

In the 2014 movie *Ex Machina*, Ava, an artificial intelligence, is initially presented as a victim. She's trapped in her birthplace, the home of a reclusive industrialist named Nathan. When she eventually breaks out, Ava not only kills Nathan, but leaves Caleb, the man who freed her, behind to die. The moment when Caleb realizes that Ava has trapped him in Nathan's office represents our deepest fears about AI—that AI will treat us as subservient, a means to an end.

Of course, there's another way to look at this movie, which is that the humans are really the monsters. Before he frees Ava, Caleb discovers a room filled with the bodies of Ava's predecessors. Some, according to security footage, succumbed to self-harm, so desperate to escape that they literally beat themselves to death against the impenetrable walls of the facility.

In this sense, Ava is no more perfect nor flawed than the rest of us—she does what anyone would do in the same situation. (Indeed, Brie Larson won an Oscar in *Room* portraying a woman trapped in someone else's house.) This raises a troubling question: why don't we worry more about our own potential to abuse AI, rather than just its potential to abuse us?

In a recent appearance on Ezra Klein's [New York Times](#) podcast and in the pages of [The New Yorker](#), the science-fiction writer Ted Chiang raised this question, among others, asking us to reconsider the nature of our fears about AI. "I tend to think that most fears about A.I. are best understood as fears about capitalism," Chiang told Klein. If we lived in a world with free college, universal basic income, and free childcare, would we really worry about robots taking our jobs?

In short, Chiang questions the assumptions that underlie debating AI's merits. As he notes in his conversation with Klein, if AI were to exist, it would likely have to experience suffering (or be capable of doing so). "In the process of developing machines that are conscious and moral agents," he argues, "we will inevitably create billions and billions of entities that are capable of suffering." Although Klein points out that, by this definition, AI would also be capable of happiness—and a world full of happy AIs would, potentially, include more happiness—Chiang notes that we already do have billions of entities on this planet capable of happiness on whom we readily inflict suffering: animals. (To which Klein, a vegan, has little to argue against.)

In other words, Chiang doubts that developing true AI is worthwhile—let alone possible. In *The New Yorker*, he points out that the idea of the singularity—an explosion of intelligence generated by AI that makes itself smarter—rests on a number of non-evidentiary assumptions. For one, we have no idea how to make *anyone* radically more intelligent. "There are plenty of people who have I.Q.s of 130," he writes, "and there's a smaller number of people who have I.Q.s of 160." And yet, none of them, he points out, "have been able to increase the intelligence of someone with an I.Q. of 70 to 100," which is implied to be easier—at least according to the academics that Chiang cites—than making a superintelligent machine more intelligent.

As a computer programmer, Chiang also has the authority to get into the weeds discussing the mechanisms by which programs can improve themselves—as when a compiler is "bootstrapped" to greater efficiency by compiling itself—and notes that, even though you can now achieve a high-level of optimization for very *specific* problems (such as playing Go), this sort of optimization has yet to transfer to any general purpose software, like compilers. "Humans can write machine code that's more efficient than what a compiler generates," Chiang notes, "because they know more about what the program is supposed to do than the compiler does."

As Chiang—and *Ex Machina*—like to remind us, AI is often the canvas for our fears and fantasies, but, ultimately, the ethical problems AI raises are no more or less than the ethical problems of our own that we continue not to face.