# HOW WILL WE REMEMBER REMEMBER

MAY 2021

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## PANDEMIC?

THE SCIENCE OF HOW OUR MEMORIES FORM— AND HOW THEY SHAPE OUR FUTURE

BY MELISSA FAY GREENE

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the evening of Wednesday, March 11, 2020, when I was compelled to cancel the Atlanta-to-Denver plane tickets my husband and I had purchased for the next day, for a long visit with our oldest son, daughter-in-law, and small grandson. I was all packed.

For the first half of the week, I'd tried to configure the increasingly ominous COVID-19 news in ways that wouldn't keep me separated from that curly-haired 3-year-old boy. Several of our adult kids had attempted to pierce my denial, calling and texting to say, "Mom, it doesn't feel safe." Wednesday night, when I saw the Denver family ringing me via FaceTime, my heart dropped. Upstairs, weeping, I unpacked the picture books and little wooden toys.

My husband, meanwhile, said that everyone was overreacting, even our son who works at the CDC. But that same night the NBA suspended its season. *Oh*, my husband thought, *this must be serious!* At that moment, his plague year began.

In the weeks that followed, as friends and neighbors recounted similar stories of when normal life stopped for them, I began to wonder about the tales we would someday tell of the pandemic. For the rest of my life, would my story begin with the cancellation of two Delta tickets for Flight 1355, ATL-DEN, scheduled for March 12, 2020? Would my husband eternally narrate the fact that, on March 11, 2020, the National Basketball Association suspended the 2019–20 season after Rudy Gobert, Utah Jazz center, tested positive for the coronavirus? And—bigger picture—what would we as a nation remember?

The pandemic has not been a single, traumatic "flashbulb" event like the assassination of John F. Kennedy, the fiery disintegration of the space shuttle Challenger, or 9/11. Instead, it's a life period in which everybody's memories will be embedded, more like the Great Depression or World War II, or My High-School Years or When I Was Married to Barbara. Starting in March 2020, hundreds of millions of Americans began forming their own impressions of it. As psychologists and anthropologists who study memory will tell you, we tend to lay out our anecdotes almost like short stories or screenplays to give our lives meaning; our plots (do they have silver linings? hopeful endings?) can reveal something about how we handle setbacks.

We're already shaping our future pandemic narratives—the stories we will tell as individuals, as communities, as societies, and

as nations about this epoch. The process of crafting these stories will help determine our resilience and well-being. How we tell our stories can transform how we move forward from hard times.



"There were so many unknowns at the beginning of the pandemic," Alex Enurah, an internal-medicine-trained hospitalist at the Medical Center of Aurora, in Colorado, told me when we spoke via Zoom recently. He had a dark beard of rich gloss and density, and maintained an expression of attentive listening and kind concern. "First, will it really cross the seas to the U.S.? How hard will it hit us? Who's going to get it?" As the virus ravaged Spain and Italy, the questions built, along with the foreboding sense "that something big was coming, with little time to prepare."

Born in 1986 in Moscow, the son of a Nigerian father and a Russian mother who met at university while completing doctorates in mathematics, Alex grew up in Baltimore. His wife, Lynn VanderWielen, a tall white woman from Wisconsin farm country, is an expert in public-health-program evaluation. Their three-bedroom brick ranch sits in the sort of landscaped Denver neighborhood whose trees look scrubby under the enormous skies of the Great Plains. Medicine isn't an easy path for a Black man. "When Alex enters a room, his patients sometimes think he's come to pick up their food tray," Lynn told me. "He says that's an important job, too, just not something a physician does. Black families are always happy to see him, though."

When his hospital asked for volunteers to see COVID-19 patients, Alex stepped up. "We constantly read updates and revised our practices to try to keep people safe," he said. "It was scary but also exciting, a rare chance to practice medicine at an historic moment. I wondered if this was like the early days of trying to get a handle on HIV/AIDS. As patients began arriving, it felt like we were taking off in a plane we hadn't finished building yet."

While reporting this story, I asked people via social media to tell me what had made the deepest impression on them so far about the pandemic and what they thought they'd remember. Memory experts then helped me assess the submissions—and what they indicate about how our minds work.

Many replies to my prompts and to my follow-up questions began with the moment a person learned the college dorm was closing, the performances were suspended, the restaurant was shutting down. The psychology professor Henry L. Roediger III and the anthropology professor James Wertsch, scholars of collective memory at Washington University in St. Louis, introduced me to the "primacy effect," one of the ways a memory gets "pinned" (as we say of tweets), to be easily retrievable.

