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**Artificial Brains & Holographic Bodies: Facing the Questions of Progress**

 Three days ago Yahoo news reported about a [Russian multimillionaire](http://news.yahoo.com/russian-tycoon-wants-move-mind-machine-220242522.html) with aspirations of what could essentially be deemed immortality. Dmitry Itskov gathered some of the world’s most brilliant minds in neuroscience and had them converge at the Lincoln Center in New York City last Saturday at the Global Future 2045 conference. There, Dmitry discussed a means for the mind to outlive the body by way of robotics. Here are the goals that Dmitry outlined for his think tank as well as the timetable for which these goals are to be met.

1. In the year 2020, Dmitry wants to see robots produced whose remote control is our minds.
2. In the year 2025, the brain would be able to be transferred to a life support based system. To quote the article it would be “a robot prosthesis that can replace an ailing, perhaps dying body.”
3. In the year 2035, we would progress from a robot body as a means to carry the brain to a computer that was capable of housing it.
4. Lastly in the year 2045, we would see the crescendo of this technological revolution as artificial brains would be piloting holographic bodies.

Now granted the consensus among this gathering of intellect was that such a timetable was too ambitious and as a result proved unrealistic. That does not alter the fact however that at the rate our society is advancing technologically the most recent advancement being in the form of a [3D Printer](http://www.forbes.com/sites/andygreenberg/2013/05/05/meet-the-liberator-test-firing-the-worlds-first-fully-3d-printed-gun/), we as a society will have to answer many profound philosophical and ethical questions regarding artificial intelligence and its potentialities for human civilization. The article itself posits two critical questions on the issue particularly as it relates to Dmitry’s ambitions. These questions are: 1.) Is immortality desirable, and if so, what's the best way to get there? And 2.) Do we leave behind something essentially human if we leave our bodies behind? The remainder of this article will be an attempt at answering these two questions.

 In regards to if immortality is desirable I feel the best means to answer that question scientifically and philosophically is to construct a world that includes the aspect of immortality through the vehicle that Dmitry has laid forth. This world will also be constructed so that the majority of human beings have crossed this technological threshold and not just the world’s most economically prosperous so as to examine the implications of this technology in its fullest conceivable scope. The remaining humans would be the very engineers/programmers of this technology. We can assert that with hologram bodies and artificial minds that all diseases have been exiled in this world. The illnesses that have plagued countless generations such as [cancer](http://www.cdc.gov/features/worldcancerday/), [AIDS](http://aids.gov/hiv-aids-basics/hiv-aids-101/statistics/), [ALS](http://www.alsa.org/about-als/facts-you-should-know.html), etc. have all become a thing of the past. The citizens who were once IT personnel and computer programmers would assumedly become the new face of medicine in this world as well. Fixing any glitches in the holographic projections of the body and stopping any bugs from penetrating the artificial minds. Medicine as we know it would presumably become a vestigial science in the body of the world. Many other luxuries and necessities that accompany the human experience would also be adapted upon embracing this technological evolution. From the food we eat, to the clothes we wear, to the transportation we utilize would all become archaic components of the human existence. This in turn, would mean that the environment would see its consumption by humanity decline and such preservation would lay the foundation for healing. The same sentiment could be expressed as it pertains to many animal populations. Such facts would seem to posit artificial minds and holographic bodies as a wondrous and beauteous way to live. However let us now take a look at two major potential consequences I raise against this technological existence the latter of which, encompasses the second inquiry stated earlier.

