

A Manifesto for Survival

by Ioana Petre

If there is one thing we've learned, as a species, throughout our natural history, it's this: the future does not come for free, the future should not be taken for granted and, more than anything else, the future belongs to the fittest! As such, in order for humanity to think about steering the future in one way or another, it firstly needs to fulfill one major prerequisite: secure its tomorrows. Once this goal is accomplished, then we can set our views on the ultimate end game, which I will henceforth address as 'utopias'. While there are no two people alike, I believe that chances are that there is no single utopia. Hence, my preference for its plural form. The final point of all of our efforts should be aimed at creating individually tailored utopias that can somehow coexist even in the presence of contradictions. Although an ambitious goal, the idea of universal happiness, joy and fulfillment is not unattainable in practice. At the very least, think about the wonders of virtual reality technology and imagine for a second how this could help you shape the world of your dreams. According to some, we might be living in a computer simulation anyway, so what difference does it make if we simulate a new world - within the old one - that makes us feel perfectly at ease?

For those of you who are already raising your eyebrows in contempt of the idea of utopian virtual reality and of infamous Nozickian experience machines, I have some good news. This essay is not about paving the road towards the future with virtual blocks; the example of the potential of virtual reality technology is simply to show that, even at this point in time, we have some clear directions that can lead us to utopia. But to get there, first, and to experience the bliss of it all, we need to survive. And this is what I'm going to write about.

I was mentioning earlier that the end game of humanity and the direction towards which it should steer its future is *individual* utopias. Due to this prominent part that individual well-being plays in my account of the greatest achievement of mankind, I am primarily concerned with *individual*

survival. This piece of writing, which I like to regard as a manifesto, will present in a step-by-step fashion the threats that endanger our survival and will focus on the idea that, in order to have the highest success rate in promoting individual well-being, we should solve our problems in a disciplined and orderly fashion. This said, I would like to propose *prioritization* as the main algorithm for demolishing the biggest obstacles to our very existence.

First things first

Imagine everything turns out perfectly in your life. If that's the case – and, let's face it, it usually isn't- would you honestly say that your physical integrity and survival are under no threat at all? Probably not. Aging, the silent enemy within, has been wracking havoc in our bodies since the day we could still brag about our wrinkle-free complexions and impressive musculature. Innumerable metabolic processes that are necessary for our well functioning lead, in time, to an accumulated damage that will eventually put a stop to everything we know. Because, at this point, natural death is inescapable for each and every one of us, I consider it the greatest threat to our individual survival and, as such, grant the task of finding a way to escape it the highest level of priority.

Now, let's fast-forward and imagine that we have succeeded in halting and reversing the effects of aging. Are we now safe from dying? Unfortunately, not yet. Even if we can make sure that our bodies are immune from harmful metabolic byproducts, DNA mutations, or hormonal shifts, we cannot control absolutely everything that's going on around us. It might simply be the case that, after visiting your physician for the recommended annual rejuvenation therapy, a brick falls on your head and crushes your skull. What is to be done then and in other similar cases? Depending on many circumstances, accidents may or may not be life threatening. In the high eventuality in which they are, I propose to designate the attempt to protect individual human beings from accident induced death with the second highest level of priority in my scheme of tackling the obstacles to our survival.

If our bodies don't kill us first and if we can actually protect ourselves from other causes of

death, are we then safe from physical destruction? Well, not even close. You see, the problem is that - as some moral philosophers have already pointed out - it is so much easier to hurt than to benefit a human being. This thought does not only apply to the behavior of others, but practically to everything that surrounds us. Nature, for one, can be both our friend and our enemy. We need our natural resources in order to survive, but, at the same time, environmental catastrophes have taken many to the grave. In a context in which climate change is starting to represent a serious challenge to humans' well-being, the safe approach is to consider our planet's problems as the third item on our priority list.

Not only the Earth can turn against us, but, according to different theories, the entire universe as well. The death of the universe, as improbable and distant as it might seem right now, represents the last problem that we need to solve in order to guarantee our physical continuity. And, thus, my priority list is complete. Starting from the microscopic processes that keep our bodies fueled and zooming out to the world outside of us, this small four-item list clusters together the dangers that each of us faces in the struggle for survival. In the next lines, I will show that there are paths worthy of being followed for tackling every point on this list. Please, do keep in mind, though, that first things should always come first.

What doesn't kill you makes you stronger...?

Most certainly not. But it's surely nice to hear. Among the many coping mechanisms that humanity has resorted to in order to be able to tolerate the horrors of death, religion, spirituality and positive folk wisdom occupy the most prominent places. In spite of all this, the thought remains: non-existence is scary and potentially infinite. If we are brave enough to assume this value judgment, then there is a high chance that we will be able to push the limits of what we know to exotic territories that might end up marveling us altogether. However, in order to reach this blissful land, we *need* to give up our coping mechanisms, to abandon that comfort zone that perpetuates a self-sabotaging inertia in the fight against the biggest killer of all times.