In an experiment conducted in 1974, 1991, and 2009, whose results were published under the title "Forgetting the Presidents," Roediger and his co-author, K. A. DeSoto, asked people to recall



in five minutes all the presidents they could. The popularity of George Washington as a response exemplified the primacy effect, the tendency to remember firsts. The "recency effect"—another pin—was exemplified by participants easily naming contemporary White House occupants.

And the imprinting of dramatic story lines—which I'll call the "narrative effect," a very powerful pin—explains why Abraham Lincoln, JFK, and Richard Nixon live on in popular memory. A few decades hence, Roediger has noted, recent-ish presidents such as Harry Truman, Dwight Eisenhower, Lyndon B. Johnson, and Gerald Ford may very well have gone the way of 19th-century figures such as Millard Fillmore and Franklin Pierce—forgotten by most Americans. They weren't the first and they're no longer the most recent, nor were their terms in office remarkable for being action-packed.

These natural memory aids work whether we're naming the Founding Fathers or recalling a turning point in our own life.

"I'll never forget those first spooky, surreal days of shelterin-place in the Bay Area," wrote Kevin Simpson, an artist, in response to my prompts. "It's one of the wealthiest and most technologically advanced places in the world, and yet we were scrounging stores for bread; paper towels; cleaning products; something, anything, to make a makeshift mask. Roads eerily silent, people crossing the street when you'd near each other on a sidewalk while walking a dog."

"I'll never forget the moment in March when a colleague at the local borough hall told me that we'd been asked to evacuate the building immediately because of the pandemic," wrote Howard Fredrics, who runs a public-access television station in Park Ridge, New Jersey. "I grabbed my office computer and ran. I haven't been back."

"I don't think people will ever forget March of 2020 and how the world changed in the matter of a week or so," Dan P. McAdams, a psychology professor at Northwestern University and an expert in narrative memory, told me. "I remember that week. I can tell you the days of the week."

Someday, when this is all behind us, children may ask what it was like to live through a global pandemic. Given the primacy effect, we'll probably start with the moment we realized something weird was afoot—my canceled Delta tickets, my sports-fan husband's lost NBA season, and Alex Enurah's sense of taking off in an unfinished plane.

**THOUGH WE MAY** vividly recall "how it began," many of our pandemic memories will be hazier. I seem to remember a bright, clear morning in late March, when sheets of cool spring air billowed toward me on a walk, and I thought, *Okay, I can do this.* I made a few long-term plans ("long-term" in the sense of "in case lockdown lasts six weeks"): Shift my college classes to remote teaching, via Zoom. Read all of Charles Dickens, because if not now, when? Cultivate pollinator-friendly native plants in the backyard. But in truth, I can't be sure if my early-pandemic plans were the thoughts of one bright, breezy morning or the thoughts of many such mornings. That's typical, the memory experts told me.

"Most of our memories are in the form of generalities," says Robyn Fivush, a psychology professor at Emory University. Hans and I had one fun outing left: the car wash. I'd bring a juice box and snacks and we'd ride through, watching the bubbles. He always asks to go. My car has never been this clean on the outside."

As Fivush had suggested, most of the submissions to my prompts took this form: "What life was like." I assume my memories will do the same. I walked the dogs a lot. I read Dickens. I discovered that Zoom classes, Zoom Thanksgiving, and Zoom game nights were a far cry from actual gatherings, but far better than nothing. I hugged those of my family members who were part of my "pod" and desperately missed the ones who lived a plane ride away. My grandson turned 4.

**FIVUSH IS INTRIGUED** by which moments get tucked away in the slick curlicues of a person's brain, and why those moments rather than the tens of millions of others from a lifetime—are saved. We use our memory in part to create a continuous sense of self, she told me, "a 'narrative identity' through all of life's ups and downs: *I am a person whose life has meaning and purpose. I'm more than the subject of brute forces. There's a Story of Me.*"

What we tend to remember most specifically are high moments and low moments, which become "episodes" in our memory, invested with meaning. In April, Alex Enurah fell ill.

#### WE DON'T SHELVE A PRISTINE FIRST EDITION OF AN EXPERIENCE IN A DUST-FREE INNER SANCTUM; WE SLOPPILY PASS THE MEMORY AROUND, INVITING COMMENT.

