



# Utopia Rising

Brian David Johnson, *Intel*

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**Utopian science fiction prototypes might not actually be about the world that we want to live in, but rather the people we want to be.**

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**I** started this speaker series to flush out the geeks here at USC,” Henry Jenkins said into the microphone with a wicked grin. “I figured if I brought out Cory Doctorow and Brian David Johnson, we would have a great conversation about the uses and abuses of science fiction as well as some fantastic geek bait.”

And that’s how the Three Geeks event got started in the basement auditorium of the University of Southern California’s Annenberg School of Communication. Jenkins, who has been rightly called the Marshall McLuhan of the 21st century, invited activist and science fiction author Cory Doctorow and me for an evening conversation about science fiction, technology, and culture. The academic (Jenkins), the activist (Doctorow), and the futurist (me) explored the sometimes geeky details together on stage.

“I figured if the three tenors could go on tour,” Jenkins said, explaining the title of the speaker series, “then we could do a three geeks version.”

## QUESTIONS FROM THE AUDIENCE

I’ve spent much of 2013 traveling to schools and universities to talk about science fiction prototypes.

Typically, I stand in front of a class or a gathering of students and talk about the process and how different people all over the world have used it to explore the human, cultural, ethical, and business implications of science and technology. (By the way, I also talk about this column in *Computer*, telling my listeners about the subjects I cover as well as the responses and letters I get from you, dear reader. Those responses are the most valuable and enjoyable part of writing this column, so please keep them coming!)

The end of each talk always includes a question-and-answer session, which is the liveliest part of the event and something I look forward to. Along with the general questions about the future of technology, there’s always one person who wants to talk about the technological singularity and when the robot apocalypse is going to happen. When will the robots/computers rise up and become our overlords? (My answer, in short, is that it’s not going to happen—I make robots, and it doesn’t work like that. But it’s always entertaining to imagine, “What if ...?”).

Another subject that also comes up quite a bit is the idea of dystopias and utopias. Science fiction prototypes embrace the idea that the

future is not an accident. It isn’t some fixed point on the horizon—the future is made every day by the actions of people. And because of that, if we’re going to build the future, we really need to have a vision for what we want that future to be. It would also help to have an idea of the various futures we want to avoid.

These two questions are at the very heart of the science fiction prototyping process. We don’t shy away from dark visions of the future (“Secret Science Fiction,” *Computer*, May 2013, pp. 105–107; [www.computer.org/csdl/mags/co/2013/05/mco2013050105.html](http://www.computer.org/csdl/mags/co/2013/05/mco2013050105.html)). Quite the contrary, we need to explore the dark potential of the science, technology, and businesses we’re developing so that we can chart what we do and don’t want them to become.

Science fiction in particular lets us explore these futures, with utopia and dystopia acting as the yin and yang of the fictional world. Utopias capture the grand expanse of our dreams, the absolute best thing that could happen, and dystopias explore the dark landscape of our nightmares, the absolute worst.

In the history of science fiction, the volume of stories that falls into



## TO READERS

I'd love to hear from you! What role does imagination play in your research and development? Was science fiction your inspiration to become an engi-

neer? Does science fiction drive you today?

Send your science fiction prototypes to [brian.david.johnson@intel.com](mailto:brian.david.johnson@intel.com).

the dystopic column far outweighs the small pittance comprising the utopias. I often get that question: Why are science fiction visions of the future so dark and negative? From *2001: A Space Odyssey* to *Blade Runner* to *Minority Report*, it seems that all science fiction creators are obsessed with the negative, and the public loves it! But why aren't we just as fascinated by visions of a bright and happy future?

The short answer is that a bright and happy future is really boring—it's bad story telling. The main architecture of a good story goes like this: a real PERSON in a real PLACE faces a big PROBLEM. Fiction (films, stories, comics, games, and even art) thrives on conflict. That's what makes a good story. When bad things happen, it's interesting to see how people react.

If you had a main character who wakes up and has an awesome life—great job, perfect family, and everything goes her way all day—it's deeply uninteresting from a plot point of view and makes people hate that character. Nobody likes to hang out with people whose lives are awesomely awesome, nothing ever goes wrong, and everything is perfect—perfect is boring. Those people come off as annoying and clueless about the real world.

Think of your favorite science fiction story—I bet it involves bad things happening to good or at least likeable people. Dystopias let us spend time with our demons to imagine a world that might be different than the one we fear.

