humanity, although that did not necessarily continue, especially in the United States.

In the middle of the nineteenth century, European psychiatrists began detailing diseases that are now understood to be versions of schizophrenia, which include accounts of adolescents rapidly declining in cognitive abilities (Jablensky, 2010). Emil Kraepelin first integrated these multiple accounts into a syndrome, which he termed "dementia praecox," including two forms of the disease, catatonic and paranoia (Jablensky, 2010; Sontheimer, 2015). Kraepelin later claimed three registers of disease, including affective, schizophrenic, and encephalopathic, that can be combined to form all major mental illnesses (Jablensky, 2010).

The beginning of the twentieth century saw the rise of psychoanalytic theories, especially from renowned psychologist Sigmund Freud; Freud believed that schizophrenia was caused by a weak ego and the inability of the child to form a relationship with their parent of the opposite sex (Sontheimer, 2015). In the 1920s, a more clinical approach to the disease was established when Eugen Bleuler coined the

term "schizophrenia," and distinguished between basic and accessory symptoms, now called negative and positive symptoms, respectively (Jablensky, 2010). Even with this knowledge, up until the 1950s, when antipsychotic drugs were developed, patients with schizophrenia were often killed as witches or institutionalized and tied down for the remainder of their lives (Sontheimer, 2015). Around the 1950s, German clinician Schnieder developed nine psychotic manifestations of the disease that were readily used for diagnostic purposes until the second-to-latest version of the Diagnostic and Statistical Manual of Mental Disorders (DSM; Jablensky, 2010). They have since been shown to not be fully predictive of the severity of the disease and the current DSM-V outlies the specific definitions, criteria, and decisions for clinicians to make when diagnosing schizophrenia.

# Symptomology

Although symptoms vary greatly between individuals with schizophrenia, they are typically classified as negative (including loss of motivation, apathy, asocial behavior, loss of emotional response, and inhibited use of language/speech) or positive (including hallucinations and delusions; American Psychiatric Association, 2013; Ross et al., 2010; Uno & Coyle, 2019). For most patients, hallucinations are often auditory wherein they hear voices commanding them to do things or telling them things about themselves (National Institute of Mental Health, 2020). Visual and somatic hallucinations can also be experienced, though are less common. Delusions are firmly held beliefs not based in any real facts; these often include thinking someone, commonly the government, is out to get them and is watching them or using electronics to track them (NIMH, 2020). Lastly are

cognitive symptoms, including impaired working memory, dissociated thought processes, and impaired executive functioning (American Psychiatric Association, 2013). The disease onset is typically in early adulthood (18-25 years old) and, as there are no biomarkers, must be diagnosed through a clinician using the aforementioned DSM-5, wherein there is a spectrum of behavioral manifestations with similar biological causes and mechanisms (American Psychiatric Association, 2013).

# Neurobiological Basis

Schizophrenia generally has many known and well-researched neurobiological causes, including brain dysmorphology, cognitive impairments, and neurochemical abnormalities (Jablensky, 2010). The following will address brain dysmorphology and neurochemical abnormalities.

In the "brain dysmorphology" category, proteins are expressed differently, which can include downregulation or upregulation; these proteins are specifically related to cell growth and maintenance, energy metabolism, and neuronal connections (Saia-Cereda et al., 2015). The corpus callosum, a large bundle of white matter that connects the right and left hemisphere is altered in individuals with schizophrenia. White matter is composed of myelinated axons of neurons, which allow for faster propagation of action potentials along the neuron, thus faster responses to stimuli and generation of movement.

Oligodendrocytes myelinate the neurons in the central nervous system; downregulation of myelin-basic protein and myelin-oligodendrocyte protein, which are the main protein contributors of myelin, is seen in individuals with schizophrenia. This downregulation points to a degenerative process occurring in the corpus callosum in schizophrenia, and

thus decreased communication between the two hemispheres of the brain. The frontal lobe myelination is also decreased, which presents as loss of executive functioning, including inability to plan for future events or consequences, lack of impulse control, and inappropriate social behavior (Sontheimer, 2015).

