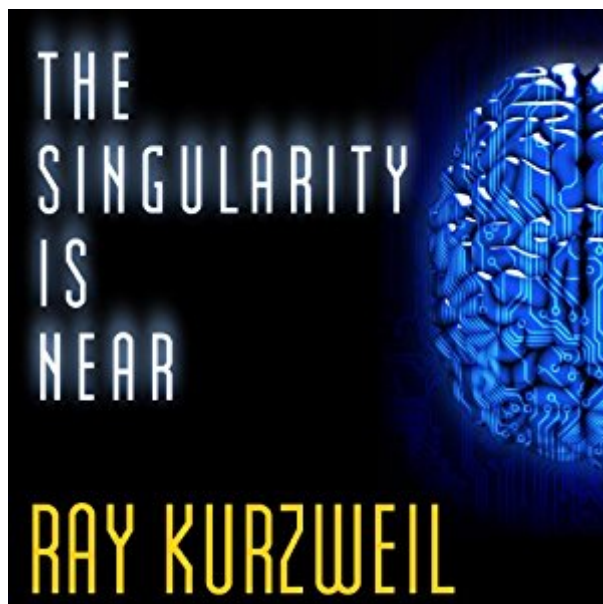


The book was found

# The Singularity Is Near: When Humans Transcend Biology



## Synopsis

For over three decades, the great inventor and futurist Ray Kurzweil has been one of the most respected and provocative advocates of the role of technology in our future. In his classic *The Age of Spiritual Machines*, he argued that computers would soon rival the full range of human intelligence at its best. Now he examines the next step in this inexorable evolutionary process: the union of human and machine, in which the knowledge and skills embedded in our brains will be combined with the vastly greater capacity, speed, and knowledge-sharing ability of our creations. That merging is the essence of the Singularity, an era in which our intelligence will become increasingly nonbiological and trillions of times more powerful than it is today - the dawning of a new civilization that will enable us to transcend our biological limitations and amplify our creativity. In this new world, there will be no clear distinction between human and machine, real reality and virtual reality. While the social and philosophical ramifications of these changes will be profound, and the threats they pose considerable, *The Singularity Is Near* maintains a radically optimistic view of the future course of human development. As such, it offers a view of the coming age that is both a dramatic culmination of centuries of technological ingenuity and a genuinely inspiring vision of our ultimate destiny.

## Book Information

Audible Audio Edition

Listening Length: 24 hours and 44 minutes

Program Type: Audiobook

Version: Unabridged

Publisher: Tantor Audio

Audible.com Release Date: May 5, 2011

Whispersync for Voice: Ready

Language: English

ASIN: B004ZF18PW

Best Sellers Rank: #13 in Books > Engineering & Transportation > Engineering > Bioengineering > Biotechnology #16 in Books > Computers & Technology > Computer Science > Robotics #19 in Books > Engineering & Transportation > Engineering > Industrial, Manufacturing & Operational Systems > Robotics & Automation

## Customer Reviews

Core of Evolution: Information or Empathy ?Kurzweil points to an exponential evolution of

Information technology, whereas religions and philosophies consider the core of evolution being growing Empathy. Is there a contradiction or a complimentary view? Kurzweil brings us to open our minds to an exponential growing (to the second degree) information world, where the singularity point would be reached in 2040. Point at which non-biological intelligence (information) would outgrow the biological information evolution of mankind. Considering that our own biological body would itself be gradually enhanced we would ourselves experience an exponential growing evolution capable to outreach the Universe. But also our human "embodied" self could be maintained alive for an infinite time. Our DNA + brains could be reverse engineered and copied into non-biological bodies (whatever shape they have). But now consider that our physical "three dimensional + time" is itself a creation of our soul which is infinite and part of another dimension that is not limited to the physical world and not limited to its laws governing the physical dimension. If you have difficulty to accept the idea of a "soul", or consider it is just a projection of humans to accept our death as a final end to the existence, then just try to assume something external to this physical dimension created our physical world and all the laws governing it "from the Big Bang to the appearance of Life, Intelligence and the concept of growing Evolution. Kurzweil considers the ultimate evolution being our future ability to outgrow the Universe with Information, and "reduces" our human existence "even if exponentially growing" to information. Even puts the core to our physical world as being information, rather than energy and matter. A very challenging and interesting approach, which must be considered with an open mind. And it does not contradict the vision (or spiritual approach) to evolution whereas a soul is projecting itself to our limited physical world to experience the evolution of mankind empathy. As Jeremy Rifkin points out (The Empathic Civilization: The Race to Global Consciousness in a World in Crisis) the evolution shows an ever growing empathy which itself is linked to growing means of communication and producing/consuming energy. By the way, I'm pointing to Jeremy Rifkin, not as a religious guru but just because he is NOT a religious guru. Rifkin's observation reconciles the core of most religions and philosophical reflexions about the existence and direction of evolution. And Rifkin made no link to the existence (or non-existence) of a soul, it's a link I make personally. Kurzweil forecasts the projection of human consciousness into total virtual reality. But this would only be a surrogate of real life. Our empathy grows through difficult and sometimes painful choices made during our life. The experience of total virtual reality "very convenient to meet with somebody far away" would shield us from these difficult and painful choices. The same way I can be injured and even die in a computer game without being injured in my physical body. If you assume the existence of a soul (again with an open minded approach) then something does survive our

