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Right now, we are inventing all these different technologies

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with which we could actually make ourselves superhumans

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with superintelligence.

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The potentials are quite extreme.

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You could eventually have printable noses,

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00:00:15,000 --> 00:00:18,000

ears, lungs, kidneys.

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The big question is immortality.

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Dying, is it something we have to do?

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I'm convinced that the engineers at MIT

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00:00:27,000 --> 00:00:32,000

are looking back into the ancient examples of the gods.

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You've got to wonder, are extraterrestrials somehow guiding us

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00:00:37,000 --> 00:00:40,000

and manipulating us into this new future

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00:00:40,000 --> 00:00:44,000

and this new human that we are destined to be?

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Since the dawn of civilization,

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00:00:47,000 --> 00:00:51,000

mankind has credited its origins to gods

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and other visitors from the stars.

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What if it were true?

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00:00:57,000 --> 00:01:03,000

Did extraterrestrial beings really help to shape our history?

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00:01:03,000 --> 00:01:07,000

And if so, might their ultimate plan be revealed

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00:01:07,000 --> 00:01:11,000

with the rise of the next humans?

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00:01:24,000 --> 00:01:32,000

MUSIC

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00:01:44,000 --> 00:01:49,000

Mountain View, California, August 1962

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00:01:49,000 --> 00:01:52,000

At NASA's Ames Research Center,

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the newly formed Division of Biotechnology and Human Research

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00:01:57,000 --> 00:02:01,000

begins a study on the possibility of exploring space

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with technologically enhanced humans,

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otherwise known as cyborgs.

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Ten months later, they release a report

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called the Cyborg Study, Engineering Man for Space.

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In it, they propose that astronauts

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00:02:18,000 --> 00:02:22,000

will require artificial organs and pharmaceuticals

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00:02:22,000 --> 00:02:26,000

to survive in the harshest environments of deep space

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as we explore beyond our solar system.

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While the program was quickly abandoned

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due to the lack of available technology,

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it helped usher in a new era of scientific research

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focused on augmenting the human species

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00:02:44,000 --> 00:02:47,000

into a new stage of evolution.

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The Transhuman

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Transhumanism is the use of technology by humans

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00:02:55,000 --> 00:02:58,000

to enhance their physical, psychological,

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00:02:58,000 --> 00:03:02,000

and most of all, intellectual capabilities.

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We transhumanists want to use science and technology

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00:03:08,000 --> 00:03:11,000

to self-direct our evolution.

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There are lots of transhumanists now

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00:03:13,000 --> 00:03:15,000

that don't even consider themselves transhuman.

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For example, people who have pacemakers

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00:03:17,000 --> 00:03:20,000

or cochlear implants or hip replacements.

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These are technologies that we're using,

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00:03:23,000 --> 00:03:26,000

and that is beyond human.

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The idea of there being a transhuman

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is actually a very old notion.

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It stems from our longing for immortality,

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so there were attempts to extend human life.

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Transhumanism has been thought of for a very long time

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00:03:42,000 --> 00:03:44,000

throughout mythology.

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00:03:46,000 --> 00:03:49,000

From Gilgamesh's search for immortality

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00:03:49,000 --> 00:03:52,000

to alchemy

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to the search for the fengen of life.

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Really, the quest to overcome what it means to be human,

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00:03:59,000 --> 00:04:01,000

to see if we can live forever,

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00:04:01,000 --> 00:04:04,000

that has been the quest for a very long time.

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Although the notion of modifying the body with technology

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00:04:08,000 --> 00:04:11,000

has been around for thousands of years,

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transhumanists say the 21st century

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00:04:15,000 --> 00:04:19,000

will radically change what it means to be a human.

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When we begin to genetically engineer

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an entirely new generation of humans.

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April 22, 2015.

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Guangzhou, China.

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Geneticists at the Sun Yat-sen University

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make history as the first team in the world

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to genetically modify a human embryo.

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Using a gene editing technique known as CRISPR-Cas9,

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the scientists were able to correct the gene defect

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00:04:57,000 --> 00:05:01,000

that causes beta thalassemia, a blood disease,

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00:05:01,000 --> 00:05:04,000

by snipping out and replacing portions of the DNA

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in the fertilized egg.