There are other leading hypotheses in the "neurochemical abnormalities" category including the dopamine hypothesis, the glutamate hypothesis, and the GABA hypothesis, all of which are neurotransmitters in the brain used to transmit chemical signals throughout the brain (So et al., 2018; Uno & Coyle, 2019). Originally, the dopamine hypothesis proposed that D2 receptors changed, causing an increase in dopamine (McCutcheon et al., 2019; Uno & Coyle, 2019). However, recent evidence has shown the receptors themselves are not changed; instead, the increase in dopamine is caused by a greater ability to synthesize presynaptic dopamine and thus increased dopamine release through vesicles (McCutcheon et al., 2019). This increase is related specifically to the acute psychosis, or positive symptoms, in schizophrenia in that dopamine is involved in through the mesolimbic pathway, which is responsible for attaching motivation salience to a stimulus (Uno & Coyle, 2019). Therefore, this increase in dopamine may cause an individual to attach the wrong salience to objects, people, or actions; this may causing them to be thought of as threatening while also inhibiting the ability to distinguish internal stimuli from external stimuli (Uno & Coyle, 2019).

For example, an auditory hallucination may cause someone to think that the government is using their cell phone to track them. In reality, a cell phone is not threatening, but the individual attached the wrong salience to it. They also misattributed

the auditory hallucination as an external stimulus (a voice that was not their own speaking to them), rather than an internal stimulus (a voice their brain "generated"). There is evidence that auditory hallucinations do activate brain structures similar to those that are activated when we process sound, including the anterior cingulate gyrus, the temporal cortex, the thalamus, the hippocampus, and the inferior colliculus (Shergill et al., 2000).

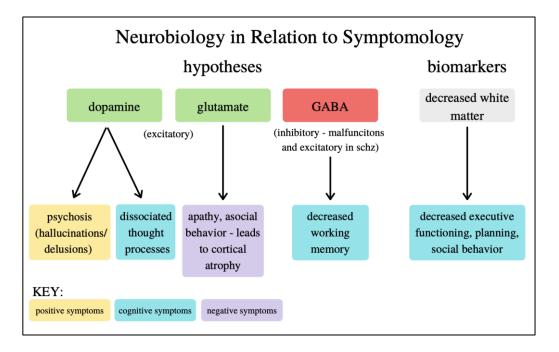
However, the theory of dopamine acting through this mesolimbic pathway has recently been called into question, with recent research suggesting that it is actually the nigrostriatal dopamine pathway, typically thought to involve movement, that is playing a role in schizophrenia (McCutcheon et al., 2019). Although this is recent research, the striatum is also involved in the aforementioned salience signaling and could potentially work in conjunction with the mesolimbic pathway (McCutcheon et al., 2019).

The glutamate hypothesis shows a reduced functionality of NMDA receptors for glutamate, which causes and increase in the synaptic activity of glutamate, especially in the pre-frontal cortex (Moghaddam & Jevitt, 2011). This increase likely causes excitotoxicity, a chain reaction wherein too much glutamate ultimately causes neuronal death (Uno & Coyle, 2019). This may contribute to both the positive and negative symptoms of schizophrenia, but more likely affects negative symptoms that lead to cortical atrophy (Moghaddam & Javitt, 2011; Uno & Coyle, 2019). MRIs of individuals with schizophrenia show region-specific changes in the activity of glutamatergic pathways, specifically in the frontal lobe (Uno & Coyle, 2019).

Lastly, the GABA hypothesis takes into consideration gamma oscillations, which are essentially wave like patterns of brain activity (So et al., 2018). GABA, a typically inhibitory neurotransmitter, becomes an excitatory neurotransmitter in schizophrenia, disrupting the normal excitation-inhibition balance that creates these oscillations. With an upset in this balance, the amplitude of these gamma oscillations is reduced, suggesting reduced functional connectivity between neuro-cortical regions, and thus a decreased working memory.

