

Attempts to achieve immortality

Attempts to achieve immortality

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Introduction

In my essay I will be talking about the various attempts through history on how to achieve immortality, from a historic, social, and technological perspective.

Historical context

History of Alchemy

To answer some of these questions we have to go back early in time, when a new “science” was introduced: Alchemy dates back to 1st century B.C in Egypt, where priests started practicing it. The first way how to achieve immortality can be found back in early alchemy. Alchemy is composed of two main aspects: the chemical-technical and the spiritual.

Practical goals of alchemy were: transmutation of the base metals into noble metals as gold or silver. The spiritual goal of alchemy were: transmutation, purification, and perfection of the alchemist's soul.

Greek alchemists created the process of transmutation where they tried to isolate the primary substance (Materia prima) out of the materials. Mangnum Opus is alchemical term for the process of creating the philosopher's stone (Lapis philosophorum). The use and operation, of the Mangnum Opus was supposed to lead to the transmutation of base metals to gold.

The creation of the Philosopher stone was expressed as a series of changing colors, or a chemical processes.

In the 7th century alchemy was on decline in Europe and by the 8th century Greek alchemy texts were being translated into Arabic. During the end of the 9th century and the beginning of 10th century Arabic alchemists publish two important books: One of them is “Kitab al-Asrar”; the opening of the book starts with an introduction to minerals, alchemical instruments and steps into the workings of alchemy.

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(→ laboratorium, → laboratory equipment and alchemical instruments and → working processes). “Kitab al-Asrar” was highly regarded by European alchemists as the foundation of their art.

In Medieval Europe alchemy was revived when Robert of Ketton translated “Kitab al-Asrar” to Latin (*De compositione alchimiae*). After a small period, another book was translated from Turkish to Latin (*Liber de Septuaginta*). Other books followed.

The translations from the Arabic works brought new basic knowledge to Medieval Europe : mineralogy, botanic, metallurgy, production of coloring and pigments.

When “*Secretum secretorum*” was translated from Arabic to Latin, it became one of the most popular books in medieval times. The translation brought with itself the widespread and popularity of alchemy. In 1250, alchemy spread across medieval Europe when Albert the Great published “*De mineralibus*”.

Since the beginning of alchemy people have tried to modify and change it, alchemists tried explaining how nature works and if it is possible to change or alter it.

In the beginning of the essay, I talked about how since the early beginnings of alchemy, humans have tried to “create” the Philosopher's Stone. This stone was believed to hold magical powers to turn base metals into noble metals and to prolong life. The original goal of most alchemists in the 4th century was to create this mythical object, and believing in the power of the stone kept the alchemists going for 5 more centuries.

"The stone, also referred to as the "tincture," or the "powder" (Greek "xerion", which passed through Latin into Arabic as elixir), was allied to an elixir of life, believed by alchemists to be a liquid derived from it. In as much as alchemy was concerned not only with the search for a method of upgrading less valuable metals, but also of perfecting the human soul, the philosopher's stone was thought to cure illnesses, prolong life, and bring about spiritual revitalization. The philosopher's stone, described variously, was sometimes said to be a common

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substance, found everywhere but unrecognized and unappreciated.¹

Ellias Ashmole and the anonymous author of Gloria Mundi claim that its history goes back to Adam, who acquired the knowledge directly from God. This knowledge was said to be passed down through biblical patriarchs, giving them their longevity².

“Speaking in terms of spiritual alchemy, this would be an inversion of the Great Work. Why remain in the fallen saturnian/lead state of the physical body when you have the opportunity to obtain true immortality as a god-like spiritual being?

You may argue that the soul is immortal anyway, which is true. But the "I" that which makes you a conscious individual is not. Alchemy interpreted as a spiritual discipline teaches you how to extract that individuality/consciousness from the animal body and fuse it to the soul/eternal body so that even after death you can proclaim "I am". In this sense the Philosopher's Stone is the vessel which allows you to traverse the spiritual universe as cognizant spiritual being , it is identical to the Merkavah chariot of the Kabbalists...it is the the etheric body for your sense of Self. Without it your soul and conscious Self will be absorbed into the collective All and will continue to be recycled in the life-death patterns of the material universe.³

Alchemists tried to find/create such substance which would prolong our lives or even make us immortal. In their attempt to find the elixir of life and to turn the base metals into noble metals they helped science to flourish. Because of them and their theoretical work we can continue in searching for our philosopher's stone.