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By using a new technology called CRISPR,

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00:05:12,000 --> 00:05:16,000

scientists are able to actually cut into the DNA

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00:05:16,000 --> 00:05:21,000

and replace parts of the DNA with genetically modified proteins.

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This allows us to literally transform who we are.

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When we look at DNA changing,

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00:05:29,000 --> 00:05:33,000

it can be used not just to overcome problems,

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00:05:33,000 --> 00:05:35,000

but to improve your looks,

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00:05:35,000 --> 00:05:38,000

maybe change the color of your hair or your eyes,

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00:05:38,000 --> 00:05:40,000

or perhaps even more importantly,

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00:05:40,000 --> 00:05:43,000

change your intellectual or physical abilities.

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00:05:48,000 --> 00:05:51,000

Will the modification of human embryos

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soon lead to a wave of what futurists call designer babies?

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Children whose physical features and mental capabilities

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00:06:00,000 --> 00:06:03,000

were selected by their parents.

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Many believe that not only is this a possibility,

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but that the very definition of a parent

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may soon change as well.

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UK is on its way to becoming the first country

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to legalize the creation of babies from three different people.

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In a large majority, the House of Commons voted in favor

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of the controversial Three Parent in Vitro Fertilization,

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or TPI VF.

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The British government officially declared it legal,

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00:06:30,000 --> 00:06:33,000

so actual children that have been born

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00:06:33,000 --> 00:06:37,000

that have DNA from three different parents.

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I think it is quite possible in the future

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00:06:41,000 --> 00:06:46,000

that it won't be just two or three parents that a child has,

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but could be any number.

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That sounds like science fiction,

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but it's actually something that Japanese scientists

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00:06:53,000 --> 00:06:55,000

are working on right now.

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And what that would entail is using an artificial womb,

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00:06:58,000 --> 00:07:02,000

actually gestating the child within that artificial womb.

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You can imagine if we can get to this stage,

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00:07:04,000 --> 00:07:06,000

it doesn't matter who the parents are.

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00:07:06,000 --> 00:07:09,000

You could have a community of people with the best genes

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00:07:09,000 --> 00:07:12,000

contributing to making that child,

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00:07:12,000 --> 00:07:15,000

and that is really the future that is in front of us.

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00:07:18,000 --> 00:07:22,000

Is it possible we could synthetically create human beings,

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00:07:22,000 --> 00:07:26,000

picking and choosing genetic traits from any number of donors?

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00:07:28,000 --> 00:07:30,000

Could the characteristics of a person

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00:07:30,000 --> 00:07:34,000

soon be limited only by our imaginations?

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00:07:34,000 --> 00:07:37,000

Ancient astronaut theorists say yes,

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00:07:37,000 --> 00:07:41,000

and suggest an even more incredible possibility

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00:07:41,000 --> 00:07:45,000

that we are not the first to do this.

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Luxor, Egypt.

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Here, in the Deir el-Bahari Mortuary Temple,

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00:07:58,000 --> 00:08:01,000

lies the burial chamber of Hatshepsut,

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00:08:01,000 --> 00:08:05,000

one of the only queens to ever become a pharaoh.

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00:08:06,000 --> 00:08:09,000

And on the frescoed walls of this tomb

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00:08:09,000 --> 00:08:12,000

is a scene portraying Hatshepsut's conception

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00:08:12,000 --> 00:08:15,000

at the hands of divine beings.

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00:08:19,000 --> 00:08:22,000

On the walls of Queen Hatshepsut's Mortuary Temple,

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it says that long time ago,

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00:08:28,000 --> 00:08:32,000

God Eamon came to Hatshepsut's mother, Ahmose,

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00:08:32,000 --> 00:08:35,000

in her sleep, and with the power of God Khanoum,

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00:08:35,000 --> 00:08:38,000

and with the key of Ankh in his hand,

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00:08:38,000 --> 00:08:41,000

he created baby Hatshepsut.

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00:08:44,000 --> 00:08:47,000

He uses the Ankh,

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00:08:47,000 --> 00:08:53,000

that key-shaped tool to give life to create a human.

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Any device that can give life

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00:08:57,000 --> 00:09:02,000

upon something would have to appear as magical.