Because most of life is routine and recurring, she told me, you remember what life was like. "I might tell you about my memories of childhood: 'One of the most important things to me was having Shabbat dinner every Friday night with my family.' You might ask: 'Tell me about one of those family dinners.' I'd say: 'Oh gosh, I don't think I can.'"

In Denver, in the Enurah-VanderWielen home, as Alex's plague year began with the steep uptick in COVID-19 cases at his hospital, his wife was in the third trimester of a much-wanted pregnancy. The couple had previously lost two pregnancies, and Lynn had suffered a dangerous postpartum hemorrhage when their son, Hans, was born. Lynn began working remotely, but mostly hung out with Hans, a giggly 2-year-old. She'd already been anxious about childbirth; the fear that Alex could get sick now compounded it. "My memories of childbirth are *I lived because Alex took care of me*," she said. "He wasn't my medical provider, obviously, but he was the one who said, 'Lynn's in trouble.' Being pregnant during COVID scared me for a lot of reasons, but mostly it was the thought *If I have to deliver the baby without Alex, will I survive it*?

"Hans and I stopped going to the grocery store, stopped playing with other kids at the park. Our neighbors grocery-shopped for us. "When I first felt a little tired," Alex said, "I assumed it was from working long hours and trying to catch up on sleep in a house where a 2-year-old knows where to find you. I said, 'My pelvis hurts,' and my 36-weeks-pregnant wife gives me a *look*. My COVID test came back positive, so I isolated downstairs."

"The baby's due date was May 11, 2020, and Alex got sick in mid-April," Lynn said. "I made him breakfast, lunch, and dinner; placed his dishes on the washer and dryer; and went back upstairs before he opened his door. I worried that if I got sick, it could affect the baby, or they'd take her away from me after birth."

"Six or seven days in," Alex said, "just really run-down and weak, sense of smell and taste gone, no appetite, talking by phone with colleagues every day. I kept track of my oxygen with a pulse oximeter, and initially I was like 96, 97, 98 percent. Then I noticed like, day six—more like 90, 91 percent, which is a change for me, but still kind of normal. And finally, I started dipping down to, like, 88 percent just from standing up. When I was down to about 85 percent, my colleagues said: 'Let's bring you in.'"

But where to go? He didn't want to be a burden on his colleagues. "In a different world or, like, if Alex were white, he could have gone to any hospital in town," Lynn said, "but anywhere other than the MCA, he'd be just an anonymous Black male admitted off the street."

"If there was anyone on Earth who could, you know, guarantee that I would get to meet the little girl Lynn was carrying," Alex said, choking up, "I felt it was my boss, Joseph Forrester," a pulmonologist. "I just really wanted to meet that little girl."

The chief medical officer, Philip Stahel, on a group phone call with Alex, said: "I'm sending an ambulance for you now."

Alex protested: "I can't do that to Lynn—she's very pregnant. That will scare her."

"All right," replied Chakradhar Kotaru, another pulmonologist on the call. "I'm coming myself."

"It was the middle of the night," Lynn said, "and his colleague walks in wearing a full hazmat suit. It scared the crap out of me. He went into the basement and helped Alex climb the stairs. I was shocked to see how much weight he'd lost in just a few days. Dr. Kotaru helped him get into the SUV, and they drove away."

**TONY RAMOS**, a graphic designer in Cleveland, was one of the people who responded to my request for stories of the pandemic. "2020 will be marked by my Easter evening sitting on the steps to the basement of my house, cellphone in hand, listening to my sister describe how the hospital in which her husband just died from COVID-19 would not let her into the building to be at his bedside," he wrote. "Instead, she had to sit in her car in their parking lot, alone. I will think about hospital parking lots differently for the rest of my life."

Trauma gouges deeply into our minds, engraving painful and long-lasting memories. "Whether they are rape victims, combat veterans, or earthquake survivors, people exposed to terrifying trauma typically retain vivid memories of the most central aspects of such experiences, often for the rest of their lives," Richard McNally, a psychology professor at Harvard, told me. "Although most people exposed to trauma do not develop post-traumatic stress disorder, they nevertheless seldom, if ever, forget their trauma." The evolutionary purpose is clear: Vivid memories of dangerous incidents may help us avoid them in the future. But that doesn't make these memories any less searing.