There are two main directions that have already been shaped in our attempt to conquer the atrocities of natural death. The first one is beautifully illustrated by the field of biogerontology. Gifted researchers, like Aubrey De Grey, Cynthia Kenyon or David Sinclair, just to name a few, have revolutionized the struggle for survival by leading the way towards new rejuvenating possibilities that may indeterminately extend our lifespans. In the gloomy and unlikely eventuality in which this path might fail us, there is another suitable option to consider: the creation of brain-computer interfaces and uploading human brains on machines. Fortunately, this solution can be applied to both natural and accident induced deaths.

Biogerontology can do little for accidental deaths. But, luckily for us, there are many potential courses of action that might shield us from this type of harm. The one that I consider most successful at this point, although it still appears phantasmagorical, is the protection of internal organs through some kind of resistant coating. This can be accompanied by even more stringent layers of defense, such as, for instance, the introduction in the human body of a set of organ-like devices. With the advent of nanotechnology and its success in reducing the size of computer chips, it is not impossible to conceive the existence of nano-robots which, if and when necessary, may take over the functions of our organs and, thus, keep us alive.

Planet Earth and us

Even if we don't suffer from the effects of any environmental catastrophe, human life extension is definitely a variable that can highly impact our relationship with our planet. People living longer and healthier years may easily lead to overpopulation and an over-consumption of natural resources. As putting a cap to all the progress we can make in extending our longevity is out of the question, what remains to be done is to find a way to accommodate these two conflicting sets of needs: ours and our planet's. Fortunately, even as I am writing this essay, there are visionaries out there pointing to the necessity of colonizing the outer space and of working towards the production of some of the machines

that are required for such an ambitious enterprise. Stephen Hawking has been raising awareness about the need to find other places in the universe that we might call home for years, while Elon Musk's *Space X* is making important progress in devising state of the art transportation that might take us to Mars. Also, many other scientists are actively searching for environmentally friendlier ways of producing energy or for degrading waste, So far, many of their results have been truly spectacular.

'Some say the world will end in fire, / Some say in ice.'

For almost one hundred years, Robert Frost has been subtly warning us about the dangers of taking the universe for granted. There are many theories out there revolving around the potential death of the cosmos: the Big Freeze, the heat death, the Big Rip, the Big Crunch or the Big Bounce. We don't actually have bulletproof evidence supporting any of them and it might as well be the case that the universe expands forever. But, in order to be on the safe side, let us consider this obstacle to our individual survival as well.

While we don't know much in this area right now even as to make a safe and accurate prediction about the fate of all the world around us, it goes without saying that we don't have a plan that could help us avoid these gloomy scenarios either. But what we have instead is a recipe for any kind of success: artificial intelligence. At that moment in time when we have solved all of our most urgent problems and when everything that is left to harm us is the destruction of the universe, it is highly likely that we have managed to create safe and effective AI. I'm saying safe and effective because otherwise we would be long wiped out, with no possibility of further worrying about our existence. Hopefully, if the human mind, cognitively enhanced or not, cannot come up with a solution to this quasi unsolvable problem, a fine product of the human mind, AI, might be up for the challenge.

In place of a conclusion: Priorities set straight

I have argued in this essay that the end game of humanity's future is non-exclusive individual

utopias and that, in order to get there, we need to guarantee the survival of individual human beings. The perspective that I embrace is that each individual life is truly priceless and worth fighting for, while each unwanted individual death is a cosmic tragedy. In order to secure the chance to reach our own utopias, we need to prioritize the resources and effort invested in keeping us alive. I proposed the following hierarchy of problems:

1. Individual death due to natural causes
2. Individual death induced by accidents
3. Individual death as a result of environmental catastrophes
4. Individual death through the death of the universe

The prioritization of these problems doesn't mean that we only look at one issue at a time and proceed to the next one only after the previous has been solved. If this were the case, then progress would be very much delayed. The type of prioritization that I am embracing here is not absolute, but relative, and it roughly abides by the following rule: dedicate the bulk of all of your resources to the problem that has the highest degree of stringency and make sure that any item on the list gets less than the one preceding it.

Before ending this essay, I need to clarify one last point. I am not arguing here for unwanted unlimited human lifespan. What I am proposing, instead, is a world governed and lived under the auspices of unrestricted freedom of choice. Nobody *has to* live millions of years until the death of the universe might become an issue. But if someone wants to, then it should be up to them to decide. Ultimately, this is what an individual utopia is all about: nothing if not a world of your making!