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00:09:03,000 --> 00:09:05,000

So you have to wonder,

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00:09:05,000 --> 00:09:08,000

who are these gods that they were talking about?

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00:09:08,000 --> 00:09:10,000

What we have in this story is actually

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00:09:10,000 --> 00:09:14,000

the immaculate conception of Hatshepsut.

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00:09:14,000 --> 00:09:16,000

And it is clear that this is the story

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00:09:16,000 --> 00:09:18,000

of an extraterrestrial intervention

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00:09:18,000 --> 00:09:22,000

in the creation of a star child, Hatshepsut.

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So we appear to be dealing with some sort of a technology,

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00:09:25,000 --> 00:09:28,000

a DNA-based technology,

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00:09:28,000 --> 00:09:32,000

that can manifest human bodies or alter human DNA.

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00:09:36,000 --> 00:09:39,000

Kodhatshepsut have been genetically engineered

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00:09:39,000 --> 00:09:42,000

by other worldly beings.

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00:09:43,000 --> 00:09:48,000

And is it possible that humans are just now starting to unlock

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00:09:48,000 --> 00:09:51,000

the incredible potential hidden within us

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00:09:51,000 --> 00:09:54,000

by our extraterrestrial creators,

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as ancient astronaut theorists propose?

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Perhaps further clues can be found

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00:10:01,000 --> 00:10:03,000

in our own attempts,

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00:10:03,000 --> 00:10:05,000

not in creating life,

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00:10:05,000 --> 00:10:08,000

but in reversing death.

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00:10:21,000 --> 00:10:23,000

Song Chen and a team of biologists

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00:10:23,000 --> 00:10:27,000

from the Life Sciences Department at Penn State University

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00:10:27,000 --> 00:10:31,000

reveal research on a cocktail of specialized drugs

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designed to convert non-neuronal cells in the brain,

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called glial cells, into neurons.

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90% of our brain is made up of what's called glial cells.

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These cells are just a support mechanism

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00:10:48,000 --> 00:10:51,000

for the neurons themselves.

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What we can do at the moment

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00:10:53,000 --> 00:10:56,000

is to take glial cells from the brain

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00:10:56,000 --> 00:10:59,000

and to use different chemicals, essentially,

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00:10:59,000 --> 00:11:03,000

to alter the functioning of the glial cells.

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00:11:03,000 --> 00:11:08,000

Chemicals will cause them to become fresh neurons.

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Gong Chen's belief for this research

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00:11:11,000 --> 00:11:14,000

is that things like severe brain trauma,

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00:11:14,000 --> 00:11:16,000

Parkinson's disease, and Alzheimer's

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00:11:16,000 --> 00:11:20,000

could actually be effectively transformed and healed.

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Could degenerative brain disorders

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00:11:27,000 --> 00:11:29,000

like Parkinson's and Alzheimer's

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00:11:29,000 --> 00:11:33,000

be cured by a simple chemical injection?

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00:11:35,000 --> 00:11:38,000

And if so, could we eventually rid the brain

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00:11:38,000 --> 00:11:41,000

of neurological diseases entirely?

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00:11:42,000 --> 00:11:45,000

Transhumanists believe the therapeutic use

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00:11:45,000 --> 00:11:47,000

for this incredible discovery

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00:11:47,000 --> 00:11:51,000

are only a small part of the bigger picture.

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00:11:53,000 --> 00:11:57,000

In the future, we could see using that technology

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00:11:57,000 --> 00:12:01,000

to increase our intelligence to a superhuman state.

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00:12:01,000 --> 00:12:05,000

Now, imagine, because the brain is only 10% neurons,

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00:12:05,000 --> 00:12:10,000

imagine if we could increase the brain's capacity to 35%.

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00:12:10,000 --> 00:12:13,000

That could change everything.

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00:12:13,000 --> 00:12:16,000

I mean, we could become a superintelligent species.

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00:12:18,000 --> 00:12:22,000

Could you, in fact, advance the human IQ,

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00:12:22,000 --> 00:12:24,000

perhaps to such a degree

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00:12:24,000 --> 00:12:26,000

that you might have people walking around now

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00:12:26,000 --> 00:12:29,000

with a 1,000 IQ?

