

Would you like to know what's in our future? What's going to happen tomorrow, next year, or even a millennium from now? Well, you're not alone. Everyone from governments to militaries to industry leaders do, as well, and they all employ people called futurists who attempt to forecast the future. Some are able to do this with surprising accuracy. In the middle of the 20th century, a think tank known as the RAND Corporation consulted dozens of scientists and futurists who together forecast many of the technologies we take for granted today, including artificial organs, the use of birth control pills, and libraries able to look up research material for the reader. One way futurists arrive at their predictions is by analyzing movements and trends in society, and charting the paths they are likely to follow into the future with varying degrees of probability. Their work informs the decisions of policymakers and world leaders, enabling them to weigh options for the future that otherwise could not have been imagined in such depth or detail. Of course, there are obvious limits to how certain anyone can be about the future. There are always unimaginable discoveries that arise which would make no sense to anyone in the present. Imagine, for example, transporting a physicist from the middle of the 19th century into the 21st. You explain to him that a strange material exists, Uranium 235, that of its own accord can produce enough energy to power an entire city, or destroy it one fell swoop. "How can such energy come from nowhere?" he would demand to know. "That's not science, that's magic." And for all intents and purposes, he would be right. His 19th century grasp of science includes no knowledge of radioactivity or nuclear physics. In his day, no forecast of the future could have predicted X-rays, or the atom bomb, let alone the theory of relativity or quantum mechanics. As Arthur C. Clarke has said, "Any sufficiently advanced technology is indistinguishable from magic." How can we prepare, then, for a future that will be as magical to us as our present would appear to someone from the 19th century? We may think our modern technology and advanced data analysis techniques might allow us to predict the future with much more accuracy than our 19th century counterpart, and rightly so. However, it's also true that our technological progress has brought with it new increasingly complex and unpredictable challenges. The stakes for future generations to be able to imagine the unimaginable are higher than ever before. So the question remains: how do we do that? One promising answer has actually been with us since the 19th century and the Industrial Revolution that laid the foundation for our modern world. During this time of explosive development and invention, a new form of literature, science fiction, also emerged. Inspired by the innovations of the day, Jules Verne, H.G. Wells, and other prolific thinkers explored fantastic scenarios, depicting new frontiers of human endeavor. And throughout the 20th century and into the 21st, storytellers have continued to share their visions of the future and correctly predicted many aspects of the world we inhabit decades later. In "Brave New World," Aldous Huxley foretold

the use of antidepressants in 1932, long before such medication became popular. In 1953, Ray Bradbury's "Fahrenheit 451," forecast earbuds, "thimble radios," in his words. And in "2001: A Space Odyssey," Arthur C. Clarke described a portable, flat-screen news pad in 1968. In works that often combine entertainment and social commentary, we are invited to suspend our disbelief and consider the consequences of radical shifts in familiar and deeply engrained institutions. In this sense, the best science fiction fulfills the words of philosopher Michel Foucault, "I'm no prophet. My job is making windows where there were once walls." Free from the constraints of the present and our assumptions of what's impossible, science fiction serves as a useful tool for thinking outside of the box. Many futurists recognize this, and some are beginning to employ science fiction writers in their teams. Just recently, a project called iKnow proposed scenarios that look much like science fiction stories. They include the discovery of an alien civilization, development of a way for humans and animals to communicate flawlessly, and radical life extension. So, what does the future hold? Of course, we can't know for certain, but science fiction shows us many possibilities. Ultimately, it is our responsibility to determine which we will work towards making a reality.