HOW TO DISAPPEAR



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OS48

Writers Note: In "Funes the Memorious" by Jorge Luis Borges, a man is kicked by a horse and loses consciousness. When he wakes up he can remember everything, trees becoming an epicenter containing millions of atoms, fallen leaves, newly green apples, and chipped pieces of bark. In 1889, he dies of lung congestion and still remembers everything like sucking on a lozenge that never disappears. I am interested in how through physically going off the grid, camouflaging, or being lost in memory a person can disappear. Is it possible? When does someone disappear? Can something disappear if it never existed?

I. SAND LAPS UP WATER HUNGRILY

I half-think and half-don't believe that we're all born to trace paths in sand and stare as clear water fills in the trenches. When I was six years old my babysitter Lydia, my sister,¹ my father, and I went on a vacation that I barely remember. The hotel room had two lamps on two bedside tables made of cherry wood. It also housed the kind of the smell that isn't pleasant or unpleasant but rather so muddled by so many people that it fades far into the distance.

As quickly as we arrived in the hotel room, I ended up on the beach. I can't remember

¹I called my sister Amelia last week to ask if she remembered the beach too. She didn't really. how. Maybe it didn't happen. I remember that my toes pressed bruises into the sand in the same way that avocados must feel when I press my thumbs into their stomachs. I kept walking.

The only light was from the moon and it made everyone's skin look almost translucent. We didn't want to disturb anyone. I politely pressed my lips together.

Lydia had brought the kind of plastic sandcastle set that helps you build towers upon towers for the most elaborate of kings and so we carefully began to fill the neon molds with dense sand. I was given a shovel and began to dig. It was very primal. The hole grew and crumbs of sand fell back in for every scoop I ate. I gathered bucketfuls of water from the ocean and poured them into the moat but the sand lapped it up so hungrily. My eyes grew wide like saucers.

I gradually carved deeper into the sand in a wide ring. The neighborhood I've grown up in is shaped like the head of a horse and loops like a race car track. It looked like that. I let wet sand eat up my skirt and poured thick water into many cups, pushing hair out of my eyes with dirty palms. I don't remember how many sips of water I poured down into that castle or how many made-up alligators were fed. A pressing urgency overcame me and I filled tracks with pure necessity. I wonder if Sisyphus grew to enjoy his task too or if he is still a little bit terrified that the boulder will swallow him alive. A mix of both seemed more true as I kept moving the sand and filling in the horse tracks.

I stopped to rest a moment but when I really gawked at the water and the bubbles made when the sand burped and grew too full I couldn't see it anymore. It disappeared like sand pushing itself through the fat fingers of a six year old.

I think I disappeared that night and I think the sand began to ache and chewed until it developed cavities and all the water in the world disappeared too. No one remembers the same thing and I haven't talked to Lydia in a long time. I think she has a daughter now. I don't know if it's possible to disappear for sure. Can you really disappear if people still remember you? When do you disappear? Maybe it's something like a God that I pray to but don't believe in.

II. IN LEARNING TO APPEAR, I'VE DISAPPEARED COMPLETELY (A how-to guide)

0. FOREWARNING: Before beginning, users must be able to create a distinction between reality and non-reality, and reality and appearance.

Children below age five cannot really conceptualize the existence of an invisible being. While emotions and germs are of the few "invisible" things they can really grasp, the idea that they can have a real consequence is much more difficult. How can something still exist if it's out of sight? Well, then the only possibility is that if I can't see it, it's not there. It's awfully *cogito ergo sum* in a way...

Visibility and reality are undoubtedly entwined concepts and childrens "understanding that some entities are impossible to see develops between the ages of 3 and 7."² I am real and yet cleverly hidden. I ran into a tree and found blood on my shoulder blade so maybe I exist. A little girl plays hide and seek so she covers her face with her fingers and curls up like a roly-poly to disappear so maybe I don't.