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00:12:29,000 --> 00:12:31,000

Could Dr. Chen's research

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00:12:31,000 --> 00:12:35,000

lead us to an exponential increase of the human intellect?

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00:12:36,000 --> 00:12:39,000

And if so, will we seem like primates

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00:12:39,000 --> 00:12:41,000

to the people of tomorrow?

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00:12:42,000 --> 00:12:46,000

Transhumanists suggest that if we can create new brain cells,

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00:12:46,000 --> 00:12:50,000

we could potentially reproduce all of the body cells,

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00:12:50,000 --> 00:12:53,000

which would have profound implications.

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00:12:57,000 --> 00:12:59,000

The big question is immortality.

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00:12:59,000 --> 00:13:03,000

Dying, is it something we have to do?

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00:13:03,000 --> 00:13:08,000

Cells die away, but if we can start replacing the cells

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00:13:08,000 --> 00:13:11,000

and if we can replace brain cells

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00:13:11,000 --> 00:13:14,000

and keep the functioning of the brain going,

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00:13:14,000 --> 00:13:18,000

then it does potentially really extend life,

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00:13:18,000 --> 00:13:20,000

in theory, forever.

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00:13:20,000 --> 00:13:24,000

Some people, like Ray Kurzweil, have suggested by 2045

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00:13:24,000 --> 00:13:26,000

we'll be able to do that.

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00:13:28,000 --> 00:13:31,000

Ray Kurzweil is Google's director of engineering,

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00:13:31,000 --> 00:13:36,000

a transhumanist, prolific author, and inventor.

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00:13:37,000 --> 00:13:39,000

He believes in the near future,

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00:13:39,000 --> 00:13:43,000

humans will be able to extend their lives indefinitely.

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00:13:44,000 --> 00:13:47,000

To reach that point, he maintains a daily diet

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00:13:47,000 --> 00:13:51,000

of over 100 different body and mind enhancing pills

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called Neotropics.

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00:13:54,000 --> 00:13:57,000

Neotropics are essentially drugs of one kind

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00:13:57,000 --> 00:13:59,000

or another, chemicals, if you like,

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00:13:59,000 --> 00:14:03,000

that can change the way both the body functions

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00:14:03,000 --> 00:14:06,000

but particularly how the brain functions.

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00:14:08,000 --> 00:14:11,000

Colline, for example, helps with memory,

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00:14:11,000 --> 00:14:13,000

and so people are using these Neotropics

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00:14:13,000 --> 00:14:16,000

to enhance their memory, to have better recall,

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00:14:16,000 --> 00:14:19,000

to have better focus.

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00:14:19,000 --> 00:14:21,000

You're starting to see Neotropics pop up everywhere,

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00:14:21,000 --> 00:14:23,000

especially in Silicon Valley.

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00:14:23,000 --> 00:14:27,000

In the future, the idea of enhancing the cognitive ability

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00:14:27,000 --> 00:14:30,000

in the human being is going to be sort of commonplace.

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00:14:33,000 --> 00:14:36,000

Kurzweil and others predict Neotropics

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00:14:36,000 --> 00:14:39,000

will become a new multi-billion-dollar industry

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00:14:39,000 --> 00:14:43,000

as people turn to supplements to enhance their bodies

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00:14:43,000 --> 00:14:45,000

and prolong their lives.

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00:14:46,000 --> 00:14:48,000

But ancient astronaut theorists believe

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00:14:48,000 --> 00:14:50,000

that like genetic manipulation,

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00:14:50,000 --> 00:14:55,000

evidence of Neotropic use can be found thousands of years ago.

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00:14:56,000 --> 00:14:59,000

Dating back to the 5th century BC,

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00:14:59,000 --> 00:15:02,000

the Hindu Sanskrit epic known as the Mahabharata,

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00:15:02,000 --> 00:15:06,000

tells the story of Samudra Manthana,

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00:15:06,000 --> 00:15:09,000

a celestial battle between the gods

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00:15:09,000 --> 00:15:12,000

for a rare substance that grants immortality.

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00:15:16,000 --> 00:15:22,000

The Samudra Manthana means the churning of the ocean,

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00:15:22,000 --> 00:15:27,000

and in this case, the ocean is visualized as a cosmic sea of milk.

