

*Roberto Manzocco*

# ***Transhumanism*** *Engineering the Human Condition*

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*History, Philosophy  
and Current Status*

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# Transhumanism - Engineering the Human Condition

History, Philosophy and Current Status

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Bill Gates: “So is there a God in this religion?”  
Ray Kurzweil: “Not yet, but there will be.”

You know what they say the modern version of Pascal’s Wager is? Sucking up to as many Transhumanists as possible, just in case one of them turns into God.

—Greg Egan, *Crystal Nights*

You have evolved from worm to man, but much within you is still worm.

—Friedrich Nietzsche, *Thus Spoke Zarathustra*

# Introduction: Gilgamesh Versus the Dragon-Tyrant

## One Man Against Mortality

People enjoy stories, apparently. Just look at human history, with all of its myths, poems, and legends. Alternatively, for the laziest among us, just skim through the list of movies and TV shows offered by Netflix or the comic books published by Marvel and DC Comics. So, stories are really part of our deep nature, and some of them can reveal something fundamental about us.

And stories, or at least some of them, will definitely help us to understand the Transhumanist narrative, as it represents the perfect fit for the legends and works of art that we are going to mention in this introduction.

My favorite story? The *Epic of Gilgamesh*, an ancient poem coming straight from Mesopotamia and considered by many specialists to be the earliest example of epic literature to have survived the ravages of time. But let's skip the philological details and jump into the core of the story. A story full of drama blessed by a cinematic style, so much so that someone should try to adapt it into a movie or, even better, a TV series. Anyway, the main character is Gilgamesh, King of the Mesopotamian city of Uruk – the timing is unclear, but we know that different stories, dating back as far as 2100 BC, were merged together into a single poem and that the earliest available version of this poem was composed more or less during the eighteenth century BC.

To make sure that the readers understand the real nature of Gilgamesh, which is that of a demigod, the poem stresses that our King is one-third human and two-thirds divine. In fact, he is the offspring of a goddess and a king, but this, of course, doesn't explain the weird proportion; maybe someone here was not that good at math or just wanted to underline that, in Gilgamesh, the divine part was predominant. Full of energy and fury, our hero is oppressing his own people and forcing them into endless battles; to answer the lamentations of all of these young warriors' wives and girlfriends, the Gods create a wild man, Enkidu, maybe the symbol of the original animal nature of humanity; Enkidu is tamed, and thus civilized, through sexual initiation by a prostitute. And so, Gilgamesh finally finds

someone able to stand up to him; the two fight, the King wins, and, in the end, Gilgamesh and Enkidu become best friends. Of course, this is just the beginning, as Gilgamesh and Enkidu will together face many more challenges and journeys. Like the one to the Cedar Forest, a legendary place, where the two kill its monstrous guardian, Humbaba – also known as “The Terrible” – and cut the sacred trees, what could possibly go wrong? Later on, the two troublemakers kill the Bull of Heaven, sent to punish them by the Goddess Ishtar – the main reason for this is actually the fact that Ishtar, a quite vindictive goddess, had her sexual advances dismissed by Gilgamesh. The Gods decide to show their disapproval for the actions of the two, and, as a form of retaliation, they sentence Enkidu to death.

And this is when things start to become interesting. With the death of his best friend, Gilgamesh becomes aware for the first time of his own mortality. In spite of being two-thirds a god, he will have to surrender to the grim reaper. There is nothing he can do about that. Or maybe there is: there might be a man – Gilgamesh is told – that somehow managed to escape death. Just a rumor, but more than enough for Gilgamesh to undertake a long, lonely, and dangerous journey through the world, with the purpose of finding the secret to a never-ending life. Do you see the pattern here? Since the very beginning of our written history, we can find narratives about human beings trying to defeat death. Not such a naïve, childish dream, apparently, but a quintessential part of our cultural DNA. But let’s go on with our story.

Gilgamesh faces many dangers and has many fascinating adventures – he meets the Scorpion Men, creatures featured in the Babylonian version of the Epic; he crosses the tunnel that the Sun traverses during the night below the Earth, which was flat, according to the Sumerians; and so on. And in the end, Gilgamesh finally meets the first and only immortal human being. His name? Utnapishtim, a kind of Sumerian Noah, a man who survived the Great Flood the Gods sent to punish humanity. Utnapishtim reveals his secret to Gilgamesh: the Gods, repenting for the excessive harshness of the punishment they released upon humanity, decided all together to make the Sumerian-Babylonian Noah immortal, as a form of compensation. This is far from good news for Gilgamesh: in fact, this is the bottom line; it would take a new general meeting of the Gods – and so another Great Flood – to grant immortal life to Gilgamesh. As a consolation prize, Utnapishtim offers Gilgamesh a magical plant that will keep him young throughout his mortal life. But luck is not on our hero’s side: while Gilgamesh is drinking water from a river, a snake steals the magical plant, and the only thing left for Gilgamesh is a sad return home.<sup>1</sup>

