



Theme Essay

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“The Humanities” as an academic discipline is the study of the entire range of activities in which humans engage. It is particularly concerned with how those activities ensure the propagation of human culture (with or without changes) from one generation to the next. In the humanities, we study the many ways that humans learn, express themselves, and communicate ideas, both intellectually and emotionally.

Popular culture and our education systems encourage us to draw a stark line between the humanities on the one hand, and science and technology on the other. But this is a false dichotomy for the simple reason that science and technology are also human activities. They grow out of very human propensities such as curiosity, imagination, and innovation. Humans make and use tools of all kinds. They use reason and experimentation to understand themselves and the world.

The books in this theme offer opportunities to consider the human aspects of science and technology—how these are distinctly human activities and how they inform us about who we are, how our bodies work, where we come from, where we belong in the universe, and what we might become.

In asking who we are, *Born in Africa* describes the quest for human origins, while *Mind Fixers* examines the fraught but useful attempts by science to address issues of mental health.

The Lives of a Cell and *A Crack in Creation* take us inside the human body at the cellular level, exposing us to technologies and understandings about the sub-microscopic underpinnings of all living things and the ethical questions our new knowledge and technologies raise. *The Immortal Life of Henrietta Lacks* invites us to consider the ethics of how we acquire such knowledge.

We have long considered ourselves to be separate somehow from the other living things on the planet, yet as our knowledge of plants and animals grows, we realize that their lives are far richer and possibly more “human” than we might have imagined. *Animals in Translation* is an extensive overview of animal qualities—such as emotions and motivation—that have been considered to belong to humans alone. *Mama’s Last Hug* turns a similar lens on our primate cousins and asks us to consider how they might be a whole lot more like us than we might have thought. *Finding the Mother Tree* provides an opportunity to marvel at the underground workings of a forest and the amazing evidence that shows how plants communicate, share, and remember. *The Botany of Desire* will cause us to wonder if plants can influence our behavior much more than we might have thought.



In *A Briefer History of Time*, we are invited to learn about humans' centuries-long quest to understand the universe in which we live, its history and future, and the fundamental laws that govern the behavior of all matter, including that from which we are made. With the possibility of that understanding in mind, *The Physics of the Impossible* takes us on a journey through the technologies—many of them inspired by science fiction—which might or might not become part of our daily lives at some time in the future.

The second half of the 20th century brought an explosion in computer technologies, especially those we have come to call “artificial intelligence.” *Alone Together* is a study of how such technologies could change human nature and might already be doing so. *Klara and the Sun*, a work of fiction, gives us a glimpse into a possible future world—neither explicitly dystopian nor utopian—where many of today's possibilities for artificial intelligence have become real.

The frightening prospects of climate change are difficult for all of us to wrap our minds around. Will science and technology save us? Can they show us how we ourselves must change? *The Control of Nature* tells four different stories of people marshalling technology on a massive scale to avert huge natural disasters, sometimes successfully and sometimes not. *The Water Knife* is a fictional thriller of the future of water in the American West which will cause us to wonder if we are reading a tale about the dawn of a dystopian future or the harsh realities that will usher in tremendous changes in the way humanity behaves.

The wide variety of perspectives, information, and imagination in these readings are likely to spark interesting discussions of how science and technology affect our lives and our understanding of what it means to be human. At the same time, we can consider how the processes of science and technology—, as invented and performed by humans—are themselves influenced by “human nature.” In every case, you are invited to engage in the decidedly human activities of amazement, curiosity, and understanding.