Figure 1

Neurobiology in Relation to Schizophrenia Symptoms



# **Treatment Options**

With an understanding of the basic biological mechanisms behind schizophrenia, treatments target these mechanisms and can often greatly reduce symptoms of the disease; however, they often cannot treat the underlying deterioration associated with

schizophrenia, such as loss of gray matter as neurons cannot be regenerated.

Antipsychotics that target dopamine receptors are the most common drugs to treat positive symptoms like hallucinations and delusions and can also affect other neurotransmitters such as serotonin, norepinephrine, and histamine (So et al., 2018; Uno & Coyle, 2019). Other antipsychotics may also suppress gamma power, similarly reducing positive symptoms (So et al., 2018). Treatment drugs may also target catecholaminergic systems, enhancing cognitive control through gamma oscillations (So et al., 2018). However, patients often stop taking these drugs and relapse, perhaps due to their adverse side effects, such as weight gain, apathy or sleepiness, and tardive dyskinesia, which is a chronic movement of the jaw or face muscles that often gets worse as patients continue to take the drugs or patients' difficulty with taking the drugs at regular intervals (Saks, 2007; Sontheimer, 2015). Unfortunately, there are no currently effective treatments to treat all aspects of the disease or even to prevent the underlying biological damage.

#### Matthew

Matthew, the narrator of the first story, suffered from schizophrenia and demonstrated many of the positive symptoms. He experienced auditory hallucinations that he believed was an outside "them" telling him to run away or that a different "they" were watching him. He also experienced visual hallucinations in the woods when he saw creatures chasing him and his mother telling him to escape. His delusions were that everyone was following him and trying to hurt him and that the hospital workers were going to harm him. Although not as explicit, Matthew also experienced negative

symptoms such as asocial behavior and apathy, which was described when detailing his past and his time at college.

# **Alzheimer Disease**

# **History**

Before the 1900s, memory loss along with cognitive impairment was often referred to as "senile dementia" and considered normal as individuals aged (Sontheimer, 2015). However, since most people didn't live to be very old, true dementia was rarely seen and earlier cases were attributed to diseases like syphilis. Alois Alzheimer was the first clinician to document a case of Alzheimer Disease (AD) when he encountered a patient with severe memory impairment, psychosis, and aggressive behavior; when the patient died, he completed an autopsy and found extracellular plaque deposits and neural fibrillary bundles (Holstein, 1997; Sontheimer, 2015). These are now characteristic traits of AD. By 1910, Emil Kraepelin, the aforementioned schizophrenia researcher and Alois Alzheimer's mentor, distinguished AD from senile dementia (Holstein, 1997; Sontheimer, 2015). The pathology distinguishing AD from other types of memory loss wasn't fully recognized until around the 1980s when clinician Robert Katzmann examined multiple autopsies and saw characteristic amyloid plaques and tau fibrillary tangles (Sontheimer, 2015).

# Symptomology

Of course, the most prominent symptom of AD is memory loss; however, many other symptoms can occur as the disease progresses and continues to cause neuronal death. AD is typically classified into three stages with increasing symptomology at each

stage (Ishibashi et al., 2020; Sontheimer, 2015). The early stage, or the preclinical stage, typically lasts 2-4 years and includes memory loss of recent and short-term memories, language becoming less fluid, a decline in language comprehension, and mood swings (Shea et al., 2015; Sontheimer, 2015). Although recent research shows that the preclinical stage may last up to 20 years, as biomarkers are present much earlier than the onset of disease symptoms (Ishibashi et al., 2020). The second stage, or mild cognitive impairment, can last from 2-10 years and typically includes more pervasive memory loss, including long term and old memories, nonsensical speech, getting lost easily, loss of inhibition, physical impairments, and Capgra's syndrome, wherein one thinks their family members or friends are imposters (Harwood et al., 1999; Ishibashi et al., 2020; Shea et al., 2015; Sontheimer, 2015). The late stage, dementia, usually only lasts 1-3 years and is characterized by confusion, issues with mobility, and problems swallowing, which is the most common cause of death due to AD (Shea et al., 2014; Sontheimer, 2015).