"Alex started out on a regular floor, but with fevers of 103, 104, he was moved to the ICU," Lynn told me. "They surrounded him with ice packs. We tried to FaceTime, but he was so out of it. His face looked shaved and gaunt. He looked like he was freezing, but said he was miserably hot. He wasn't eating. Our relationship is based on a lot of joking and messing around, and we tried to do that a tiny bit on the phone, but Alex would have coughing fits and couldn't get his breath."

"Code blues were going off all around me in the ICU," Alex said. "TVs were tuned to CNN, and I thought I heard them saying, 'Black and Hispanic COVID-19 patients are doing *particularly* poorly.' And I was like, *This is* not *going well*. I'd suspected that the poorer outcomes of Black and Hispanic patients were not all due to social determinants of health, that there might be other components that hadn't been quantified yet. Being Black, I was really scared at this point. I was breathing too quickly. I'd cough once or twice, and my oxygen level would fall into the 70s. I'd seen patients who'd had one, two, four liters of oxygen suddenly pass away, despite our best efforts. I started reviewing the choices I'd made in life to become a doctor. I also started to think, *Well, would this be a time to, you know*—not write a letter; I didn't have the stamina for that. But should I record a video message to our unborn child, kind of telling her about her dad? I didn't want to tell Lynn that I was thinking about something like that, but I think she and I both knew this could end really badly."

Lynn said: "Mostly over the phone, when he could hardly talk at all, we just kept saying 'I love you. I love you so much.' Once, he said: 'I'm not sure I'm going to meet our baby."



"Even as we experience an event," Robyn Fivush has written, "we are already beginning to think about how to tell this event to another person at a later time." In a 2008 paper for the academic journal *Memory*, she and a co-author elaborated on the ideas of the 20th-century French sociologist Maurice Halbwachs, who developed the concept of collective memory: "Even when experiencing events for the first time, the traveller has in mind the reactions of others, which colour both his perception of the event and his recollection of it."

According to Halbwachs, we begin composing our memories in anticipation of sharing them. I've caught myself doing this (and the more confusing or stressful the event, the more likely I am to start framing it before it's over, picturing the friends and family I will entertain with my tale of woe and mishap). But I had no idea that everyone does it, nor did I know that retailing our memories into shareable stories is intrinsic to the art of remembering. "When something is going terribly wrong," Fivush confirmed, "you're already thinking, *When this is all over, if it ends well, it's going to be a great story*."

Lynn spent a lot of time on the phone with her sister, sharing updates about Alex's condition and seeking support. "Hans occupied my mind most of the day," Lynn told me, "but when he went to bed at night and I was alone, I spiraled. Because then I could look at the news, read the articles, see what was happening with COVID. I called my sister in Wisconsin to ask, 'Should I just come home? What if Alex gets so sick that he's on a ventilator and that's when I go into labor? What if Alex doesn't make it? Am I going to raise two kids all alone?' Hans idolizes his dad ... I mean, anything Alex does, to Hans it's the most marvelous thing in the whole wide world.

"My sister tried to reassure me: 'He's going to be okay.'"

The work of Elizabeth Loftus, a cognitive psychologist at UC Irvine, and others has shown that, if we discuss a memory with listeners who remember it differently, we may unconsciously borrow a bit of their local color or scrap of dialogue for our own version. "Every time you bring a memory to mind, it's activated, then reconsolidated," Fivush told me. And we're open to accepting



other people's interpretation of our own memories. "We need to make sense of things," she continued. "During COVID, you call your friend to say, 'I'm so lonely,' and she says, 'I know, but Zooming with your family helps, doesn't it? I feel like I'm talking to my grown kids more than ever,' and you immediately start to think about your situation differently. You'll remember it differently."

We don't shelve a pristine first edition of an experience in a dust-free inner sanctum; we sloppily pass the memory around, inviting comment. The consolidated edition, with other people's fingerprints all over it, is what we put on the shelf of long-term memory, unaware that we've done so.

THE FOUNDER OF the field of cognitive psychology, Ulric Neisser, who died in 2012, was Fivush's mentor and colleague at Emory. On January 29, 1986, he distributed a brief questionnaire to his Psych 101 undergrads, asking for details about how they'd learned—the previous day—about the cataclysmic failure of the Challenger. He collected answers from 106 students. In the fall of 1988, he tracked down 44 of the students and asked them to answer the same questions again. The results were striking: 25 percent of the subjects were wrong about everything, scoring zero. Half of the subjects scored two or less on a seven-point scale. Meanwhile, most of the students felt confident about their replies. "Our data leave no doubt that vivid and confident flashbulb recollections can be mistaken," Neisser concluded. "When this happens, the original memories seem to have disappeared entirely; none of our retrieval cues enabled the subjects to recover them."