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<sup>1</sup> Stephen Mitchell, *Gilgamesh: A New English Version*, Atria Books, New York 2006

## Hubris, Anyone?

For our purposes, other mythical and legendary figures are worth mentioning. One of them is a character belonging to Greek mythology and also very dear to many Transhumanists, the Titan Prometheus, a true cultural hero, credited with different things – according to the different sources of the myth. So, Prometheus is either the creator of humanity, or the one who stole the fire from the Gods to donate it to mankind, or the one who – against the Gods’ will – taught humanity all of the arts and the knowledge that they have.

One way or the other, in the Western tradition, he became the symbol of both humanity striving for knowledge, progress, and civilization and the risk of surpassing the limits set by the laws of nature, paying a price in terms of hubris and the related unintended, usually bad, consequences. During the Romantic era, Prometheus became the embodiment of the figure of solitary genius, whose attempts to create something great and to ameliorate the human condition would inevitably end up in tragedy. The classic history – as told for the first time by Hesiod – represents him punished by Zeus, king of the Gods, bound to a rock, with an eagle eating his liver every day, only to have it regrow every night, ready to be eaten again the following day, forever. Prometheus’s myth appeared for the first time in the eighth century BC, with his story told by the poet Hesiod in his *Theogony*. In this case, it has a happy ending: after few years of punishment, another iconic Greek hero, Heracles, kills Zeus’s eagle and frees Prometheus.

Hesiod’s epic is just one of the many poems and works of art devoted to Prometheus, and we have at least to mention the fifth-century BC tragedy *Prometheus Bound*, in which Aeschylus widens the field of transgression perpetrated by the Titan against Zeus. Besides stealing the fire from the Gods, Prometheus stands accused of such charges as teaching human beings arts like medicine, agriculture, mathematics, and so forth. So, it is not a coincidence that, in 1818, Mary Shelley chose, for her novel, *Frankenstein*, the subtitle *The Modern Prometheus*.

*Frankenstein* is very important to us for many reasons. Unlike other novels of that age, the story told by Mary Shelley (1797–1851) – a young and ambitious scientist, Victor Frankenstein, decides to tinker with life itself and creates a monstrous but intelligent creature that in the end rebels against his own creator and all humankind – is not based on magic or some other supernatural device. It is human science that decides to challenge the laws of nature, in order to bring a human – if “composite” – being back to life. Yes, the idea for the novel came to Mary Shelley after a journey near Frankenstein Castle, where, a couple of centuries earlier, some obscure alchemist had attempted his own experiments. And yes, Shelley conceived her monster during a competition with authors like Polidori, Byron, and her future husband Percy Shelley, to see who was capable of writing the best horror story. But the scientific background that she tried to give to her work qualifies it as



the first modern science fiction novel – according to the sci-fi writer Brian Aldiss and others.

Besides, to her contemporaries, Mary Shelley’s idea of reanimating dead bodies using electricity would not have looked so extravagant, as shown by Sharon Rushton – Chair in Romanticism at Lancaster University – in her essay *The Science of Life and Death in Mary Shelley’s Frankenstein*.<sup>2</sup> In her paper, Rushton surveys the scientific background of Shelley’s novel and shows us how one of that age’s main obsessions was the difficulty of distinguishing clearly between the states of life and death and the connected fear of being buried alive. To study the phenomenon, in 1774, two London physicians, Thomas Cogan and William Hawes, created the Royal Humane Society, whose initial name was the Society for the Recovery of Persons Apparently Drowned. Every year, the society would organize a procession of those saved and reanimated by the two doctors’ resuscitation methodology – among them, Mary Shelley’s mother. The successes of the Royal Humane Society spread the idea that distinguishing between life and death was impossible and that, rotting corpses excluded, everybody was at risk of being buried alive – a fact that even inspired a market for “life-preserving coffins,” fully equipped with devices for easily opening them from the inside and holes for breathing.

