

# Learning to Imagine

Reviewed by Josh Trapani<sup>6</sup>

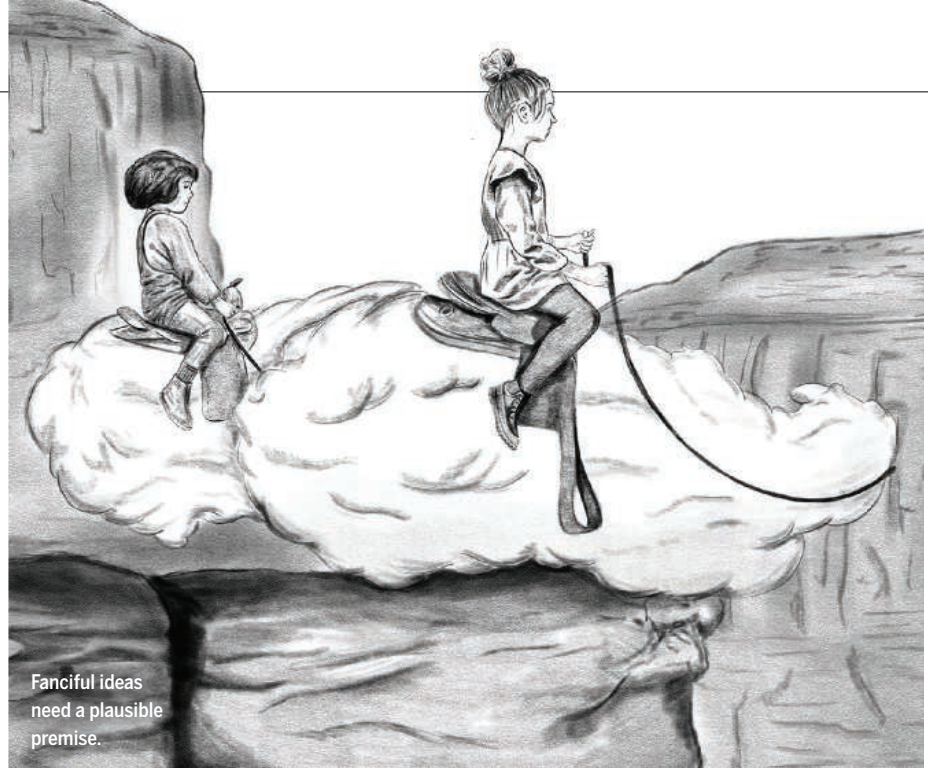
Playing with my 5-year-old during pandemic isolation, I sometimes uncharitably wondered: Why are her made-up games so dreadfully boring? In *Learning to Imagine*, psychologist Andrew Shtulman calls it a myth that children are unbridled fonts of imagination. To the contrary, the more we learn, the more imaginative we can become. Kids, he argues, fail to conceive of obvious possibilities. They enforce strict rules bound by limited knowledge of physical and moral laws and prefer imitation to novelty.

To marshal evidence for this argument, Shtulman explores mechanisms for expanding imagination. Without exposure to the testimonies of others or new tools and technologies, people may reject plausible ideas out of hand, he maintains. Lord Kelvin, for instance, famously denied the possibility of “heavier-than-air flying machines” less than 10 years before the Wright brothers created one. Abstract principles, like those so influential in science and ethics, also bolster imagination. For example, sexual selection explains traits that other theories—natural selection included—cannot. Finally, imagination grows through exploring alternative models of the world, as in playacting, fiction, or religious faith. Across all of these examples, expanding imagination requires building closely on what people already know.

Perhaps counterintuitively, kids relate best to realistic stories. For instance, Walt Disney’s earliest cartoons were chaotic and surreal. Only when his animations became “plausibly impossible” did they garner mass appeal. Many fictional worlds, from Middle Earth to Hogwarts, rely on plausible impossibility.

Shtulman ably and incisively navigates this vast, fascinating terrain. *Learning to Imagine* never drags or gets mired in jargon. Allusions to pop culture help: from Santa Claus to Elizabeth Holmes, from the Beatles to *The Princess Bride*. I wish, however, that there had been more focus on what these findings mean. If education helps rather than hinders imagination, how do we optimize it? Shtulman advises: “engage with, and learn from, the collective knowledge of other people.” AI programs like GPT take that approach, educating themselves on massive datasets.

“Be like GPT” is not the most heartening message. But while people cannot soak up



gobs of data like AI can, human imagination is communal and collaborative. That, at least, is something all of us—5-year-olds and their dads alike—have over the chatbots.

**Learning to Imagine: The Science of Discovering New Possibilities.** Andrew Shtulman, Harvard University Press, 2023, 352 pp.

## Of Time and Turtles

Reviewed by Rhema Bjorkland<sup>7</sup>

While turtles have the largest fan base of any reptile group, their shrinking habitats are increasingly dissected by development and roads, making injuries and death major threats. When combined with unintended capture in fishing gear, garden-variety thoughtlessness, and old-fashioned cruelty, the result is that many turtle species are now imperiled in the United States and globally.

In *Of Time and Turtles*, naturalist Sy Montgomery describes her experience as a volunteer with the Turtle Rescue League in Southbridge, Massachusetts. The book seeks to connect the healing experienced by staff and volunteers with the recovery of turtles. Against the backdrop of her 60th birthday, the COVID-19 pandemic, and the political and social turmoil of 2020 and 2021, she turned to turtles “to show me the path to wisdom and how to make my peace with time.”

Montgomery accurately describes the

long and exhausting days that turtle rehabilitation specialists and researchers put in during nesting season, a time when turtles are most mobile and at risk. Rescuers and rehabilitators respond to huge volumes of rescue calls during this period and move to protect vulnerable nests and eggs. It is immensely difficult and emotionally exhausting for rescue staff and volunteers to see, treat, release, and—in many cases—bury their turtle charges.

Montgomery’s documentation of the almost miraculous ability of turtles to recover from injuries that would doom most other vertebrates is not exaggerated. This resilience is the foundation for the Turtle Rescue League founders’ creed to “Never give up on a turtle” and the source of their enduring belief in saving them, one shattered shell at a time.

The book captures the surprisingly spirited interactions that turtles display with humans, and Montgomery sheds light on how and why humans who interact with turtles often come to feel like the creatures are family. Yet the anthropomorphism she employs is at times distracting and ultimately does the turtles a disservice. Their chelonian persistence is sufficiently awe-inspiring without characterizations that seek to imbue them with human qualities.

**Of Time and Turtles: Mending the World, Shell by Shattered Shell.** Sy Montgomery, Illustrated by Matt Patterson, Mariner, 2023, 304 pp.

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