² Woolley, Jacqueline D., and Melissa A. McInnis. "The Development of Children's Concepts of Invisibility." Cognitive Development, vol. 34, 2015, pp. 63–75. PubMed Central, <u>https://doi.org/10.1016/j.cogdev.2014.12.009</u>.

Figure 1

		Reality Status		
		Real	Not Real	
Visibility	Visible	Orange juice	SpongeBob	
		Teacher	Mermaid	
		Bike	Magic wand	
	Invisible	Germs	Ghost	
		Air	Imaginary friend	
		Song	Magic spell	

Note: From Woolley, Jacqueline D., and Melissa A. McInnis. "The Development of Children's Concepts of Invisibility." *Cognitive Development*, vol. 34, 2015, pp. 63–75. *PubMed Central*, https://doi.org/10.1016/j.cogdev.2014.12.009.

I pressed my nose into the middle of a smudged mirror when I was five and grew upset because whatever was tickling it wasn't there. The moment became simultaneously strained and epiphanous as the glass became foggy. I learned that pollen could make my eyes red and swollen and make my nostrils into twin garbage pipes like the ones near the Kensico Dam. More than that I squinted and saw that pollen is stronger than me and invisible and yet I can't blow my nose any more gingerly. At the same time my friend Nika had a tea party with Remmy, Sally, and Dr. Penny. The very next day they woke up and realized all that was left was the Forget-Me-Not tea leaves piled high in the bottom of the kettle.

1. STEP ONE: Learn from the world around you. Chameleons aren't always green.

Zebra stripes, unexplained deaths, Ghillie Suits, missing people on the back of milk cartons, object permanence (or lack thereof), and invisible ink. Biting easily ingestible pea-sized pieces of your own index finger.³ I forget what my mother's face looks like slowly and it's a kind of disappearance that bent pinkies learn to dismiss. Some days I think about my sister Amelia and wonder if she has ever thought that she disappeared at sea like Amelia Earhart.

Animal camouflage⁴ (sometimes referred to as cryptic coloration) is used to disguise organisms so they avoid being seen by prey or preyed upon. These organisms rely on external factors like the season or temperature to dictate how their different physical characteristics adapt. A bear with slow growing fur camouflages differently than an amphibian that sheds its skin. By changing pigment and physical structure, camouflage can be very effective. Some animals engage in more unique forms of disguise such as aposematism in which coloration draws attention to identity as a warning. Instead of blending into grass, a snake is bright and bold in asserting its poisonous fangs. A viper wouldn't attack a startlingly red frog. The military does that too with Razzle-Dazzle camouflage⁵ in both World Wars. No matter how many great

 $^{{}^{3}}A$ "37-year-old man was hospitalized following a psychotic episode in which he cooked and ate his index finger. The described event was engrafted coupon a chronically deformed ego with poor childhood adjustment..."

Mintz, Ira L. "AUTOCANNIBALISM : A CASE STUDY." *American Journal of Psychiatry*, vol. 120, no. 10, Apr. 1964, pp. 1017–1017. *DOI.org (Crossref)*, https://doi.org/10.1176/ajp.120.10.1017.

⁴*Camouflage*. https://education.nationalgeographic.org/resource/camouflage. Accessed 23 Apr. 2023.

⁵Scott-Samuel, Nicholas E., et al. "Dazzle Camouflage Affects Speed Perception." *PLOS ONE*, vol. 6, no. 6, June 2011, p. e20233. *PLoS Journals*, <u>https://doi.org/10.1371/journal.pone.0020233</u>.

anti-war books are written, we fight and die and we disappear and sometimes being invisible is the

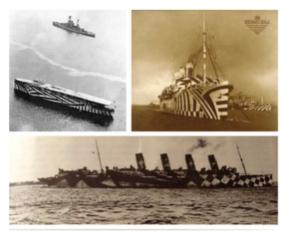
best thing you can do. That's what the animal kingdom seems to whisper in the soldiers ears.

