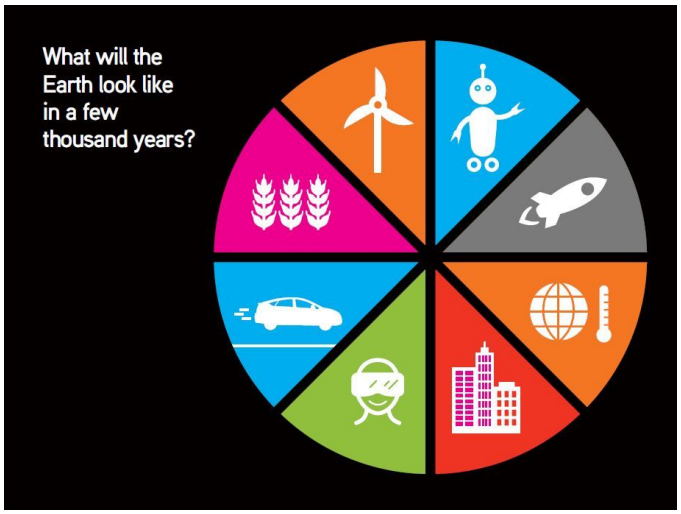
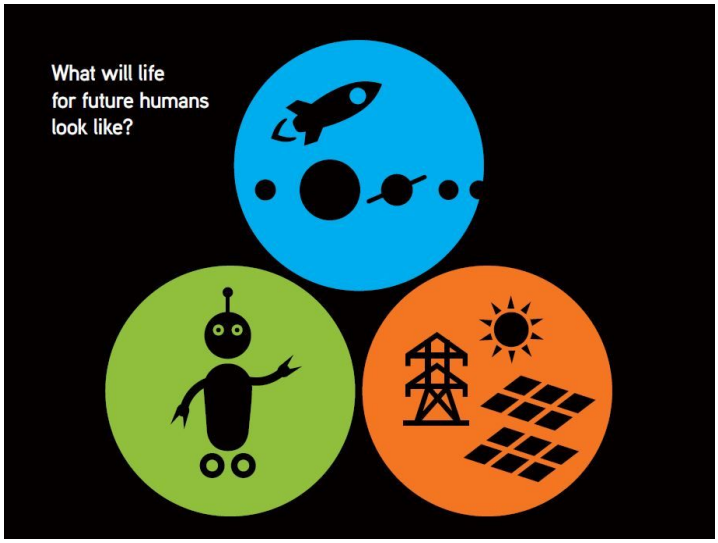
Let's be optimistic and imagine a world in which the quest has succeeded. Threshold 9 host humans are flourishing within a sas been successfully negotiated and mtable global society based on a more sustainable relationship to the biosphere. That means human societies may be around for several thousand years, perhaps even for hundreds of thousands of years.



Speculating on what comes next takes us into the terrifying, unpredictable, but perhaps Utopian world of the middle future. At this scale, our models are really guesses. Their chances of being right are about as great as nineteenth-century pictures of aristocrats in checkered suits riding bicycles on the moon. The best we can do is run through a list of some possibilities based on trends we can already see.

Will we see the emergence of global governmental structures that partially superseded nation-states and finally eliminate the threat of nuclear war? Will fusion power provide a new energy bonanza? If so, will we use it with greater sensitivity to its disruptive impacts on the biosphere, as a tool that can lay the foundations for a good life for all humans? Or will we find ways of controlling even vaster flows of energy to create civilizations of unimaginable complexity? A Russian astronomer, Nikolai Kardashev, has argued that if there are other civilizations capable of something like collective learning, many will have learned to capture all the usable energy of their home planets, while some may have learned to manage all the energy of their solar system, and some may even have learned to tap the energy of entire galaxies.

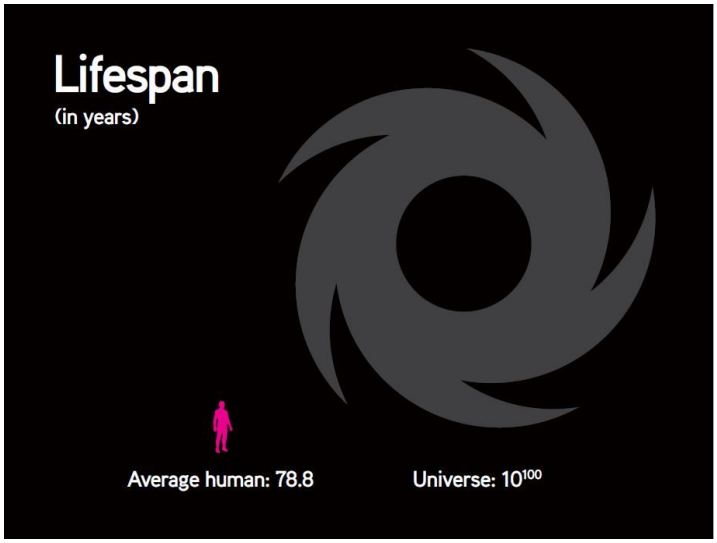
Will our descendants migrate beyond Earth? Will they start mining asteroids or setting up colonies on the moon or Mars? Or (if we look far enough ahead) on life-friendly planets around nearby star systems? Will we engineer new life-forms, new, energy-efficient food crops, or microbes that can treat diseases or check cancers? Will we engineer tiny machines, nano-surgeons, that can enter our bodies and fix broken organs, or build buildings without supervision as they follow electronic architects' designs? Will we build machines much cleverer than us? If so, can we be sure we will keep control of them?



Will we build new humans? Will micro- and macro-enhancements make us bionic, give us longer and healthier lives, and eventually turn us into something different, something trans-human? Will new technologies allow humans to exchange ideas, thoughts, emotions, and images instantaneously and continuously, creating something like a single, vast global mind? Will the noosphere partially detach itself from us humans and turn into a thin, unified layer of mind hovering over the biosphere? When, in all of this, will we decide that human history (as we understand it today) has ended because our species can no longer be described as Homo sapiens?

Will new science transform our understanding of

ourselves and the universe, turning today's origin story inside out? Comparing today's origin stories with those of one hundred years ago suggests that this could happen very soon, and many times.



And, of course, there are also the unknown unknowns that could switch future tracks in a second or two. Our science and technology may already be good enough to see asteroid impacts coming and perhaps do something about them. But there may be other unpredictable catastrophes, such as… encountering other life-forms. If we do meet them, will we peer at them through a microscope (or bionically enhanced eyes)? Or will they pluck us up with huge tweezers, put us in vast petri dishes, and peer at us through microscopes?

"Beyond Humans: Millennial and Cosmological Futures" is an excerpt from "Where Is It All Going?," chapter 12 of Origin Story, by David Christian.