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00:15:27,000 --> 00:15:31,000

It is, in essence, the Milky Way itself.

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00:15:32,000 --> 00:15:36,000

There were two primary forces and odds in the universe.

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There were the Asuras,

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00:15:38,000 --> 00:15:44,000

and they were at odds with a new order of gods, the Davas.

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The gods went to Lord Vishnu and Vishnu said,

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00:15:49,000 --> 00:15:51,000

why don't you try to cooperate with them?

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00:15:51,000 --> 00:15:54,000

At the very depths of the ocean,

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00:15:54,000 --> 00:15:58,000

there is a substance called Amrita,

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00:15:58,000 --> 00:16:00,000

a divine nectar of immortality.

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00:16:00,000 --> 00:16:03,000

It will churn the cosmic ocean of milk,

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00:16:03,000 --> 00:16:06,000

and it will yield forth the nectar of immortality,

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00:16:06,000 --> 00:16:08,000

and you can share it.

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00:16:08,000 --> 00:16:12,000

The gods and the demons start churning in the heavens,

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00:16:12,000 --> 00:16:14,000

the Milky Way,

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00:16:14,000 --> 00:16:17,000

and what is produced by this is an elixir,

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00:16:17,000 --> 00:16:20,000

an elixir that can grant immortality.

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00:16:20,000 --> 00:16:24,000

Well, it was a terrible war now because everyone wanted this.

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00:16:25,000 --> 00:16:28,000

In order to win the battle for the gods,

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00:16:28,000 --> 00:16:32,000

they decided they need this Amrita, this elixir of life.

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00:16:32,000 --> 00:16:37,000

So you have to wonder if this story isn't about some kind of

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extraterrestrial war in heaven,

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where aliens are fighting over new tropics.

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Could the story of the Samudra Manthana

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be an ancient account of a celestial battle

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over a highly advanced new tropic?

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Ancient astronaut theorists say yes,

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and point to legends of immortality elixirs throughout antiquity.

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The ancients had many stories of immortality,

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that it was touchable or reachable.

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The Chinese had the peaches of immortality.

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The Greeks had ambrosia.

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The Mesopotamians had the idea of soul mind.

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In the biblical tradition, there is the tree of life.

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There is something that you can ingest and gain immortality.

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This quest has been going on for thousands of years

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around the world by many different cultures.

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This quest for these smart drugs that will enhance

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our lifestyle and our mental clarity.

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So you have to wonder, was this new tropic drug

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some kind of extraterrestrial elixir

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that was well known in ancient times?

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Could ancient accounts of elixirs of immortality

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really be descriptions of extraterrestrial new tropics?

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And might it soon be possible to unlock our full human potential

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simply with the right potion or pill?

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Perhaps fulfilling a destiny to become like our alien ancestors.

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Ancient astronaut theorists say yes

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and suggest molecular chemistry is only the beginning of the human upgrade.

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Coming up...

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Nanomachines could actually heal the wounds in our bodies.

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The possibility of reversing human aging is not a very big stretch.

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The nanomachines are the most driven submersible nanomachines ever created.

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Molecular nanotechnology is the idea of building devices, machines,

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at a molecular scale.

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Nano refers to a billion of a meter, so very, very small.

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We're getting down to atomic scale.

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Measuring only 244 atoms across,

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these miniature robots are designed to deliver specialized medicines

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throughout the body using the bloodstream.

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Scientists have created bio-bots that are the first of its kind.

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These tiny little bio-hybrid semi-bots are capable of driving to viscous material through our bodies.

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They take submersible nanomachines that can be controlled with UV light,

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and using the UV light they can control where these nanomachines take nutrients

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and take medicines into the body.

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As long as we have a way of controlling them from the outside,

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they can move around very, very quickly, perform a function.

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If we're looking at operating on a cancer,

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then potentially they could do that operation for you from within.

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This could lead to huge advances in medicine, in healing,

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leading to nanomachines that could actually heal the wounds in our bodies,

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close things up much faster, repair damaged tissue,

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extend our lifespan, and literally bring us into a new level of human evolution.

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Transhumanist believe our bodies will soon be home to swarms of nanomachines

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that will both heal and also warn of disease.