# Neurobiological Basis

Macroscopically, AD causes overall cortical brain atrophy over time; however, this is not a diagnostic tool as it is not specific to AD (DeTure & Dickson, 2019). The primary microscopic changes that occur specifically in AD are tau neurofibrillary tangles and extracellular amyloid plaques (DeTure & Dickson, 2019; Jiji, 2018; Rentz et al., 2017; Shea et al., 2014). Tau is normally a functioning microtubule-associated protein (MAP), proteins that help anchor microtubules to one another and create the cytoskeleton and thus structure of a neuron (Bear et al., 2016). In AD, tau becomes

hyperphosphorylated and forms insoluble aggregates, filling the intracellular space of the neuron; this prevents tau from binding microtubules to one another, compromising the cytoskeletal structure of the neuron and preventing molecules from being transported down the axon, speeding up neuronal death (Jiji, 2018). Amyloid plaques are found in many neurodegenerative diseases and are composed of misfolded proteins that stick to each other. In AD, these plaques contain an overabundance of beta amyloid; yet, it is still largely unknown if the plaques themselves are causing neurodegeneration. However, current research has also shown that both tau and amyloid contribute to lower cognitive performance, such as inability remembering short phrases or names or difficulty coming up with a desired word, and can act as biomarkers that develop early on in the disease before symptoms are otherwise apparent (Rentz et al., 2017). There is some evidence that plaques and tangles may not actually be causing AD, but rather be a side effect or confound of the disease.

# **Treatment Options**

Similar to most neurodegenerative diseases, there is no cure for AD itself and any treatment options available are primarily relieving symptoms or delaying progression of the disease. Some common drugs used are acetylcholinesterase (AChE) inhibitors, which prolong the activity of the neurotransmitter acetylcholine in the synapse, as AChE itself is also involved in promoting formation of amyloid plaques seen in AD (Lane et al., 2005; Lushchekina & Masson, 2020). Antidepressants or antipsychotics may also be administered, as depression and psychosis are often associated with AD (Caraci et al.,

2020; Thompson et al., 2007). Unfortunately, there are currently no other FDA-approved drugs that are used to treat AD or its symptoms.

#### Rose

Rose, the narrator of the second story, is in the second stage of Alzheimer disease. In the beginning of the story, she is still pretty lucid and remembers her daughter and grandson, but describes moments where she forgets how long it's been since her husband passed, gets confused when her daughter is speaking quickly, putting her book in the microwave, and forgetting to check the mail. In the car when she gets frustrated about not being able to do things on her own anymore, she suddenly thinks that her sister is driving and her brother is in the backseat and she is a teenager again. After the accident, Rose continually declines due to the emotional trauma, thinking that a doctor is her father, not being able to recall words, getting lost, and forgetting the accident all together.

#### **Post-Traumatic Amnesia**

#### History

The term post-traumatic amnesia (PTA) was coined by Sir Charles Symonds in 1937 as the period of amnesia following a concussion or traumatic brain injury (Marshman et al., 2013; Steel et al., 2015; Symonds, 1940). Early terms for PTA include "post-traumatic confusional state," "post-traumatic dementia," "amnestic confabulatory state," and "Korsakow psychosis," though PTA is now the generally accepted term (Steel et al., 2015). Recovery from a severe TBI is often marked in three stages: coma, PTA, which is a variable, fluctuating stage rather than a defined, linear sequence of events, and finally a gradual return to normal cognitive functioning and daily activities (Marshman et

al., 2013; Steel et al., 2015). Symonds also coined the term "islands of memory," the idea that the memories lost or maintained are often not whole, but rather small islands, further supporting the idea of PTA as a fluctuating syndrome (Steel et al., 2015).