In the process of remembering their Challenger stories, the Emory undergrads may have unwittingly borrowed parts of their friends' narratives. One student wrote, in 1986, "I was in my religion class and some people walked in and started talking about [it]." Two and a half years later, the same student wrote: "When I first heard about the explosion I was sitting in my freshman dorm room with my roommate and we were watching TV."



Whenever I've told people about this research, likening it to my generation's purported total recall of the afternoon of Friday, November 22, 1963, their response is invariably: "Sure, but I remember it perfectly," after which they tell me their particulars, thereby missing the point of Neisser's findings. (For the record, I'm also certain that I remember those minutes with molecular precision, including wondering whether the shooting—we hadn't yet learned that President Kennedy had died—meant that my Friday-afternoon piano lesson would be canceled.)

"No one ever says: 'Oh sure, I heard about 9/11, but it didn't really strike me,'" Fivush told me. "No, the story is: 'I *heard* the news, and I *ran* to the TV, and I *watched* the second tower come down, and I was *devastated*.' We probably didn't all do that, but a lot of us did. As we tell the story, it's not really false. To tell it is to become part of the community, to share the moment, to work together to understand an event that's difficult to grasp. If we recall and talk about something often enough, it will become a 'cultural narrative.' Through multiple tellings, repetitions, and negotiations, it becomes the Story About X."

This plague year has left us feeling isolated. Each of us seems to dwell alone within a damp grotto of private thoughts. But we're already engaged in the crowdsourcing project of organizing collective memories. Americans self-sort into countless communities, which have very different experiences of the pandemic. There are health-care workers and scientists logging inhuman hours; frontline "essential workers" getting sick and going broke; parents trying to do their jobs while acting as their children's teachers; kids squirming in front of their Zoom screens; Black Lives Matter activists marching and seeing their numbers swell; folks working from home who are dazed by the sameness of their days; college students stalled in their childhood bedrooms. There are the evicted, the jobless, the sick, the bereaved.

In daily chitchat and in give-and-take on social media, we share with others how it started for us and how it's going. We instinctively compare and match what we've got to what they've got, like the Emory undergrads settling on a blended version of How I Learned About the Challenger Disaster. Within each community, for years to come, stories will be passed around, tweaked, and polished until a small number of gems come to represent *This is what it was like to live through the coronavirus pandemic*.

Narrative-memory experts call this "the social construction of autobiographical memory." It's possible that Lynn's late-night collaboration with her sister—who urged optimism—enabled Lynn to re-shelve the day's difficult hours in her memory with the lightest tincture of hope.

THE GREATEST MEMORY-KEEPERS invented by humankind are stories. "Facts are better remembered when interwoven in a narrative," Henry Roediger told me. Think about what you know of your early childhood. Stories told about you as a little kid are more accessible than a random Wednesday afternoon when you came in quietly from kindergarten and ate your lunch without complaint.

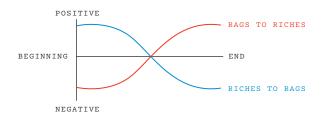
Inherent in the architecture of a story is its meaning. Narrativememory experts believe that by manipulating the plot of an anecdote, we may be able to exert a bit of control over a memory, even a painful one.

A story opens with a protagonist anchored in time and place, who has a goal and a motivation, but confronts obstacles and barriers on the journey to the goal. At the end of the story, something must have changed in the inner or outer life of the hero. That's the archetypal story arc in Western culture.

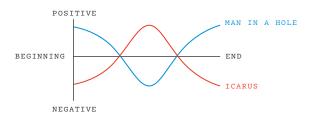
Throughout his life, beginning well before he won worldwide acclaim for his novels, Kurt Vonnegut ruminated about the form our stories take. "The shape of a given society's stories is at least as interesting as the shape of its pots or spearheads," he wrote in his autobiography, summarizing his master's thesis on "story shapes" for an anthropology degree at the University of Chicago. The department rejected his thesis, but he never forgot what he called his "prettiest contribution."