biological existence. That soul decides the major obstacles and encounters it will experience in its chosen (with guidance?) next physical life " call it destiny " allowing the embodied self to make choices during his physical life, each choice bringing him some experience of growing (or decreasing) empathy. So each physical life has a definite reason to be limited in time. We might have made some wrong choices (wrong towards growing empathy) our death allows us then to understand what happened and make choices for the next physical life allowing the evolution towards growing Universal empathy. That means also that a human brain does not contain all the elements contained in the soul. The human brain would then " just " be a relay to our non-physical soul. What is the exclusive part of the soul, not being contained in our brains, is unknown. But at least does limit our exponentially growing information technology to ever copy/backup/replicate a human being as a whole, as the exclusive soul components would be missing. And what happens to a Human body version 2,0 with infinite life extension ? Our soul would be kept imprisoned in a body without the ability to reconsider past choices and bring some new challenges to pursue it's evolution ? No answers, but Kurzweil excellent book at least opens questions about the core of our existence.

A definite must read for those who want to get a glimpse of near future in order to make preparations and logical investments. This book is the new word in many ways it has a messianic nature, it tells us of the great flood and tells us to build boats or get ready to drown. Ray is a magnificent man a certified genius and he shares his projections and grand vision with both positive and negative aspects, nothing gets sugar coated. Read it and get ready

After watching shows like Humans and Westworld as well as hearing futurists and Bill Gates and Stephen Hawkins refer to the Singularity I decided to go to the source. The theme is that the continued exponential growth in GNR (Genetics, Nanotechnology, and Robotics) will lead to intelligence and capability far exceeding that of humans. The argument, backed by charts and data, is compelling and Kurzweil is primarily an optimist. He sees a future where aging, disease, and poverty can be eliminated but, at the same time, is humble enough to acknowledge the dangers and uncertainties. Whether it's resisted or not, whether it looks like Humans or Dark Mirror or not; this future is coming and we'd all be wise to ponder it's implications and join the discussion on how to ensure it's a positive for humanity!

Good evening. You may know me as the genial, white-haired book reviewer, but I once had a secret

identity. I was Doctor D. Filed, the mad scientist, and my job was to introduce children to "the future," around when they were nine years old. You may remember "the future." We would zoom round the galaxy, meeting alien races, living forever, and having robot computers that were smarter than we are. However, all this would happen many years from now, and our great-great-grandchildren's great-great-grandchildren might catch a little glimpse of it. Otherwise the future we ourselves encountered would be just like today, only more so. However, Ray Kurzweil has been doing the math on those last two things, and he has a revised date for when we'll be immortal and have super-smart computers. And his date is . . . 2045. That's right, the year 2045, thirty-five years from now, less than half a lifetime. That means that more than half the people alive today will see that date. And don't take that to be some wishful thinking. Kurzweil has extrapolated the rate of change in technology and biology to arrive at that date. He points out that these technologies improve exponentially. That means that if our technology knowledge doubles every year, we are not going to see twenty times the knowledge in a decade, but two multiplied by itself ten times, or over a thousand times. Kurzweil quotes the Human Genome Project, which after seven years of a fifteen-year process, had completed one percent of its work. However, it finished on time, because technology improved all through that period. His work is meticulously sourced, with many a footnote reference. His charts show that over and over again knowledge takes an exponential course. EDIT: I read recently of a human genome being read in four weeks, and today I hear of someone who did it in a week. Exponential enough for ya? EDIT of EDIT: An ex-ICU nurse told me today (9/9/09) that someone who nursed in an ICU as little as three years ago would have to go through months of training to get up to speed on ICU changes since then. AND THE LAST EDIT: "Complete Genomics has completed 14 genomes since March (20 human genomes in the world have been published), priced at \$5000, and aims to complete 10,000 genomes by the end of 2010." (also 9/9/09, still less than twenty years since the first mapping.) He believes that "the singularity," no matter how far away it seems today, will be here on time. This will mean that some technologies will reach their limits, but new technologies will arise before they're needed. The history of computer technology certainly bears him out. Equally biology is helping us understand the brain, so its re-creation in software is likely to happen. You might think that there is too much to learn about the brain, but it's a reasonably simple machine with complex ways of doing things. So let's just concentrate on the higher powers, rather than reconstructing neurons. To give you an example, for more than a hundred years we have been able to fly. We've had birds around us all through human history, but we didn't copy them. Pretty much all our development has been with fixed- and rotating-wing aircraft being pulled through the air. Our "non-bird" flying has made us superior to birds, but we also have to get up there

