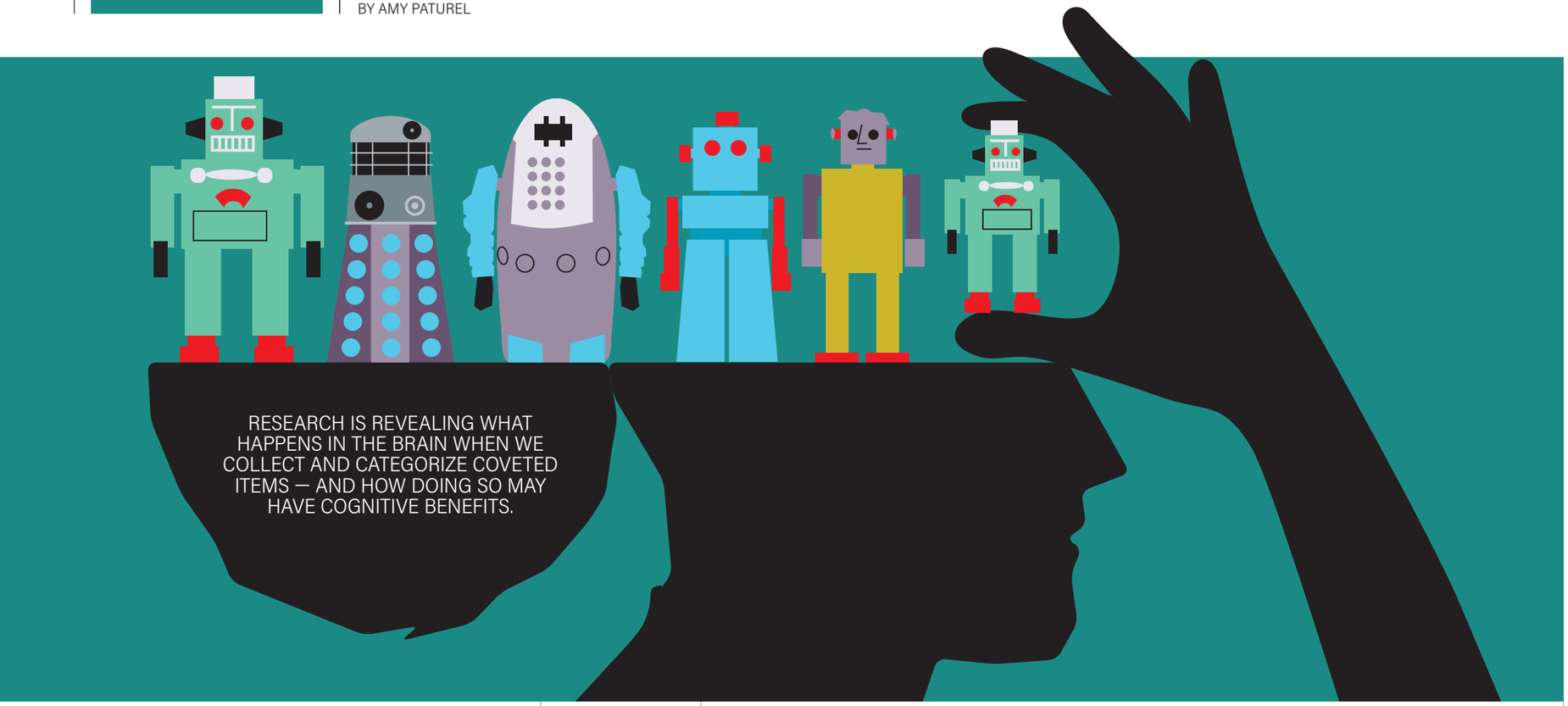
BY AMY PATUREL



Collecting Your Thoughts

My husband, Brandon, has been collecting toys since the summer of 1996 when he was 17 years old, beginning with the 3-inch Obi-Wan Kenobi he purchased to dress up his dorm room windowsill. A motley crew of *Star Wars* action figures followed. And eventually, what began as an easy-to-contain collection morphed into a three-car garage packed with 450 Pez dispensers, 1,000-plus action figures, and a 6-foot-tall Spider-Man.

Like his toys, Brandon is in good company. An estimated 1 in 3 adults collects something, and research suggests the popular pastime could come with cognitive perks. Through a range of mechanisms that scientists are still teasing out, collecting may enhance memory, forge new connections in the brain, and even trigger the body's relaxation response.