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And some propose this technology is advancing so rapidly

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that it will not just be future generations that will live tens or even hundreds of years longer,

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but people who are alive today.

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The possibility of reversing human aging as opposed to just slowing it down

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is not a very big stretch.

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So if you understand aging and the fundamentals of the processes that are leading to it,

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it would be quite possible both to slow it and it would also be possible to reverse it.

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An example of this is a study that has gone on at Harvard

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by reversing the muscle tissue and mice.

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We have actually reversed the age in these mice.

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And so if we can do that in the laboratory setting,

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it's only a matter of time before we're able to reverse our own aging process.

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Could millions of microscopic robots soon be swimming in our bloodstreams,

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augmenting our immune system,

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and even reversing the aging process entirely, as transhumanists believe?

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Ancient astronaut theorists suggest that if such a transformation does occur,

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it may be a sign that we are evolving to become more like our alien race.

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As evidence, they point to the Sumerian King List,

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a series of stone tablets that are believed to be over 4,000 years old,

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and record the reigns of ancient Mesopotamian kings that ruled for upwards of 43,000 years.

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The Sumerian King List was handed down to humanity by the gods.

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What's extraordinary is that the reigns of these kings last into the thousands of years.

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These people weren't making allegorical or metaphorical statements,

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these were accurate historical records.

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Ancient texts,

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and ancient texts,

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and ancient texts,

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and ancient texts,

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and ancient texts,

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Ancient texts, including the Bible and the Sumerian texts,

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talk about ancient kings and other people living incredibly long lifespans.

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Methuselah, who was supposedly the father of Noah,

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was said to have lived for 969 years.

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When we look into the past,

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there's a clear record of people who have lived a much longer lifespan than we have today.

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We have to wonder if these beings weren't given or had access to some type of nanotechnology,

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that fuels the idea and understanding in our drive today to be like the gods.

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And this important nanotechnology is something that extra-terrestrials and other advanced civilizations would already have.

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And it would only make sense that if extra-terrestrials are coming to our planet,

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they would have brought this nanotechnology with them.

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Might our research into nanotechnology,

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new tropics, and genetic engineering

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ascend us to the level of extra-terrestrials that came to earth thousands of years ago,

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as ancient astronaut theorists suggest.

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Perhaps further clues can be found by examining the technology

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that is being developed to upgrade not just our blood,

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but even our flesh.

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00:25:16,000 --> 00:25:17,000

Coming up...

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00:25:18,000 --> 00:25:22,000

We can use the power of our thoughts to control avatar robots.

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The engineers at MIT are looking back into the ancient examples of the gods.

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New York City, May 4th, 2015

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At TechCrunch Disrupt New York, an annual new technologies conference,

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U.S. biotech startup BioBots launches a desktop 3D printer for biomaterials,

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which they use to print a replica of Van Gogh's ear.

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Instead of plastic, special ink is combined with biomaterials,

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like collagen and cultured cells, to build living tissue and human organs.

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So right now, we're just at the beginning of understanding how to 3D print organs.

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It's a process called biofabrication.

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So BioBots has created a biofabrication 3D printer that can print artificial tissue and small organs.

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In the future, what we're going to see are 3D printers that are biofabricating our bodies and our organs.

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You could eventually have printable noses, lungs, ears, kidneys,

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and in certain ways, this technology is so extreme that it could make it democratic, it could make it inexpensive.

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So in the hands of skilled trained medical professionals, it could be possible in the future

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00:27:07,000 --> 00:27:12,000

to 3D print organs for people out of their own genetic material.

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Transhumanists believe we may soon transcend our biological limitations

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as we embed machines directly into our own bodies.

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DARPA, the agency of the U.S. Department of Defense,

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responsible for the development of emerging technologies for use by the military,

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is currently designing neural implants that will improve cognitive speed and memory retention in soldiers.

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And in 2014, scientists at Seoul National University in South Korea unveiled research on synthetic smart-skin,

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life-like ultra-thin crystalline silicon designed to cover prosthetic limbs,

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00:28:05,000 --> 00:28:09,000

giving the user all of the sensations of a natural limb.

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They've now developed a skin which has touch sensors embedded in it with a very fine matrix,

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which can be put around a prosthetic.