Religion and Immortality

Religion also provides some aspects of immortality: Christianity promises immortality: If humans beings who show goodness follow divine law (resurrection), or eternal life in heaven.

1 Encyc. Brit., 15th ed., 1976

2 Wikipedia.com/philosophers_stone

3 <http://forum.alchemyforums.com/showthread.php?978-Philosopher-s-Stone-and-Immortality>

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Symbols of Immortality

Ankh – Egyptian symbol of life that hold connotations of immortality when depicted in the hands of the gods and Pharaohs.

Trefoil knot – symbolic representation of infinity or the life cycle are often used to represent immortality.

Ouroboros – is another symbol of representation of immortality⁴.

The future

So far I had been talking about chemical / early scientific approach to gain immortality but now I will continue with the scientific approach in preserving our lives/minds.

Mind Uploading

Why not map human being's behaviour over an extended period of time, to monitor his actions, his life style. When the data is gathered it would give us a certain picture of his personality and behaviour, which would make it easier to generate a mind map. After completing the map, it would be downloaded into a supercomputer. Together with an avatar.

In June 1st 2012, Special Issue on Mind Uploading was published. I would like to talk about this new approach which could lead to immortality. How can this lead to immortality? Mental content of our brain will be transferred into computers. Mind upload is no longer a science-fiction but a serious research. You can find more information about this research at non-profit organization CarbonCopies official webpage: carboncopies.org

⁴ www.Wikipedia.com/immortality

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In 2012 Evan R. Goldstein published an article about: The Strange Neuroscience of Immortality:

“The human race is on a beeline to mind uploading: We will preserve a brain, slice it up, simulate it on a computer, and hook it up to a robot body.” Kenneth Hayworth

By 2110, Hayworth predicts, mind uploading—the transfer of a biological brain to a silicon-based operating system—will be as common as laser eye surgery is today.⁵”

Mr. Hayworth is working as a connectomics which is a new branch of neuroscience, a connectome is a complete map of brain neural circuitry. In 2010 the National Institutes of Health established the Human Connectome Project, \$40-million, multi-institution effort to study the field's medical potential.

Since the mid-19th century we know how the human brain look; Like a spider web, consisting of neurons and synapses which are being sent from one part of the brain to another. A piece of human brain tissue the size of a thimble consists around 50 million neurons and close to trillion synapses.

Scientists had managed to map a nervous system of a soil worm known as C.Elegans. This creature has only 302 neurons and 7000 synapses but still this project took several years to completion, it's the only one connectome ever completed. If the same techniques would be used to map just one cubic millimeter of human cortex, it could take a million human-years.

The reason why I'm talking about this is because if we want to “upload” human mind into a computer or other silicon based equipment the scientists have to map the human brain to find all the connections.

5 <http://chronicle.com/article/The-Strange-Neuroscience-of/132819/>

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“Neuroscience has not yet been able to deliver on the idea of understanding the brain as a bunch of neurons because our tools have been too crude. But now there's a new optimism that we can deliver on that promise.”⁶

By an ultramicrotome machine which is about the size of sewing machine.

“A tiny diamond blade shaves tissue samples into slices as thin as 30 nanometers—more than a thousandth as thin as a human hair. The slices are then brought to another part of the lab and imaged in an electron microscope. Stack up a few hundred or thousands of these pictures and you get a high-resolution, three-dimensional view of a neural network—the building blocks of a connectome.”⁷

As the article goes Mr. Hayworth describes his own vision of his brain preservation and mind upload. Few years ago he founded Brain Preservation Foundation, its mission is to promote the research into whole-brain preservation. His foundation had published a [Brain Preservation Bill of Rights](#)⁸

“It is our individual unalienable right to choose death, or to choose the possibility of further life for our memories or identity, as desired ...”⁹

If you want to read more about this research you can visit: <http://chronicle.com/article/The-Strange-Neuroscience-of/132819/>.

There are people who believe that mind uploading will be possible and that scientists will be able to upload the human brain into a computer, but there are also people who don't share this opinion.