## MY DYSTOPIC 20TH CENTURY

Science fiction author Brian Aldiss made a name for himself by writing challenging and engaging science fiction in the 1960s. He became famous for his award-winning collections *Hothouse* (1962 Hugo Award) and *The Saliva Tree* (1966 Nebula Award), but today he's usually remembered for penning the short story "Supertoys Last All Summer Long" (1969), which became the movie *A.I. Artificial Intelligence*. (Note: the "Supertoys" stories are worth reading from a science fiction prototyping point of view. They describe a rich and realistic world in which complex people interact with futuristic and flawed technology.)

What many people don't know about Aldiss is that in 1973 he wrote a comprehensive and opinionated history of the science fiction genre called *Billion Year Spree: The True History of Science Fiction*. Over the years, he has continued to update and revise the volume with coauthor David Wingrove, retitling it *Trillion Year Spree: The History of Science Fiction* in 1986. The authors form an interesting idea about the fuel that powered most of the 20th century's dystopian fiction:

Western society is still liberalizing itself, tortuous though the process is (and threatened all the while). We used to hang people for stealing bread; now we pay unemployment benefits. We used to allow children to be used as slave labour; now we are extending the school-leaving age. We used to treat as criminal people who were merely

sick. We may have many hang-ups, but socially we are more enlightened than we were at the beginning of the century.

This moral progress comes as a result of scientific developments—a positive thing science does, often forgotten in a time when science's failures claim our attention. Human dignity does not go with an empty stomach, and it is science which feeds more mouths than ever before. The biological and biochemical springs of human action are still being examined; we can only say that they seem to undermine an authoritarian view of government, and equally to make moral judgments of the old kind irrelevant. The double helix of heredity may prove to be the next politico-religious symbol after the swastika.

Because this more understanding or science-based attitude has to fight its way to general acceptance—and has a painfully long way to go—we can expect to find it worked out in novel form, filtered through various aspects by various minds.

All these [dystopian] novels, whatever else they are, treat the predicament of the individual in societies that represent varying degrees of repression...the authors are searching for a definition that will stand in the terrifying light of twentieth-century knowledge.

According to Aldiss and Wingrove, all the best-known dystopias of the 20th century were a way for authors and the rest of us to play out our anxieties as the world moved from the rural to the urban, from superstition to science, and headed into a future that envisioned mass mechanization, government rule, and a very different role for the individual in society.

From Jack London's *The Iron Heel* (1908—usually cited as the first modern dystopia) up through Aldous Huxley's *Brave New World* (1932), George Orwell's *Nineteen Eighty-Four* (1949), Ray Bradbury's

*Fahrenheit 451* (1953), and Philip K. Dick's *Do Androids Dream of Electric Sheep?* (1968), this tradition continues today with Suzanne Collins's wildly popular *The Hunger Games* trilogy (2008-2010). But what do the dystopias of the 21st century look like? Are we still wrestling with the same demons, or do we need a new dystopia for our new century? (Send me your thoughts. ... I'm still thinking about it.)

## A UTOPIA FOR THE 21ST CENTURY

That night on stage at USC, the topic of utopias kept coming up, like a strange intellectual virus that seemed to infect everyone's questions and thoughts. It's always hard to talk about utopias—I'm an optimist, so saying that out loud just feels weird. I genuinely believe that the future will be great because people build the future, and, really, why would we build an awful one? Yet talking about pure utopias is difficult because they're kind of boring and there aren't a lot of good examples of them.

"We need utopias just like we need dystopias," I said in front of the USC audience. "But it's hard to stomach a world where everything goes right. It makes utopias hard to write and read." Doctorow made a face that indicated he didn't agree, and that always makes for a good conversation.

"You don't agree?" I paused.

"No," he said, "I don't agree with your definition of a utopia. A utopia isn't a story where everything goes right and people's lives are awesome. A real utopia is in the real world where things go wrong and bad things happen, but what makes it a utopia is how people react to the world around them."

"What do you mean?" I pushed as Jenkins listened.

"A utopia is created in how people react to the real world. It's a place where when the world is going to

hell and everyone expects people to be at their worst, people turn around and do their best," Doctorow explained. "It's a world where when a major hurricane hits an American city, people don't start looting and killing each other, but actually go down the street and check on their neighbors. Dystopian fiction like Cormac McCarthy's *The Road* tells us that we're all just a massive power outage away from killing and eating our neighbors. I don't agree that we're all a half-step away from fulfilling our worst nightmares when the slightest adversity hits."

That night, my entire view of utopias changed, broadened, and became much more meaningful. No longer were utopias a candy-colored landscape of happiness, now they were real tools to imagine how real people might show the better side of themselves. To watch the event, visit <http://vimeo.com/81120151>.

**U**topian science fiction prototypes might not actually be about the world that we want to live in, but rather the people

we want to be. We can envision our better selves living in the reality of the world that we're going to inhabit through science fiction prototypes that look beyond the dystopic. **■**

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