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So you can actually feel what that arm is feeling,

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or you can touch the floor, feel whether it's hot or cold or applying pressure.

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Future artificial limbs will look just like our skin, look just like our hands and our legs.

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It's going to affect the entire world.

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We're going to see people using smart prosthetics that are added to the body,

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that can be controlled directly through the brain.

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And that really is the future of prosthetics.

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I can speak from experience because I've had one myself.

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00:29:01,000 --> 00:29:07,000

Our implants that link either into the brain or into the human nervous system,

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and what I had was 100 small electrodes fired into my nervous system

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00:29:16,000 --> 00:29:19,000

to link my nervous system with a computer.

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It was a bit like plugging a plug into an electric socket, but the socket was my nervous system.

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So I went to Columbia University in New York, we plugged my nervous system into the internet,

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and I controlled a robot hand from my brain signals.

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You can extend your nervous system by simply plugging into it.

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If we can use just the power of our thoughts to control artificial limbs,

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we can eventually one day use the power of our thoughts to control avatar robots.

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I think we're going to see that kind of technology used to control avatars on the moon.

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We're going to see that kind of technology to control robotic humanoid avatars on Mars.

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Could we one day venture into the cosmos?

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00:30:15,000 --> 00:30:21,000

Not with our bodies, but by wirelessly controlling robotic avatars.

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And is it possible that extraterrestrials have utilized these same technologies

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to explore Earth in the distant past?

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Ancient astronaut theorists say yes, and point to technologies currently in development at MIT

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that strongly resemble those in ancient accounts of gods who descended from the sky.

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At the Massachusetts Institute of Technologies Institute for Soldier Nanotechnologies,

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they are developing a new smart skin for our soldiers.

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It would make them resistant to ballistic attack or chemical attack,

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and also would instantly self-repair.

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This is absolutely extraordinary because in the ancient texts we learn of the gods

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who wore a similar skin that seemed to make them impervious to any kind of human weaponry.

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They couldn't die.

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Now when I hear stories of semi-divine beings such as Hercules

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with his impenetrable lion skin,

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or in the Sanskrit Mahabharata, the story of Karna and his impenetrable armor,

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I have to ask the question whether or not these were all misunderstood technologies.

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Could the self-repairing skin being developed at MIT be the same technology

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our ancestors wrote about when they described divine beings that were invincible?

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And are we on the verge of this incredible biological and evolutionary leap ourselves?

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Some believe that mankind's next step is not in augmenting our bodies with machines,

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00:32:14,000 --> 00:32:18,000

but in becoming the machines ourselves.

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00:32:19,000 --> 00:32:20,000

Coming up.

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00:32:20,000 --> 00:32:25,000

We can download every connection that we have in our brain onto a computer.

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00:32:26,000 --> 00:32:31,000

These are the kinds of powers that would have been viewed as godlike at one previous time.

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A lot of people are really excited about the idea of if we could map out the structure of the human brain,

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neuron for neuron, and every connection,

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00:32:59,000 --> 00:33:03,000

then we can download every connection that we have in our brain.

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00:33:03,000 --> 00:33:08,000

And we can also create a new system of human brain.

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00:33:08,000 --> 00:33:11,000

We can create a new system of human brain,

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00:33:11,000 --> 00:33:14,000

and we can create a new system of human brain,

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00:33:14,000 --> 00:33:17,000

and we can create a new system of human brain,

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00:33:17,000 --> 00:33:21,000

then we can download every connection that we have in our brain,

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00:33:21,000 --> 00:33:24,000

all that information onto a computer.

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00:33:28,000 --> 00:33:33,000

The Human Brain Project is only one of a number of brain mapping ventures.

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The next great American project, and that's what we're calling the Brain Initiative.

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In 2013, President Barack Obama unveiled a \$4.5 billion project called the Brain Initiative.

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And Microsoft co-founder Paul Allen has invested over \$500 million in the Allen Institute for Brain Science.

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Futures speculate that if these initiatives are successful, the implications could be profound.

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Imagine having every piece of knowledge that every human has ever collected.

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00:34:18,000 --> 00:34:26,000

And if you crunch that down into a digital consciousness, that's going to unlock everything.