The first major consequence I believe such technological advancement carries is that it would fundamentally alter how we view and uphold ethical & moral philosophy. Now, even for those who do not believe in such constructs as morality or right and wrong they at least, in my personal experience with them, believe and uphold the idea of *consequences*. They may not necessarily believe that killing is wrong, but that in no way means that they themselves are going to walk up behind a man and shoot him in the head in broad daylight. They will not do this because they realize the consequence is that they will go to jail. With this technology, what this world has effectively achieved is the negation of the very inertia that is consequence. The world now exists of action begetting more action moving fast along an infinite line with nothing impeding its momentum. I say this because this technology has also negated the very object that seemed to govern mankind when it came to actions and their consequences. The object I am referring to is the object of *time.* Think about it, our time on Earth no matter what corner of it we reside in is finite. In the United States specifically, the average life expectancy [for a male is 76.19 years and for a female is 81.17 years.](https://www.cia.gov/library/publications/the-world-factbook/fields/2102.html) Such awareness of our finite nature and of the nature of time itself influences every investment we make of our time and our human capital for we wish to maximize our existence. Even though the ideal of maximization is subjective and takes up many different forms, it is an ideal I believe every human being harbors in one capacity or another. Nowhere is this sentiment more brilliantly illustrated then during the period of the Cold War. The United States and the Soviet Union were engaged in war with one another over which ideology was stronger; Capitalism or Communism. Both nations were amassing weapons of all kinds so as to ensure the destruction of the other should War become a reality. [By the year 1961, enough bombs were produced to annihilate the world.](http://www.historylearningsite.co.uk/nuclear_arms_race.htm) Yet the reality is that neither superpower pulled the trigger with their weapons because they realized that what lied on the other side was the *end.* The existence of nations, their cultures, their legacies, and the human population itself would be utterly decimated and the journey of our species concluded. With our lifespans being reduced to streams of binary and complex algorithms, the very face of warfare itself would change. Cyber warfare would become the new manner in which violence between nations would be formally conducted. The philosophy behind this warfare would be completely redefined for it would no longer be about ending human life but rather it would become about seizing it. Which nation could hack into and take control of more artificial brains and holographic bodies to strengthen their respective empires? Since life could no longer end these wars would be prolonged to a much greater degree and whoever was victorious, their empires could potentially be just as immortal as its rulers.

The second major objection I raise towards this path to immortality ties directly into the second inquiry the article posed. Do we leave behind something essentially human if we leave our bodies behind? Now it is here where the chasm between holistic philosophy and reductionist Philosophy presents itself. The [reductionist](http://www.businessdictionary.com/definition/reductionism.html) believes that the environment is simply a collection of resources for human beings to utilize and that human beings themselves are tools meant to be manipulated and exploited. They break down the complexities of the world into simpler parts and as such when dealing with the issue of immortality, would examine the brain and the body individually and more than likely deduce that the path that Dmitry has laid before us is the best conceived to descend. Conversely, the [holist](http://www.thefreedictionary.com/holism) will state that everything is connected and that when we try and zone in on certain parts of the complexities of the world, we lose sight of others thus doing more harm than good. As such, the holist would more than likely reject the idea of replacing our brains with artificial ones and converting our bodies to holographs and opt instead to study populations as a whole and see who is achieving the greatest longevity (such as the [centenarians](http://www.adlercentenarians.org/) for instance) among them and the environments and lifestyles that make this longevity possible. We can see that with the reductionist’s view that the human being is to be exploited and manipulated that they would examine the prospect of artificial minds and holographic bodies as a progression of one’s humanity rather than a regression. Since the holist argues that everything is connected and that reducing complex systems to simpler parts has been incredibly damaging to the world, we can assume that they would be staunchly against such a utilization of artificial intelligence believing it to be the complete forfeiture of our humanity and redefining the nature of the world itself. Does the holist or the reductionist have the correct stance?

I pondered the question of what exactly makes us human for some time. I thought about our ability to reason, our capacity to love and loathe and how we utilize these capacities and abilities to create and destroy. I realized that the totality of these things is what makes up human nature and even more significantly; I realized not just the totality of human nature but also its essence. The essence I speak of is the very freewill of man. For if we were to convert to an existence such as that proposed by Dmitry, we would forfeit our freewill and become products of a mechanistic determinism. Thoughts, feelings, and experiences would all become written code and downloaded into our artificial brains. Our cognitive ability would be limited solely to what could be converted into data and then into information for these artificial minds. We would no longer be able to call our experiences our own for they would merely be things that the overseers of this new age permitted us to have. Ultimately, we achieve this longevity at a grave cost. Nietzsche’s belief of eternal recurrence would come to pass for how long would it be before our artificial brains reached the limits of their linguistic capabilities? Or that the abilities and experiences of the holographic body began repeating themselves? What it becomes is a tradeoff between unlimited potential and limited time for unlimited time but limited potential. This is not man’s way. Even though the human body and mind as it stands now is susceptible to error and decay the fact remains that every day that passes the wall that separates what is possible and impossible as it relates to the capabilities and limitations of the human body gets pushed farther and farther. Should Dmitry’s vision ever come to pass, the wall will become that of brick, and the pushing that we have done just becomes exhausted energy with no progress. It is because of this that I uphold the holist view. If we wish to live longer let us adopt healthier lifestyles, rebuild our environment, and be relentless in our search for remedies to the ailments that take life from so many. The article at the beginning of this essay ended with a quote from Dmitry stating: “"We're always losing something for what we're doing. We're always paying." That may be true but as far as I am concerned, this is one price that is too high. Better dead having had freewill and infinite possibility before me than immortal and having my world be the construct of a determinism which chokes off possibility and authentic experiences.