Years later, Vonnegut mused about how great it would be if artificial intelligence could graph the plots of stories. "There is no reason why the simple shapes of stories can't be fed into computers," he said in a famous lecture. "They are beautiful shapes." In 2016, following up on the late novelist's suggestion, data scientists at the University of Vermont and the University of Adelaide, in Australia, put 1,327 English-language works of fiction through statistical computations of "sentiment analysis." They tracked the emotional valence of each story by counting previously identified "happy" words such as *laughter*, *excellent*, and *joy* and "unhappy" words such as *murder*, *cancer*, and *death*. The data analytics revealed that more than 1,000 fictional works could be captured in just six story arcs, which are easily grasped in three pairs.

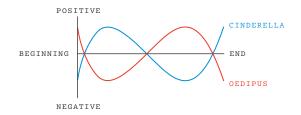
In the first pair, a curving line rises from the lower left to the upper right (the Rags-to-Riches story) or falls from the upper left to the lower right (Tragedy, or Riches to Rags):



The next two involve a change in trajectory: What seemed like a good idea at the time doesn't pan out (rise then fall, as in the myth of Icarus), or triumph is snatched from defeat (fall then rise, nicknamed Man in a Hole).



The third set involves more complex stories that include two inflection points in the hero's prospects: fall-rise-fall, as exemplified by Oedipus, and rise-fall-rise, nicknamed Cinderella.



Robyn Fivush and two Emory colleagues, Robert Thorstad and Matthew Graci, wondered whether our personal narratives might echo these same fictional story arcs. When weaving our little after-dinner stories, most of us probably try to offer a bit of drama, intuiting that a flat recitation of this-happened-then-thishappened will not captivate our listeners. Without revealing what they were looking for, the Emory researchers invited volunteers to write down their "most positive experience" and "most traumatic experience." They also solicited anonymous personal narratives online, enabling them to analyze 3,000 personal narratives from more than 500 subjects (each participant wrote multiple narratives).

"People shared really intimate things about themselves," Thorstad, who is now a data scientist for *The Wall Street Journal*, told me. "Some contained physical or sexual violence; some conveyed strong tragedies. We didn't tell the subjects we were interested in story shape. They didn't have to tell a story. They could have just narrated—*This happened first and this happened next*—with no emotional shape, just a flat line."

The researchers subjected the personal narratives to dataanalytic techniques similar to those applied to fictional narratives. The same classic story arcs materialized. The large majority of personal narratives "were well characterized by the same 6 emotional arcs that emerged in a recent large-scale analysis of English-language cultural fiction," they reported. Nonprofessional writers, sharing thousands of deeply personal accounts of key life episodes, instinctively chose those same six story shapes.

Within that discovery lay another: Everyday storytellers liked two of the arcs best. "I came into this study thinking that Rags to Riches and Tragedy were going to be common," Thorstad said. "But people prefer story arcs with one emotional inflection point: Man in a Hole or Icarus."



While the researchers haven't yet analyzed this preference, my hunch would be that these one-inflection-point story shapes offer greater drama than the simple uphill or downhill slopes of Rags to Riches and Tragedy, while the greater complexity of the two-inflection-point plots, Oedipus and Cinderella, exceed the casual skill set of most raconteurs. We can't all be Sophocles. Or Walt Disney. Or Kurt Vonnegut.



"Shape," Thorstad told me, "changes the overall sentiment of the story."

That's the essence of a body of research in the field of narrative psychology. "We study the arc within a given memory," Dan McAdams, the Northwestern psychology professor, told me. "Let's say a person describes a turning point, like: 'I got fired from my first job, went into a depression, and couldn't talk to anybody for three weeks. But I crawled out of it, and a year later, I landed a fabulous position and haven't looked back.' We call that a 'redemptive' sequence."

That's Man in a Hole. "Somebody gets into trouble, gets out of it again" is how Vonnegut described it in his lecture. "People love that story. They never get sick of it."

Its opposite, the "contamination" sequence, describes a negative episode that ruins everything. "In a contamination sequence, everything is going beautifully at the start," McAdams said. "She was the love of my life. We were going to be together forever. We were happy. Then I woke up Monday morning and she was gone, and I'm never going to find love again.'

"Every life story is filled with different sorts of scenes. We've found that people whose narratives include a lot of redemptive arcs tend to have higher psychological well-being. People whose life stories contain a higher density of contamination narratives tend to show higher levels of depression and lower levels of well-being."