According to neuroscientist (and Chinese porcelain collector) Shirley Mueller, collecting feeds the pleasure center of the brain, but without the drawbacks of alcohol, gambling, or nicotine. "Collecting is a way to feel a sense of safety and comfort," says Mueller, who is also the author of the book, *Inside the Head of a Collector: Neuropsychological Forces at Play* (Lucia Marquand, 2019). "It's a way for the collector to temporarily let go of the burdens in their lives and find joy in the moment."

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OF COURSE, collecting is not a new phenomenon. More than 100,000 years ago, our ancestors foraged for crystals, shells, and other nonutilitarian objects just as they foraged for food — a habit reflected in the hordes of rock- and mineral-hounds today. Amassed without any apparent practical purpose, these ancient collections may hint at the modern motivations to accumulate. While some people collect as a statement of who they are, others collect as an investment or a source of pleasure — impulses that ring as true today as they might have rung many millennia ago.

KELLIE JAEGER/DISCOVER

"While the motivations to collect are varied, they typically revolve around developing a more positive sense of self," says Brandon Schmeichel, a comic book collector and psychology professor at Texas A&M University. That distinguishes collecting from hoarding. With hoarding, stuff is acquired indiscriminately. There's no methodical thought process behind what is procured. And instead of creating a sense of self-worth, the behavior typically makes hoarders feel bad about themselves.

But even collecting of the nonhoarding variety can be pathological, says Brian Appleby, a neuropsychiatrist with University Hospitals in Cleveland. In the early 1990s, psychoanalyst Werner Muensterberger described collecting as an attempt to fill a void from childhood. Decades earlier, Sigmund Freud viewed the practice as a form of regression, or as a means of controlling one's fears. Apply those theories to my husband, and collecting could be interpreted as Brandon's way of coming to terms with his mom bailing when he was barely out of diapers, or of creating order in a life of chaos with three kids, a dog, and a demanding job.

"Collectors are drawn to collecting as a means of bolstering the self by setting up goals that are tangible and attainable."

"A more scientifically sound theory," Mueller says, "is the pleasure principle." In the late 1990s and early 2000s, functional MRI (fMRI) technology uncovered what happens in the brain when we experience joy: The nucleus accumbens, also known as the brain's pleasure center, lights up. In the late 2000s, the same technology revealed that the nucleus accumbens also activates whenever we make a meaningful purchase, in part because the anticipated gain makes us feel good.

"Collectors are drawn to collecting as a means of bolstering the self by setting up goals that are tangible, attainable, and provide the collector with concrete feedback of progress," Schmeichel reports in a paper published in *Leisure Sciences*. "It also taps into people's need to seek challenge." And unlike more nebulous goals (like "be a good husband"), collecting provides quantifiable evidence of success. Brandon can peruse the items in our garage and see just how far he has come since that first acquisition in college. (He now has 21 Obi-Wan figures.) In fact, many collectors say their top motive to collect is to gain a sense of skill, success, or competence.

No matter the motivation for collecting, there's no disputing that the activity can offer collectors a feeling of confidence, or of certainty in uncertain times. Perhaps that's one reason the pandemic spawned an uptick in collecting, even among those who were previously noncollectors. Sales of stamps and coins surged. And business in vinyl records, vintage comics, and memorabilia also boomed. According to Schmeichel, collecting can also serve as a means of symbolic immortality. Brandon can control his toys. They'll never leave him. And barring a house fire, earthquake, or other natural disaster, they'll undoubtedly outlive him.

BRANDON CAN recall with amazing detail not only the events of his life, but years when movies came out, obscure actors' names, birthdays of people he hasn't seen in decades. His memory is

BRAIN REGIONS AFFECTED BY COLLECTING

- **The prefrontal cortex,** the "thinking center" of the brain.
- **The nucleus accumbens,** the "pleasure center" of the brain.
- **The dorsal pathway,** the area at the top of the brain that processes objects for the purpose of interaction.
- **The vagus nerve,** a pair of cranial nerves that extend all the way from the brain stem to the gut.

AMY PATUREL and her husband, Brandon, have well over 1,000 toys in their garage, many in their original packaging.

sharp — almost photographic. I used to think it was all genetics. But as I watched his toy collection grow in size and scope, and saw how he cataloged every shelf according to some elaborate known-only-to-him algorithm, I began to wonder whether collecting toys is somehow training his brain.