We'll have to learn better next time, but then again eagles eat arctic foxes all the time. So it goes.

2. STEP TWO: Sight is tricky.

In Razzle-Dazzle camouflage, the idea isn't that warships aren't seen, but rather that by using "high contrast geometric patterns: so-called "dazzle camouflage" they are seen in a distorted fashion. The patterning "disrupts[s] the perception of their range, heading, size, shape and speed."⁵ They are seen and yet unperceivable.

Figure 2



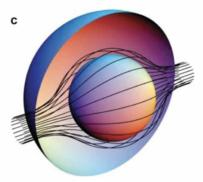
Note: From Scott-Samuel, Nicholas E., et al. "Dazzle
Camouflage Affects Speed Perception." *PLOS ONE*, vol.
6, no. 6, June 2011, p. e20233. *PLoS Journals*, https://doi.org/10.1371/journal.pone.0020233. Sometimes I think that if I put on a costume covered in stripes and zig-zags I could sit on the wet soil and throw a line out until I catch a fat catfish to grill for dinner. When I gut the fish I would find a little golden ring with a sharp ruby set in the middle and laugh a full bellied laugh. After smoking the fat with shallots I would swallow bite by bite and the ruby ring would disappear again.

Scientists are fascinated by invisibility too–like children in a way. One of the more prevalent theories as to how to execute invisibility involves transformation electrodynamics, a type of transformation optics that describes a "material as the geometrical space where a desired optical function occurs, thereby bridging the barrier between 'material' and 'function.'"⁶ In other words, whereas usually material dictates function, function dictates material. By changing electrodynamic factors the function shifts and with it the material is shifted and can possibly seem "invisible."

The trouble is that anything in reality would be an approximation. Possible methods include using Maxwell's equations, which set parameters for light in hopes of creating a spherical space where "all of the light rays impinging on the shell will be guided around the central 'hole' as if these rays were propagating in an empty space."⁶ So many factors play a part in the plausibility of this type of cloaking, not the least of which include different electromagnetic fields and refraction indexes. For now it's mostly a hypothetical. I'll turn my dog invisible next month.

⁶ Zhang, Baile. "Electrodynamics of Transformation-Based Invisibility Cloaking." *Light: Science & Applications*, vol. 1, no. 10, Oct. 2012, pp. e32–e32. *www.nature.com*, https://doi.org/10.1038/lsa.2012.32.

Figure 3



The path of the same ray (blue line) and a vector **x** in the original Cartesian space in **a**, and the space after transformation in **b**. (**c**) All rays impinging on the spherical invisibility cloak go around the central region as if the space was empty. Figure reprinted with permission: **a**, **b**, Ref. 28, © 2006 OSA; **c**, Ref. 2, © 2006 AAAS.

Note: From Zhang, Baile. "Electrodynamics of Transformation-Based Invisibility Cloaking." *Light: Science & Applications*, vol. 1, no. 10, Oct. 2012, pp. e32–e32. *www.nature.com*, https://doi.org/10.1038/lsa.2012.32.

3. STEP THREE: Being seen is good-bad.

We made it so I can go missing so easily as long as papers are burned and soiled. Due to insufficient authoritative structures set in place to help undocumented migrants as well as the phenomenon of enforced disappearance,⁷ migrants and asylum seekers are especially vulnerable to going missing. Disappearing in the eyes of the government. If you are not documented then there's a lack of distinction between missing and pre-missing–you already cease to exist in the

⁷*The phenomenon in which authorities work in conjunction with or secretly to detain or somehow deprive people of their liberties.*

Citroni, Gabriella. "The First Attempts in Mexico andCentral America to Address the Phenomenon of Missing and Disappeared Migrants." *International Review of the Red Cross*, vol. 99, no. 905, Aug. 2017, pp. 735–57. *EBSCOhost*, <u>https://doi.org/10.1017/S1816383118000346</u>. pre-missing state. If you are in that state already it makes you solidly gone in the post-missing one. How can you miss something you never *really* saw? I don't think you can or at least it's a different model and flavor. Migration patterns only indicate that more people will "disappear" in the future as no new legal structures can adequately create solutions to the problem yet.