Of course, some people face more painful setbacks and disasters in life than others. "Someone who's had a horribly difficult life could have a harder time framing redemptive sequences," McAdams said. "But we look at the interpretation: What kind of meaning does a person derive from difficult events? Some people tend to go through life interpreting things in a positive way, making redemption sequences where they can, even in difficult circumstances."

"I'm not convinced we *store* our memories as narratives," Fivush told me. "The neurobiology and neurochemistry of memory suggest that our memories are stored in dynamic, fluid pieces. When we are in the process of reassembling a memory, we have these story shapes also stored and available to us.

"The particular form we give a memory depends on the context," she said. "For example: When you're telling a sad story, most Americans will demand a redemptive end. They'll say, 'But you learned something about yourself, didn't you?"

Vickie Scheer, 73, a retired educator in Atlanta, shared an episode of loneliness redeemed by kindness. Hating the social isolation of lockdown, she said, she sat on her front porch and called "Hi, neighbor!" to random passersby, including a couple walking their dog. "The woman had red hair on one side and a shaved head on the other, and they both were covered in tattoos. They always said hello back. I found out they were dog-walkers. One day I was taking out the trash just as they were passing by. They asked how I was that day. I burst into tears and said, 'Today not so good.' The woman said, 'You are grieving, I understand.' I told them their kindness made all the difference in the world to me. They promised to stop by every Monday to check on me."

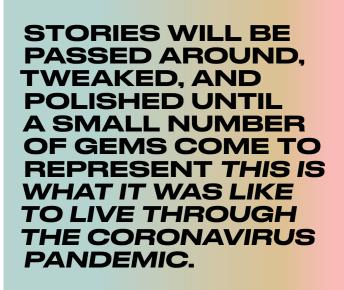
Many folks, mid-pandemic, described still-unfolding situations. Fivush cautions that the final shape of a story we tell now might not be known yet. She categorizes narratives of events in progress simply as "unfinished."

As for my canceled trip to visit my grandson, I haven't seen him yet; still, I'll categorize my own story arc not as Icarus (that would make me too sad) but as "unfinished."

IN DENVER, Alex Enurah and Lynn VanderWielen's story began to take a turn for the better. As Alex told me, "One day, I noticed: *Well, it doesn't seem like things are actually getting worse right this*  *minute. So that's good.* They moved me out of ICU back to a regular floor. A few colleagues stopped by to visit, everyone fully geared up. They'd try not to make me laugh, because laughing made my oxygen shoot down ... After a few more days, they said I could quarantine at home."

"He was cleared on the first day of May, and I went into labor on May 4," Lynn said. "If you look at your whole lifetime, four days is so insignificant, but it was significant for us. We delivered Ida at 12:05 in the morning on the fifth of May, healthy, happy, screaming. She was wonderful from the first moment. And I did fine too."

"With the childbirth complications last time," Alex said, "and with my having recently come out of the hospital myself, I was just very ... on edge. It was a lot of emotion. You know, for the longest time I felt like I would not get to meet her, and then it's like, suddenly she's in the room and she's healthy. I had a lot of competing thoughts, including *Is this even real, or is this a dream*? Watching Lynn hold our baby, I honestly wondered if it was



possible that I had died and was somehow seeing this, you know, after ... It just took me a little bit of time to be able to process and appreciate everything."

"We didn't know if Alex would meet the baby," Lynn said. "And then here she was, healthy, and Hans was home asleep in his bed, so we were going to get to be a family again. Honestly, it was surreal, like this outcome hadn't been on the list of possible choices."

I asked Robert Thorstad what his research might allow him to predict about how we'll talk about our COVID-era memories in the future. "The obvious implication is that, whatever story we tell, it's not going to be a linear story from good to bad or from bad to good. It's not going to be: 'My life was great, and then COVID-19 ruined it.' It's going to have inflection points. And narrative psychologists tell us that the shape of story a person chooses can help lead to greater resilience and better outcomes." "If you land well after a difficult incident," Fivush agreed, "you're more likely to give it a redemptive arc. And if you give a difficult episode a redemptive arc, you're more likely to land well. It's not tautological; it's transactional. They influence each other, like: *The better I cope, the more I can create positive meaning out of my experience* and *The more I can create positive meaning out of my experience, the better I cope.* This is why psychotherapy asks patients, 'What's a different way to think about this?'"

