

UNKNOWN'S PODCAST

Clip from Episode 8: The Future of Technology Transcript

Host: David Christian, historian, founder of Big History, and emeritus professor at Macquarie University, Sydney, Australia.

Guest: Kevin Kelly, futurist and Senior Maverick for Wired magazine.

Optimism and a 100-Year Future

David Christian: Most of the really big mysteries sit in the future. So, I wonder if I can take you into the future, which is where we can be certain we don't really know what we're talking about. If we move to larger time scales, say thirty years or a hundred years, I believe you're spending a lot of time at the moment thinking about the hundred-year time scale. Can we move on to the scale of a hundred years, and then I'd like to push you to even longer time scales, a thousand years, a million years? What sort of technologies do you see emerging? And a related question, which is, are you broadly optimistic about the future?

Kevin Kelly: Let me start with the broad one, I am radically optimistic. I'm probably the most optimistic person you will meet, and that's because I deliberately choose to be more optimistic every day. Optimism is a choice; it's not necessarily a temperament, so I choose to be more optimistic. And I choose to be optimistic because everything good in this world today, if we look around your room, wherever you are, whatever listener, look around the room, and all the good things that you might find in your room, were all made by optimistic people who believed in something that few other people believed could happen. So, the world has been made and shaped by the optimists of the past, and it will be the optimists of the future, who believe in things, that are going to shape the future, and I want to be one of those. So that's why I choose to be optimistic, because it requires imagining something first, in order to make something complicated happen. You have to imagine it and believe that it can be possible; otherwise, it doesn't happen. So yes, I am optimistic, in the hundred-year frame, let me say one thing that may be shocking, which is that most of the things in a hundred years are going to be old stuff. It's going to be the same stuff, I would say, you know, 95% of the stuff in a hundred years will be exactly the same stuff we have right now. Most of your brain and my brain is reptilian. There's only a very thin layer of modern conscious layer; it's a small percentage of your brain that is different from even the primate brain. And so, most of the stuff in the future is going to be, I would say, if you walked into a city in a hundred years, it will look very familiar. Probably a lot of the same buildings still there, probably the same streets, probably the same plumbing. We have this idea of pace layers, that things change at different rates, but the infrastructural things change very slowly. And most of the world is infrastructure that we don't see, and so technologies succeed by becoming invisible, and most of the stuff in our lives is invisible because it works. Or only makes visible when it breaks. So, let me just say that in a hundred years from now, most of the stuff is going to be very similar to what we have now. There will be

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5% different, and that 5% is going to be very meaningful to us, it's going to be very important. The way I see it is like, you know, you've heard of Maslow's hierarchy of kind of the basic needs and things. Well, most of the things that are changing are at the higher level. They're like: what it means to us, what's our identity, how do we spend our day? Whereas the basic support systems are going to be pretty much the same. There will be innovations here and there, in them of course, but they aren't going to be revolutionary. We had the industrial revolution, they already happened, all the atoms have been rearranged. Most of the changes in the future are going to be in the intangible arena. Things that are much more intangible. Things like your health, your communications, your idea of how you spend your time; it's in the intangible. Of course, we're going to have, you know, robots and others doing that work, but the real changes are going to be in a realm beyond just the rearranging the atoms in the world. So, what do I see in a hundred years? I think things like, let's take agriculture, using biological organisms to take solar energy and turn it into materials, because they can do it on their own. It's like having self-running factories, self-reproducing factories, will be really important still. We'll use technologies to breed better versions of them. We'll use AI technology to make what they call precision agriculture. Most of the work will be done by robots, and they will be attending each plant individually. Each corn plant, out of the zillions planted every year, will be remembered uniquely, and given the right amount of fertilizer and pesticides, whatever it is, for that particular corn plant, so it can maximize its yield. And so, the idea of using solar energy to make stuff, will not go away, but will be much more efficient, much more better. We can use, we can grow other things, besides just food. We can grow fibers, new kind of fibers that were completely engineered from scratch. You know, we can grow materials that we use for construction, in the same way. So that's, in one example, a hundred-year future.