and come down safely. Hence a non-neuron brain, provided that it works at a higher level, can replace an incredibly complex series of cells. Kurzweil believes that we'll see advances in GNR, or Genetics, Nanotechnologies, and Robotics. Our DNA will be transformed to make us unable to catch major diseases, we'll have tiny machines inside our bloodstream, and these machines will improve our health from within. The day before I wrote this I read of "bacteria-based computing," and we're already capable of putting together tiny machines atom by atom, so it's not far away. Where does that leave us? Don't look at me - my white hair is a result of being born in World War II. I won't see the singularity - but you might. Many people try to believe that it will never happen as soon as Kurzweil says - but that's like going out in a thunderstorm "because hardly anybody gets killed by lightning." The day will come, because "Objects seen in the future are closer than they appear." When those things happen it will cause a major disruptive force. Some understanding of what's to come makes us more able to judge these technologies when they occur. An unprepared population is likely to be panicked into making a wrong choice. I'm sure your reaction to this news was a kind of fear - when something needs fixing that you thought was OK. Kinda like your first reaction to Global Climate Change. But just as we recognized and now are doing something toward fixing Global Warming, so we can recognize this and discuss it. It's obviously a far bigger problem, but even if the projections are off it's still likely to occur. Most people don't realize that there are more embedded computers than people in the world - chips that run your remote control, your car, and your dishwasher. We are so used to them we don't even know that they are there. Some criticisms of this book are that it's repetitive, but Kurzweil has to show that everything points to it. His background is impeccable, but I wouldn't take dozens of pills as he does, but then I've given up living long enough to see The Singularity. I applaud him for not making the book into some kind of horror story, and his apparent optimism is simply explaining that the process will happen, and there are enough good things to look forward to dealing with it. You may agree with Kurzweil or you may not, but at least you'll know that there is an issue coming up that you'll probably have to deal with. Parts of it may seem unlikely to happen, but you're reading this on a system that has just about all the knowledge in the world, and the half human/half computers will have direct access to it. In fact, we'll invent the last machine we need - the "inventing machine," which will be like the "mathematic machine" we call a computer, but it will invent new things and even improve itself. So don't laugh at the white-haired book reviewer - in the late twenty-first century, and the twenty-second century, and the twenty-third century, this could be you, telling the youngsters how unlimited knowledge and life was once a figment of people's imaginations. And if you have the slightest interest in this subject, buy this book. In 1975 - thirty-five years before now, imagine a book

that told you what life would be like in 2010 - Communism crushed, a computer in just about every home, and all the knowledge in the world on tap. This book is far more important than the 1975 book, and I'll bet you wished you'd read the 1975 book and made a few wise investments. But "The Singularity Is Near" will prepare you for a major coming crisis, and you'd better be prepared.

[Download to continue reading...](#)

The Singularity Is Near: When Humans Transcend Biology Little Humans (Humans of New York Book 2) Super humans, and Super Heroes edition 3: How too Cause Super humans and Super Heroes with Quantum Physics The Rift Valley and the Archaeological Evidence of the First Humans (First Humans and Early Civilizations) The Technological Singularity (MIT Press Essential Knowledge) The Aiki Singularity: Transformative Power Singularity Now! The Artificial Intelligence Timeline: Automation, robotics, tech titans, and their brave new world (September 2017) Artificial Intelligence and the Technological Singularity (Opposing Viewpoints (Hardcover)) Artificial Intelligence and the Technological Singularity (Opposing Viewpoints (Paperback)) Transcendence: The Disinformation Encyclopedia of Transhumanism and the Singularity Best Hikes Near Anchorage (Best Hikes Near Series) Best Hikes Near Phoenix (Best Hikes Near Series) Best Hikes Near San Francisco (Best Hikes Near Series) Best Hikes Near Colorado Springs (Best Hikes Near Series) Best Hikes Near Denver and Boulder (Best Hikes Near Series) Coffee and Coffeehouses: The Origins of a Social Beverage in the Medieval Near East (Publications on the Near East) Best Hikes Near Vancouver (Best Hikes Near Series) Best Hikes Near Atlanta (Best Hikes Near Series) Best Hikes Near Raleigh, Durham, and Chapel Hill (Best Hikes Near Series) Best Hikes Near Cleveland (Best Hikes Near Series)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)