Gabriella Citroni, a professor of Human Rights Law explains that "Emerging trends that aim at putting in place higher barriers to entry to deter migrants, and which criminalize and scapegoat the latter, are only going to force thousands of people into using more dangerous channels to travel, thus exposing their lives to greater risk."⁷

Rather than somehow miraculously "fix" the issue, the goal should be more akin to changing social structures that perpetuate the spaces in which undocumented people feel unsafe and are forced down dangerous paths. At once being seen and being invisible are both bad and yet the exact goal.

4. STEP FOUR: Practice.

I figure that wearing all camouflage out might lend a menacing feeling to my appearance. I'll have to learn a different way to disappear.

At the airport, a man who mumbled behind a mask and stood behind scratchy glass shuffled things about my suitcase. He asked if anything fragile or sharp was in it and truthfully I knew that my mug was fragile and my Swiss army knife was sharp. I didn't really know how to break it to him so I pretended I couldn't hear and put on a megawatt-left-lopsided smile and he rummaged. He found both, made eye contact, and even pulled the knife part out a bit as if to ensure I knew the absurdity of my hopes of bringing it on Alaska Airlines flight 39 out of JFK. The real upset is that SFO didn't even raise an eyebrow last week. I'll have to keep working on it.

5. STEP FIVE: Remember to forget.

After all is said and done I am going to need to disappear from whatever collective consciousness I've been born into. That's much harder to accomplish than I would've hoped. Maybe forgetting can be easy and difficult.

Different types of memory—implicit, remote, explicit, and semantic–degrade differently with illnesses affecting memory such as different dementias. Scientists understand this to occur because different areas of the brain store separate types of memories so damage to one section doesn't necessarily damage another. Subconscious implicit memories such as procedural memory (the ability to brush your teeth or comb your hair, for example) usually are not as rapidly affected by dementia. However, explicit or conscious memory (something like your cousin's maiden name) becomes severely impaired much more quickly.⁸ Neurons are damaged starting in the hippocampus, dementia continues and remembering how to do dishes stays more than remembering your granddaughter sometimes. It's easy to disappear like that. It's also not very fair.

In *Bojack Horseman*, an oddly existential TV program about a talking horse, the last thing Bojack's mom says to him is "I see you." More accurately, it's "ICU" like the sign. He spends the whole episode monologuing about how his whole life he has just want to be seen and

⁸Morris, Robin G., and Michael D. Kopelman. "The Memory Deficits in Alzheimer-Type Dementia: A Review." *The Quarterly Journal of Experimental Psychology Section A*, vol. 38, no. 4, Nov. 1986, pp. 575–602. *DOI.org (Crossref)*, <u>https://doi.org/10.1080/14640748608401615</u>.

this realization parallels his estranged mothers same desire. His mother had dementia and her final wish was for an open casket funeral and yet Bojack did not deliver. These two people (horses) spent their whole lives wanting to be seen by one another. Like passing sailboats. How strange that you can be invisible for so long and then in a twist of cruel irony be half-seen before a final blink of the eye? How much stranger is it that a mother and a son who held so much resentment for each other were given the chance to forget one another with dementia or by closing a casket. Despite that it wasn't any kind of relief. No one was exonerated or given absolution.

Still though, they just never got to see each other. They just disappeared and left behind a closed casket and a free churro.