# Symptomology

In its most basic form, PTA is the period of time following a traumatic brain injury wherein patients show altered consciousness, including confusion, memory loss, and cognitive and behavioral disturbances (Hicks et al., 2017; Marshman et al., 2013; Prowe, 2018; Steel et al., 2015). From here, the syndrome varies between patients and may last anywhere from a few hours to months (Prowe, 2018; Steel et al., 2015). Most patients experience anterograde amnesia, or the inability to create or maintain new memories (Marshman et al., 2013). However, some patients may also experience retrograde amnesia, or the inability to recall previous memories (Marshman et al., 2013). Which memories, how much memory, and whether or not those will come back is largely situational both for retrograde and anterograde amnesia (Marshman et al., 2013; Steel et al., 2015).

Confusion and agitation are also common symptoms of PTA, with deficits occurring with both temporal and spatial perception (Marshman et al., 2013; Prowe, 2018). This confusion may also affect speech, making it rambling and meaningless and individuals may confabulate information (Marshman et al., 2013; Prowe, 2018; Steel et al., 2015). Agitation is characterized by impulsiveness, impaired insight, and verbal and physical aggression (Hicks et al., 2017; Marshman et al., 2013; Prowe, 2018). There is evidence that this confusion can lead to psychosis as the symptoms mimic acute

traumatic psychosis, though it is relatively uncommon in those recovering from TBIs (Gurin & Arciniegas, 2019; Hicks et al., 2017; Marshman et al., 2013; McAllister & Ferrell, 2002; Prowe 2018). Attention and executive functioning are also impaired in those with PTA, impacting vigilance, orienting functions, and executive functions (Marshman et al., 2013). These deficits will likely cause an inability to plan ahead, a reversion to child-like behavior, and decreased reaction times and speed of processing information (Marshman et al., 2013; Prowe, 2018).

# Neurobiological Basis

The underlying neurobiology and pathophysiology of PTA still remain largely unclear, as TBIs affect different parts of the brain, and thus damage may look different in each individual with PTA (Steel et al., 2015). However, the primary symptom, anterograde amnesia, which involves episodic and semantic memories, may have to do with damage in the Papez circuit: hippocampus to mammillary bodies to thalamus to limbic system to frontal lobe (Marshman et al., 2013). The hippocampus is responsible for long term memory consolidation and then sends projections to the thalamus, involved in regulation, the frontal lobe, involved in planning and executive functioning, and the limbic system, involved in emotions and memory processing, all of which relate to the primary symptoms of PTA.

The default mode network, including some of the aforementioned structures such as the hippocampus, is the functional connection of structures involved in memory processing (De Simoni et al., 2016). Research shows that patients with PTA show abnormal functional connectivity between the parahippocampal gyrus and cingulate

cortex, involved in associative memory and the speed of information processing (De Simoni et al. 2016). This is likely due to widespread axonal damage caused by the TBI in these areas (De Simoni et al., 2016). Specifically, this lack of connection between the default mode network and the temporal lobe is likely where memory deficits occur (De Simoni et al., 2016).

Attention deficits and vigilance largely have to do with general cortical arousal, with projections coming from the reticular formation in the brainstem, which is dedicated to arousal and consciousness (Marshman et al., 2013). Orienting functions involve posterior, visuospatial cortical areas, while executive functions involve anterior, frontal cortical areas (Marshman et al., 2013).