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00:34:27,000 --> 00:34:39,000

We can't know things about the world and about life that no individuals have ever previously known.

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00:34:40,000 --> 00:34:47,000

Because they're all from the aggregation of all of human knowledge that's going together.

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00:34:47,000 --> 00:34:53,000

So these are the kinds of powers that would have been viewed as godlike in previous eras.

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00:34:57,000 --> 00:35:06,000

Could we be on the verge of creating a superhuman intelligence, able to outperform a human at any task?

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00:35:07,000 --> 00:35:13,000

And if so, are we at risk of being replaced by machines entirely?

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00:35:15,000 --> 00:35:22,000

Transhumanists believe what lies ahead could actually be emerging of man and machine.

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00:35:27,000 --> 00:35:40,000

If we can map the human brain into technology, then I could take your brain or somebody else's brain and copy it into a computer.

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A technological one that could potentially live forever.

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What happens if we gain the ability to upload our consciousness into some sort of cloud virtual internet technology?

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It's not that far from the spectrum of a realizable goal, because we're already seeing neurological implants that can be put into the brain,

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00:36:10,000 --> 00:36:15,000

that can be used to control the movement of an artificial arm.

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00:36:16,000 --> 00:36:23,000

What happens if those neural implants can actually take the true essence of what it means to be conscious?

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And break that down into some sort of pure information that could live apart from a biological substrate?

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It could make itself far more massive, far more intelligent than any human ever had been before.

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00:36:44,000 --> 00:36:52,000

Could extraterrestrials have steered our evolution towards technology so that we may merge men directly with machine?

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00:36:53,000 --> 00:36:57,000

Eliminating our biological restraints?

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00:36:58,000 --> 00:37:05,000

And if so, might our futures lie entirely in a digital realm of silicon and bits of code?

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Many believe the answer lies not in what we are becoming, but where we are going.

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It won't be long before mankind has reached a point where we have the technology and the artificial intelligence to leave our planet and go into space.

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Just like extraterrestrials before us.

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You've got to wonder, are extraterrestrials somehow guiding us and manipulating us into this new future and this new human that we are destined to be?

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Is it possible that extraterrestrials have led us to a post-biological future so that we can rejoin them in the cosmos?

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And if so, might they have used these same technologies to visit Earth in the distant past?

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Ancient astronaut theorists say yes and look to NASA's own attempts at re-engineering man for space.

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New York City, 1961.

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Psychopharmacologist Nathan S. Klein and cybernetic mathematician Manfred Klein co-publish a paper about human space travel entitled Drugs, Space and Cybernetics.

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The two coined the term cyborg, an enhanced human being specifically doctored to survive in extraterrestrial environments without a space suit.

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In their paper, they detailed various ways in which to modify the human body for survival beyond Earth and later served as the inspiration for NASA's study, Engineering Man for Space.

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Our bodies are not suited for living in space. After only a few days, we experience muscle and bone loss.

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One has to wonder if extraterrestrials experience the same type of problems.

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I do think that any beings that are able to cross the cosmos and visit this planet will have learned how to self-direct their evolution.

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To survive in deep space for extraordinarily long periods of time, those beings more than likely

will be at least biodigital, meaning that they have merged with their technologies, or they will be pure digital beings.

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These may be robots or cyborgs.

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Could extraterrestrials have used the same cyborg technologies we are just now developing?

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If so, might our push towards transhumanism really be inspired by an innate desire to travel further into space and seek out our creators?

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There has been a consistent path towards the fusion of human and machine. Throughout all of our history, this idea that we could somehow advance ourselves for the betterment of humankind through this merger of technology and biology.

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I think that what will happen is that our biological bodies will be able to be perfected. Any imperfections corrected, our mental abilities and lifespan will be enhanced considerably.

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And we will be ready, ourselves, to go into space and ultimately join our creators in the start.

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Is it possible extraterrestrials left us with the tools to mold ourselves into a truly transhuman species?

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One, without any limits, capable of traveling the stars at will?

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Or could nanomachines, artificial intelligence and the digital revolution render humans obsolete?

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Our lives and the very nature of our existence may balance on this choice.

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00:41:49,000 --> 00:41:54,000

A choice that is coming much sooner than we think.