I've always said that if I reach a point where I can't wipe my own shit I'd die. I'm not afraid of it. On the other hand, if I was buried or even cremated it would certainly feel heavy and strange to know that my cold hands still held my first bike ride and my teeth still grind when too close together. If I got a big enough spoon I'd like to scrape out my bone marrow and return to the ocean just three pounds lighter.⁹

Geoffrey Sonnabed, a professor of neurophysiology, believed that experience is the only "real" thing–all that exists is "experience and its decay." In his mind, even without dementia or mental disturbance, memory is constantly disappearing. In September of 1936 Sonnabed created

⁹*The weight of memory is 3 lbs according to Quora scientists*

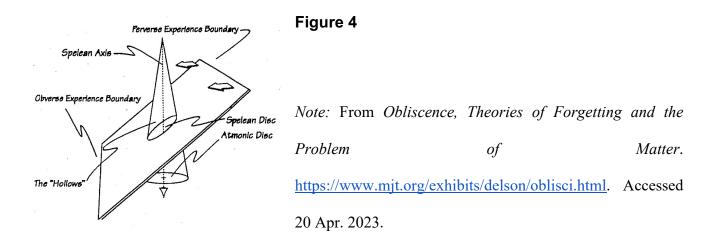
the Model of Obliscence in which a cone (forgetting) and a plane (experience) intersect. The cone

can be further dissected as the Atomic Disk (immediate individual consciousness) and the hollow

[&]quot;How Much Does a Memory Weigh?" Quora, <u>https://www.quora.com/How-much-does-a-memory-weigh</u>. Accessed 25 Apr. 2023.

interior as well as the Spelean Axis which passes through the cone and acts as the line of sight of the individual. As the intersection between cone and disk changes, participants go from being involved in an experience to remembering it to forgetting it.

Sonnabed also said that "We, amnesiacs all, condemned to live in an eternally fleeting present, have created the most elaborate of human constructions, memory, to buffer ourselves against the intolerable knowledge of the irreversible passage of time and the irretrievability of its moments and events."¹⁰ That sums up his thinking well. With this logic we disappear as soon as we die. Death and legacy becomes less of an elephant and instead the room shrinks into a single moment that peskily runs and trips.



Some people believe that dying is just like hitting your head really hard and fainting except you never wake up again. I've never fainted before. Other people say it's like a many

¹⁰ Obliscence, Theories of Forgetting and the Problem of Matter. <u>https://www.mjt.org/exhibits/delson/oblisci.html</u>. Accessed 20 Apr. 2023.

tiered chocolate cake. If we know we will eat and eat until it-our life or the cake-disappears, why chew so quickly and eat so boisterously?¹¹ Well, "[f]orgetting, [Sonnabed] believed, not

remembering is the inevitable outcome of all experience."¹⁰ I've grown to expect to disappear more often than I inhale. A part of me is constantly turning invisible and yet spinning pirouettes on the Spelean Axis in hopes of being seen.

III. THE SANDBAR WAS SINKING YESTERDAY or "IF YOU'RE GOING TO RUN OUT OF CAKE TO EAT, WHAT'S THE PURPOSE OF EATING CAKE"¹¹ (If we all disappear I won't mourn yet)

This morning the sandbar that pokes its nose out of Napa's quiet green water was taking in lungfuls of breaths with both nostrils out. *I wish I could sit on the nose bridge and let the sand and mud nudge my elbows until the water pools around my fingertips*, I remember thinking.

By midday only one nostril was left and I noticed my own right nostril was so congested I needed lemon-mint cough drops to clear out my sinuses. The freckle under the sandbars septum was gone. The water level was rising. I think that where Sisyphus grew scared, Tantalus¹² in all his desperation would have let the river devour him whole and let out a weighty hiccup at the end.

In one way or another I think the sand eats the water and the water, not in retaliation but out of a full-cheeked acceptance, drinks the sand. Slowly the mud takes shallower breaths and the sandbar disappears under a profound carpet of water. A duckling bore witness but wasn't

¹²*I* grew up reading a big yellow book about Greek Mythology every night and every night went to sleep thinking Tantalus must just want to be swallowed whole. afraid; he saw a kind of disappearance but with newly born legs, he swam to his mother fearlessly.