6 How The Brain's Wiring Makes Us Who We Are by Houghton Mifflin Harcourt

7 <http://chronicle.com/article/The-Strange-Neuroscience-of/132819/>

8 <http://www.brainpreservation.org/content/preservation-rights>

9 <http://chronicle.com/article/The-Strange-Neuroscience-of/132819/>

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One of those people who doesn't believe is Mr. Dvorsky who published an article "*You Might Never Upload Your Brain Into a Computer*"

In his article he listed 8 reasons why mind uploading to computer will not be possible

1. Brain functions are not computable
→ "*The brain is not computable and no engineering can reproduce it¹⁰*" Argued that human consciousness can't be replicated
2. We'll never solve the hard problem of consciousness
→ Hard problem – explaining how incoming sensations are translated in our brain into subjective feelings – ex: experience of colors, music, taste
3. We'll never solve the binding problem
→ "*We still need to figure out how our brains segregate elements in complex patterns, a process that allows us to distinguish them as discrete objects. The binding problem also describes the issue of how objects, like those in the background or in our peripheral experience — or even something as abstract as emotions — can still be combined into a unitary and coherent experience*"
4. Panpsychism is true
5. Mind-body dualism is true
→ In 17th century Rene Descartes wrote that the mind is nonphysical substance (and If our minds are somewhere outside our bodies) then the upload would just create an illusion like the movie Matrix.

¹⁰Citation of neuroscientist Miguel Nicolelis from a meeting of the American Association for the Advancement of Science in Boston

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6. It would be unethical to develop
 - In order to test such an upload, the scientists would have to test it. First on animals and then on human beings which might be unethical.
7. We can never be sure it works
 - no one can know for sure if the upload will be done correctly, “uploaded person ” might end up as (“zombie”) or as a “corrupted file”.
8. Uploaded minds would be vulnerable to hacking and abuse
 - danger of vulnerability against malicious attacks and hacking, “ uploaded person ” would have to set up some kind of personal firewall.

Mr. Dvorsky wrote down a list of arguments which he believes are crucial and because of them we will never be able to continue in this project, to upload our minds into an avatar run by supercomputer which would hold our personality. But what if we can prove him wrong? What if there are people who believes that his arguments are not that strong. One of the people who disagree with Mr. Dvorsky is author of this article: <http://hplusmagazine.com/2013/04/21/goertzel-contra-dvorsky-on-mind-uploading/>.

I believe that it depends on the person if he wants his brain to be preserved after he dies, or if he wants to die. Since this research is still at the beginning we have plenty of time to decide, we can follow this research and draw our own conclusion. But I think that it's too early to condemn this possibility of immortality.

Cryonics

Idea of cryo-preserve humans sprang from the science-fiction book which Robert Ettingern read in 1960's. He founded the Cryonics Institute in Clinton where over 100 people are frozen inside huge glass “sarcophagus” filled with nitrogen at colder temperatures than negative 130 degrees Celsius. At the age of 92 he became one of the patients together with his 2 wives.

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Together with his wives and other people he hopes that the future holds the key for better medical services. When they can be unfrozen and receive better medical care. You can get cryogenically frozen for only \$30,000. By July 2011 there were 200 people being cryogenically frozen in U.S – and around 2000 people have signed to be frozen when they die.

It's not only humans which get frozen for example : embryos, umbilical cords or stem cells but scientists are also freezing endangered animals species at a virtual frozen zoo in Louisiana.

“Like most medical technologies, this is a chance to live a little bit longer. Not a guarantee – it doesn't mean that I believe it's sure to work, or even that it's likely to work, but I think the chance of it working is high enough to be worth the cost” Hanson said.

Some people agree to be cryogenically frozen, but some doesn't. For example wife of Mr. Hanson said that she is not willing to participate because of moral issues. Not only the moral issues but also different questions arises: *“When will you be thawed out? Should you wait until the medical world is absolutely ready to handle the process?”¹¹*

Cryogenics as the other future process of achieving immortality are disputable. There are people who believe in them and there are people which disagrees with such researches. It's the personal believe of the human being. His choice to take but for sure we have to wait until all those methods are completed, when we will have all the answers and we will know all the advantages and consequences.

I believe that in the near future we will have the necessary answers to all our questions and we will have the choice but so far all these ways preserving immortality are only on the papers or hidden behind the lab doors.

11 <http://abcnews.go.com/Health/life-ice-world-crazy-cryogenics/story?id=14167348#.UZEZODvuSr4>