We're surviving an incredibly difficult period, many of us tucking brutal, sad, or frightening memories into long-term storage. But whether alone or with input from others, we may be able to flip over some of our Icarus "contamination" sequences into Man in a Hole "redemptive" sequences, giving ourselves a boost. "You can't just change your story by deciding to do it in a second," Fivush said. "For really difficult challenges, it takes time to rework your understanding. People might ask if you're over your grief after two months. No, it takes years. But it can be done."

**IDA ENURAH IS** a jolly baby, with a broad, smiley face like her dad's.

"It took a long time for Alex to sound like himself, even when he came home from the hospital," Lynn told me via Zoom. "Once he was home he told me they'd been really worried about him."

"I'd never been that sick, realizing how close I was to possibly dying," Alex told me. "Things are good now. But that experience put me in a very dark place for a long while. When I returned to work, I was afraid. There was a fear of being exposed to COVID again, wondering if I'd have a more severe reaction the second time and need to be intubated immediately. I had a hard time passing the ICU room I'd been in. It gave me a sick feeling. A visceral response. To this day I try to detour around that section. I'd never even been hospitalized before. It puts my work in a quite different light. It makes the conversations about death and dying with patients and families more difficult and more personal."

"But, I mean, we're home, we're healthy," Lynn said. "We have two healthy kids. I feel like I'm—I don't know if *proud* is the right word, but I feel like I did a good job."

There are overlapping narrative arcs in this family's story: two protagonists with the same goal, that everyone should survive, but different battles to fight. Alex was fighting for his life. Lynn feared that labor and delivery would throw her into another fight for her life and that COVID-19 could threaten the life of her unborn child, while she did her best to keep 2-year-old Hans's life stable.

"I see a redemptive arc in Lynn's story," Fivush told me. "Ida was born, she's happy and healthy; we're nesting, everything's great. Some redemption stories are just a return to homeostasis: *I got through it and normal life has been restored.* Alex says he is still processing; his story may be different in another year or two, depending upon how the nation emerges from the pandemic. His narrative is unfinished."

"WE ALL KNOW in our bones that this plague year is an epic year," Dan McAdams told me. "Not a day goes by without the proliferation of redemptive stories about the coronavirus. Some are dramatic stories of recovery, starring nurses and first responders who minister to the victims, and starring those victims who manage to come back from the precipice. Others find unexpected benefits in the shutdowns: Families are eating dinners together now, the skies are less polluted, communities pull together. In the United States, progressives may imagine that the crisis will ultimately usher in universal health care or a Green New Deal. They invoke the story of America's overcoming the adversity of the Great Depression and World War II to emerge as a stronger and more egalitarian society.

"But not everyone will be able to tell a redemptive narrative," he continued. "The suffering is too great. It might be a year where more people are inspired to take the path of Albert Camus' protagonist in *The Plague*, Dr. Bernard Rieux. He wasn't able to save many people, and he couldn't begin to say what it all meant, and the loss of thousands of people didn't appear to be pointing a way to a better life for the survivors. By the end of *The Plague*, you come to believe, with Rieux, that at least it meant something for him to bear witness; he bore witness to suffering. Not every story is redemptive—there are other kinds of great stories in the world, and bearing witness is an important one. It's possible that's the best most of us can do this year. Sometimes you just have to come to terms with the world as it is, and to human beings as they are, rather than how we wish the world and people were."

Perhaps Dr. Enurah's role is like Dr. Rieux's: to bear witness. He has seen the worst of COVID-19 from beside hospital beds, and then in them. He did his best to help preserve life, even to the point of nearly losing his own.

I asked him whether there was anything else he thought he might remember about the pandemic, and he instantly offered this episode: "My colleague Dr. Timothy Bedient was the one who admitted me to the ICU. He was doing the history and physical, asking me questions about my past and all that. I felt like I had the plague; people suited up before entering my room; at home I hadn't been able to hold Hans or get close to my wife. But at the end of our conversation—it was a very brief gesture—Tim put his hand on my shoulder. He said, 'Alex, we are going to figure this out. I think this is going to be okay.' And to me, that was the most meaningful moment of that whole time—the fact that he put his hand on my shoulder meant the world to me. I was feeling nothing but fear, and it felt like he crossed a barrier to be with me."

It's a representative moment of the pandemic era, of a type that might emerge as a theme in many of our tales: that, in the worst of times, even as many people surprised us with their indifference, ignorance, racism, and aggression, other people—some of them friends and colleagues, some total strangers—managed to cross barriers and offer us kindness, compassion, alliance, and strength.  $\mathcal{A}$ 

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