If my hippocampus isn't kicked by a horse, I think I'm okay with letting myself be swallowed and rebirthed every millisecond. If I disappear tomorrow I will reappear again. If I reappear again, I'll disappear yesterday. So says the sandbar and the tides and my mother.

¹¹"When We Die, Do We Just Disappear?" *Quora*, <u>https://www.quora.com/When-we-die-do-we-just-disappear</u>. Accessed 20 Apr. 2023.

Work Cited

Borges, Jorge Luis. "Funes the Memorious." Ficciones, Editorial Sur, 1942.

- *Camouflage*. https://education.nationalgeographic.org/resource/camouflage. Accessed 23 Apr. 2023.
- Citroni, Gabriella. "The First Attempts in Mexico and Central America to Address the Phenomenon of Missing and Disappeared Migrants." *International Review of the Red Cross*, vol. 99, no. 905, Aug. 2017, pp. 735–57. *EBSCOhost*, https://doi.org/10.1017/S1816383118000346.
- Fleury, Romain, and Andrea Alu. "Cloaking and Invisibility: A Review." Progress In Electromagnetics Research, vol. 147, Apr. 2014, pp. 171–203. go.gale.com, https://go.gale.com/ps/i.do?p=AONE&sw=w&issn=10704698&v=2.1&it=r&id=GALE %7CA554040787&sid=googleScholar&linkaccess=abs.
- "How Much Does a Memory Weigh?" *Quora*, https://www.quora.com/How-much-does-amemory-weigh. Accessed 25 Apr. 2023.
- Mintz, Ira L. "AUTOCANNIBALISM : A CASE STUDY." American Journal of Psychiatry, vol. 120, no. 10, Apr. 1964, pp. 1017–1017. DOI.org (Crossref), https://doi.org/10.1176/ajp.120.10.1017.
- Morris, Robin G., and Michael D. Kopelman. "The Memory Deficits in Alzheimer-Type Dementia: A Review." *The Quarterly Journal of Experimental Psychology Section A*, vol. 38, no. 4, Nov. 1986, pp. 575–602. *DOI.org (Crossref)*, https://doi.org/10.1080/14640748608401615.
- Obliscence, Theories of Forgetting and the Problem of Matter. https://www.mjt.org/exhibits/delson/oblisci.html. Accessed 20 Apr. 2023.

- Quiroga, Rodrigo Quian. "In Retrospect: Funes the Memorious." *Nature*, vol. 463, no. 7281, Feb. 2010, pp. 611–611. *EBSCOhost*, <u>https://doi.org/10.1038/463611a</u>.
- Scott-Samuel, Nicholas E., et al. "Dazzle Camouflage Affects Speed Perception." PLOS ONE, vol. 6, no. 6, June 2011, p. e20233. PLoS Journals, https://doi.org/10.1371/journal.pone.0020233.
- Swami, Viren, and Adrian Furnham. "Examining Conspiracist Beliefs About the Disappearance of Amelia Earhart." *Journal of General Psychology*, vol. 139, no. 4, Oct. 2012, pp. 244–59. *EBSCOhost*, https://doi.org/10.1080/00221309.2012.697932.
- "When We Die, Do We Just Disappear?" *Quora*, https://www.quora.com/When-we-die-dowe-just-disappear. Accessed 20 Apr. 2023.
- Woolley, Jacqueline D., and Melissa A. McInnis. "The Development of Children's Concepts of Invisibility." *Cognitive Development*, vol. 34, 2015, pp. 63–75. *PubMed Central*, https://doi.org/10.1016/j.cogdev.2014.12.009.
- Zhang, Baile. "Electrodynamics of Transformation-Based Invisibility Cloaking." Light: Science & Applications, vol. 1, no. 10, Oct. 2012, pp. e32–e32. www.nature.com, https://doi.org/10.1038/lsa.2012.32.