### **Treatment Options**

Recovery varies on a case-by-case basis, though there are no treatments available to directly treat PTA besides time. However, there are different rehabilitation options that help individuals with PTA resume daily living activities. A recent study developed a protocol to improve communication between patient and staff members and reducing maladaptive behaviors and negative emotional associations (Hart et al., 2020). Environmental modifications may also be helpful for those suffering from PTA through reduction of noise or overstimulation along with orienting cues to help them readjust to their world (Hicks et al., 2017). Occupational therapy may also broadly help reacquaintance to the environment and improving information processing (Nott et al., 2008).

Another treatment option includes pharmacological intervention with the most common drugs prescribed being antidepressants, carbamazepine (typically an anticonvulsant), amantadine (to treat dyskinesia, which is abnormal movement), betablockers (block epinephrine and norepinephrine to reduce body's natural fight or flight response), benzodiazepines (used to treat anxiety, depression, insomnia, seizures and more), and neuroleptics (to treat psychosis; Hicks et al., 2017). Similar to the other neurological diseases mentioned, all of these drugs treat symptoms of PTA; however, contrastingly to the other diseases, PTA is primarily a set of symptoms, with TBI being the underlying injury.

#### Elise

Elise, the narrator of the third story and Rose's daughter, suffers from post-traumatic amnesia after the brain injury she got in the accident. Of course, the main symptom she exhibits is memory loss, as she does not remember her husband or son or the accident. She also exhibits an inability to create new memories, as she continually forgets what happened and has to be reminded of her name. She is irritable, has frequent mood swings, is verbally violent, and becomes emotionally attached to healthcare workers. Elise recovers quite quickly from her TBI and is able to create new memories, though still doesn't remember some specific details from her past.

### Significance

The purpose of this collection of short stories is to increase empathy in the reader for individuals with cognitive disabilities, as they are often marginalized for their occasional loss of contact with reality. This can make it increasingly difficult for those

without neurological illnesses to know how disorienting this experience can be for those with cognitive disabilities, as well as how to communicate respectfully and effectively with them.

Research in the field of cognitive literary studies has shown that fiction writing creates empathy in the reader through tools such as defamiliarization and gapping, while also "uniquely engag[ing] the psychological processes needed to gain access to characters' subjective experiences" (Kidd & Castano, 2013; Oatley, 2006). This can help the reader not only understand the characters and the narrative better, but also gain deeper insight into themselves as the emotion has been defamiliarized. Or as Shelley wrote, defamiliarization "purg[es] from our inward sight the film of familiarity which obscures us from the wonder of our being" (Miall & Kuiken, 1994). Essentially, defamiliarization takes something that would otherwise be familiar to the reader and the writer manipulates it so it takes on a whole new meaning of "wonder" that we would not otherwise be able to access through our "film of familiarity."

In order to effectively engage the reader in the literary text, the author must first use foregrounding, which draws attention to lexical, syntactical, phonetic, and semantic parallelisms and deviances in the text (Jakobson, 1960; Miall & Kuiken, 1994). These deviations include anything that violates conventions of communication, art, or society (Bálint et al., 2016), for example, changing the rhyme scheme after the fifth stanza, or misspelling something on purpose, or even a parody on a well-known plot. Only after this deviance is brought to the attention of the reader can defamiliarization occur by a sort of transformation of the language of the foregrounded text, or the way the characters act in a

narrative (Miall & Kuiken, 1994; Oatley, 2006). Because the deviance has been brought to the reader's attention, they spend more time thinking about what it may mean, and thus, have a "defamiliarized" concept of the deviance (Bálint et al., 2016). This refreshment of words, ideas, and concepts allows them to then be *refamiliarized* in one's mind, and thus, the reader ascribes their own emotional meaning to the text, creating a greater sense of investment and thus empathy (Miall & Kuiken, 1994; Schlovsky, 2015). Another field, cognitive disabilities studies, talks about aesthetic defamiliarization, when authors with neurological or mental illness are able to create empathy in the reader through writing about their experiences, similar to what this thesis was trying to achieve (Savarese & Zunshine, 2014).

