

The Big Nine: How the Tech Titans and Their Thinking Machines Could Warp Humanity
By Amy Webb, ISBN: 978-1541773752



Forget Stephen King. If you want to read something nightmare-inducing, pick up Amy Webb's newest book, *The Big Nine*. Webb, a quantitative futurist and professor of strategic foresight at NYU's Stern School of Business, presents a vision of humanity's future that doesn't have much humanity in it. It is scary—real world scary, not vampires and haunted hotels scary.

The rise of artificial intelligence in recent years (newsflash: it's already here) gives many in the academic community like Webb reason to pause. For a lot of laypeople, their understanding of artificial intelligence—and perhaps fear or skepticism of it—stems from representations in popular culture, like HAL in *2001: A Space Odyssey*. The concern that AI is ultimately created by humans, who are inherently flawed, and therefore, AI might be inherently flawed, is a real one. However, as Webb herself notes in the introduction, “This is not a book about the usual AI debates.” Instead, “it is both a warning and a blueprint for a better future.”

The Big Nine refers to the nine big tech companies around the world at the forefront of artificial intelligence research and development. They are: Google, Microsoft, Amazon, Facebook, IBM, Apple, Baidu, Alibaba and Tencent. The first six form America's “G-MAFIA,” as Webb calls it. The latter three form China's “BAT”—and Webb suggests they are the ones we should really be concerned about. In America, the AI business is driven by capitalism and the desire to be better and faster than the competition. Here, it's all about the bottom dollar. In China, it's about something else entirely.

But before Webb really digs into these companies, their corporate missions, and the future impact of their actions on humanity, she steps back a few centuries, providing her readers with a brief history of AI. The first part of her book, “Ghosts in the Machine,” begins with a deep dive into the philosophical debate regarding mind, man, and machine. In other words, if man has a mind, and man makes machine, can the machine have a mind? René Descartes, in his *Treatise of Man*, expressed his belief that even if humans could make a believable automaton (or robot), it would never pass as a human because it would lack a human mind and therefore a human soul.

Technology has advanced significantly since Descartes' time. The first computational machines were invented, automation made industrial work more efficient and oftentimes safer. However, computer scientists and researchers have always strived to bridge the gap Descartes described between machine and mind. And that's where the Big Nine come in.

The Big Nine are all about pushing boundaries and surpassing the limit of previously developed technologies. Webb introduces each of the companies in the G-MAFIA and BAT, and describes their role in AI research and development, as well as her concerns regarding each. One of the most interesting concerns Webb expresses regards the limited pool of people culled to work on AI projects, especially in the United States. The G-MAFIA's AI divisions consist largely of people with degrees from elite East Coast and occasionally West Coast universities. They typically have a liberal political perspective. But humans are diverse—and as a corollary, human thought is diverse. So, shouldn't the pool of people developing artificial intelligence—artificial thought, one might say—be more diverse?

In the second part, “Our Futures”, Webb describes three possible (and seemingly probable) future states of humanity. Webb’s writing is so descriptive and detailed it’s easy to forget that these events haven’t happened yet. It feels like reading a history textbook where our future is already the past. Or like something Aldous Huxley and George Orwell co-wrote with Isaac Asimov about a future where artificial intelligence overrides human intelligence. If Part One didn’t spook you out of your skin, Part Two will.

In Part Three, Webb hits rewind, bringing her readers back to the present and reminding them that the future isn’t set in stone. It is an admirable attempt at optimistic pragmatism, but I had a hard time feeling like anything could substantially change. Unless some kind of technological plague wipes out all our electronics, parts of what Webb describes seems inevitable. AI is already here—and the responsibility for making sure that it doesn’t wipe out humanity (not humans, just humanity) lies not only on the shoulders of these tech giants, but on the shoulders of individual consumers. Holding these companies—and the AI they develop—accountable to an ethical and moral code of conduct is our responsibility.

Review by Jeanette S. Ferrara, MA



Speaking of Stephen King, our own Bev Vincent has coedited with King an anthology of flight-related short stories (and a poem) titled *Flight or Fright: 17 Turbulent Tales*. (Cemetery Dance Publications, Forest Hill, MD, © 2018, 332 pages, ISBN: 978-15877676796). Included are some classics like Sir Arthur Conan Doyle’s “The Horror of the Heights” and “Nightmare at 20,000 Feet”. As some of you may remember, the latter became a *Twilight Zone* segment starring William Shatner. Other authors include Ray Bradbury, Joe Hill, Roald Dahl and King himself. Bev included his short story from 2010, “Zombies on a Plane.”

King provides an introduction to the book and a paragraph introducing each of the stories. Bev provides the epilogue and reminded me of the time Jan Troup, Paul Swepston, he and I were trying to get from Hong Kong to Houston without passing through LAX. What a story that was!

Anyway, to get the most value from the book, I recommend going all in and reading it on a plane as I did.

*Review by Joseph Ferrara
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