"Collecting requires attaining knowledge. You have to figure out where you can find the coveted items, what they're worth, and how you will organize and display your collectibles," Mueller says. "Those activities stimulate areas of the brain involved in executive functioning, skills that include working memory, multitasking, and (perhaps ironically) impulse-control." So, just like putting together a puzzle, learning a new language, or playing the daily Wordle, collecting can be a form of exercise for the mind, Mueller says.

On a physiological level, research in *Frontiers in Human Neuroscience* shows that tangible objects have unique effects on brain functions specifically related to memory. "The brain processes objects along a ventral pathway, which is thought to control how we perceive things, as well as along a dorsal pathway, which controls how we interact with objects as well as their sensory characteristics," says researcher Jacqueline Snow, professor of cognitive neuroscience at the University of Nevada, Reno. "Unlike pictures, real objects amplify brain responses in action-related areas in the dorsal pathway, and that may translate to deeper processing."

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Since visualizing objects stimulates many areas of the brain simultaneously, Snow says it's plausible that Brandon's affinity for toy collecting strengthens his memories. Each object is associated with a person, experience, or moment in time, and he can better recall those things because he has a tangible reminder. In that way, collectibles act as a physical time machine. Every item in his collection is both a piece of Brandon's history and a cue for his memory.

Indeed, Appleby tells me objects are one way to trigger memory recall for people with dementia. But even without a memory disorder, collectibles — whether toys, spoons, or shot glasses — can help people hold onto memories. Studies in children suggest they retain information better when they're presented with objects rather than words or pictures, the standard approach to learning for children in America, Snow says.

That theory seems to hold true in our household. Our kids not only know the origin story of every DC and Marvel superhero, but they can also recite every U.S. president's name, presumably because

ANGELA BURCH

FROM TOP: ANGELA BURCH (3); KELLIE JAEGER/DISCOVER

they learned about them through a physical representation (Brandon's collection of presidential Pez dispensers). Ask them to recite the Gettysburg Address though, which was part of their fourth-grade curriculum, and they're stumped.

FROM THE bobblehead of *Die Hard* hero John McClane to the Beatles' yellow submarine, Brandon's toys are a magical mystery tour of his life experiences: the Halloween wind-up toys we played with when I was hospitalized during my pregnancy, the 1989 Batmobile LEGO set he built with our three boys shortly after the pandemic hit, and the knight in shining armor I gave him during the early days of our relationship.

"This sort of collecting facilitates reminiscences about the past, and typically the memories that surface are positive goal-related experiences," Schmeichel reports in his *Leisure Sciences* review. Studies suggest that nostalgia can bolster both physical and psychological health, in part by activating the vagus nerve. One of 12 pairs of cranial nerves that connect our brain and body, the vagus nerve not only puts the brakes on inflammation, a key player in diseases that affect cognition, but it also unlocks the relaxation response, releasing feel-good chemicals that slow your heart rate.

When Brandon is in the garage, he loses track of time, forgets to eat, and gets into a meditative zone that he says feels a bit like runner's high. Mueller tells me that's a common experience among collectors. When they're interacting with their collection — planning a purchase, securing a sale, or displaying their collectibles on a shelf — collectors often achieve a state of relaxation, self-love, and self-acceptance.

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Collecting also seems to hit each of the three fundamental psychological needs — autonomy, competence, and relatedness — laid out in leading theories of motivation. It can cultivate both a sense of belonging and individuality. "Collectors often report that the friendship and camaraderie of other collectors is one of the most rewarding aspects of collecting," Schmeichel reports in *Leisure Sciences*. Interacting with sellers, other collectors, or even admirers of your collection can also serve as a foundation for relationship-building.

A PRODUCT OF almost three decades of collecting, Brandon's toys may serve as a mnemonic aid, helping him hold onto specific memories.

That concept may explain the appeal of events that bring collectors together, like the myriad comic conventions and coin and stamp shows that occur across the nation. Research published in *PLOS Medicine* shows that kind of social connectedness is as, if not more, important to health and longevity than diet, exercise, or even kicking a 15-cigarette-a-day smoking habit. Other studies show that a sense of purpose acts as a buffer against depression, loneliness, and cognitive impairment.

While this all seems to bode well for Brandon's long-term memory and overall wellbeing, make no mistake: I still fixate on the lack of storage space, and the fact that I can't park a car in our garage. Ever. And there's always the danger I'll knock over a Batman bobblehead when I retrieve a pizza from the freezer (one of the few non-toy items in our garage). But at least Brandon can control his collection, and maybe multiple aspects of his cognitive health, even if he can't control family chaos. D

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