This effect is also achieved by gapping, wherein the author does not provide all the details of plot or character, forcing the reader to fill in those "gaps" themselves and, again, make them more emotionally invested in the piece (Auyoung, 2014; Hogan, 2011; Oatley, 2006). By creating a dissonance between what the character feels, or the substance, versus their actions, or their shadow, "the main responsibility for what goes on in the text [shifts to] the imaginative mind of the audience or reader" (Oatley, 2006). This literary engagement with the text allows the reader to take on the goals of the character, and essentially "run that simulation" in our mind, creating empathy for the character (Oatley, 2006). Through specific writing techniques solely used in fiction writing, along with the unique engagement the reader may experience, fiction writing increases empathy for the characters presented in the text.

These tools were used throughout the first three short stories, as you may have felt confused at times about the timeline of the plot or the characters' actions. In Matthew's story, there was a lot of gapping used, where Matthew's actions didn't necessarily match what he was saying and there was a lot of confusion about where Matthew was, if the creatures he saw were real or what the order of events was. This was intentional, as that is exactly the way that Matthew felt about the situation: confused and helpless. Defamiliarization was also used in Matthew's story, when things were in Spanish. You were used to simply reading in English, so suddenly coming across a different language forced you to think about the meaning behind the words and what was happening in the story for longer than you normally would have. Rose's story also used gapping, as she imagined she was with her sister and then she suddenly arrived at the hospital waiting room. The defamiliarizing occurred when Rose thought the doctor was her father. Of course, you may have guessed quite quickly that it was not actually her father, but hearing her exclaim "dad" may have disoriented you for a second about what Rose was actually thinking. Similar to the previous two, Elise's story also jumped timelines, as her days and memories were quite hazy for a good amount of time. There was also gapping in that you did not necessarily know how Elise felt about her husband until the end of the piece. There was little defamiliarization in this piece, as the storyline was beginning to wrap up and the plot was coming together. As much as possible, Jonathan's story was meant to be straightforward and revealing of how much of the plot you had perhaps missed in reading the first three stories. Again, this was meant to show you just how difficult living life with one of these neurological illnesses can be.

I, personally, have not suffered from any of these illnesses and want to acknowledge that I am speaking from a place of research, not experience. However, I felt it was important to bring light to these illnesses. As those without cognitive disabilities, we often engage in "mindblindness," wherein we perceive the other only as we can understand through our experiences, which often leads to prescribing hurtful or false meaning to their experiences (Carson & Kittay, 2009). It's important to understand our own ignorance when thinking about cognitive disabilities. I wanted to question this lack of understanding and communication in my thesis, and perhaps lessen the relational and communicative gap between those with and without cognitive disabilities through these fictional stories.

Often, neurological illnesses cause people to lose contact with either reality, their memories, or both. While those with illnesses may experience this more acutely, I would argue that all of our realties are fragmented. Our entire experience in the world is based off our brain processing information through our senses. However, the brain is extremely complex in its connections and firing, meaning there is a definite possibility that it is unreliable sometimes. And you may never know if you are experiencing the world in a drastically different way than someone else, because you will never be able to actually experience it any other way. This is why fiction is so vital to understanding those that are different than us.

Our memories fail all of us in this way. We confabulate memories over time and we create memories based on pictures we've seen or stories our parents told us, yet we hold onto to those memories as if they actually happened. Contrastingly, we forget things

that actually happened. When you think back over your life, you probably only remember major events or flashes of images here and there, but you likely don't know what you had for dinner last month or even last week.

Overall, I wanted to emphasize that the stigmatization of mental illnesses and cognitive disabilities stems from a lack of understanding of those who lose contact with reality or their memories and a lack of communication between us all. Recognizing that even those without neurological illnesses confabulate memories or might not be experiencing reality the exact same as someone else, may help us understand that we are not so different. After all, we are all unreliable narrators of our own stories.

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