Diderot and d’Alembert’s *Encyclopédie* distinguished between “absolute death” – characterized by a state of putrefaction – and “incomplete death,” comparable to states of coma, suspended animation, sleeping, and fainting. And, of course, in the same years, someone even tried to animate truly dead animals and people. During the second half of the eighteenth century, the Italian scientist Luigi Galvani managed to make a dead frog’s legs twitch using electricity – a phenomenon that came to be known as “galvanism.”<sup>3</sup> Just as it would happen in a horror novel – and, in some aspects, in Shelley’s novel itself –, Galvani’s nephew, Giovanni Aldini, tried to reanimate a human body, more specifically, the corpse belonging to a hanged criminal – a procedure allowed by the 1752 “Murder Act,” which established that a murderer’s corpse could be dissected for research purposes. And, incredible as it may sound, Aldini apparently succeeded – partially – as his corpse contorted its face, opened one eye, raised one hand, and moved its legs.<sup>4</sup> During those years, the nature of life itself was open to debate, with a member of the Royal College of Surgeons, John Abernethy, defending the idea that “life” was a separate material substance, basically a vital principle “super-added”

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<sup>2</sup> <https://www.bl.uk/romantics-and-victorians/articles/the-science-of-life-and-death-in-mary-shelleys-frankenstein>

<sup>3</sup> Luigi Galvani, *De viribus electricitatis in motu musculari commentarius*, 1792, <https://archive.org/details/AloysiiGalvaniD00Galv>

<sup>4</sup> Giovanni Aldini, *An account of the late improvements in galvanism*, 1803, <http://public-domainreview.org/collections/an-account-of-the-late-improvements-in-galvanism-1803/>

to the organized body – an idea in line with all of the fantasies about reanimating dead bodies through electricity.

As we are talking about people filled with hubris, can we really avoid mentioning Faust? Of course not. He is the protagonist of a popular German legend, apparently based on a semi-historical character, Johann Georg Faust – who was born more or less in 1480 and died more or less in 1540, even though some historians believe that this character actually represents the fusion of two different historical figures. At any rate, according to the classic legend, Faust is a charlatan – an astrologer, a magician, an alchemist, and a necromancer – very much dissatisfied with his life, to the point that he sells his soul to the Devil in exchange for superhuman knowledge and, of course, a considerable amount of physical pleasure. His story inspired many kinds of artwork, ballads, novels, movies, and so on. Even better, his name became an adjective, “Faustian,” used to indicate any person who renounces their moral principles in order to achieve powers and knowledge normally forbidden to human beings. A fact that, besides the moral part – Transhumanists talk a lot about ethics –, looks very Transhumanist. With a side effect, though, normally, Faustian characters end up losing their soul – of course, it was in the contract – and burning in Hell forever and ever. Anyway, the adaptations of the legend of Faust that are worth mentioning are, of course, Christopher Marlowe’s *The Tragical History of Doctor Faustus*, a play likely published around 1587; Johann Wolfgang von Goethe’s *Faust*, a play in two parts published between 1808 and 1832; and Thomas Mann’s *Doctor Faustus*, a novel published in 1947. Mann’s novel represents a reframing of this old legend and its adaptation to modern times. The novel tells the story of a fictional musician, Adrian Leverkühn, who sells his soul and his sanity to the Devil in exchange for 24 years of superhuman creativity. The description – or actual lack of it – of what awaits every Faustian Transhumanist in Hell is particularly effective:

That is the secret delight and security of hell, that it cannot be denounced, that it lies hidden from language, that it simply is, but cannot appear in a newspaper, be made public, be brought to critical notice by words—which is why the words ‘subterranean,’ ‘cellar,’ ‘thick walls,’ ‘soundlessness,’ ‘oblivion,’ ‘hopelessness,’ are but weak symbols. (...) that is what the newcomer first experiences and what he at first cannot grasp with his, so to speak, healthy senses and will not understand because reason, or whatever limitation of the understanding it may be, prevents him from doing so, in short, because it is unbelievable, so unbelievable that it turns a man chalk-white, unbelievable, although in the very greeting upon arrival it is revealed in a concise and most forcible form that ‘here all things cease,’ every mercy, every grace, every forbearance, every last trace of consideration for the beseeching, unbelieving objection: ‘You cannot, you really cannot do that

with a soul<sup>5</sup> -but it is done, it happens, and without a word of accountability, in the sound-tight cellar, deep below God's hearing, and indeed for all eternity.<sup>5</sup>

Of course, this will not stop the Transhumanists, for the following fundamental reason: Transhumanists are not religious types – at least in most cases – and, to them, the idea of hubris is nothing to be ashamed of. On the contrary, floating in a sea of nihilism, Transhumanism sees in hubris the only hope of salvation, the only chance human beings have of avoiding something that they fear even more than an imaginary Hell: pure nothingness.

### **The Fable of the Dragon-Tyrant**

What I would like to stress here is the complete overturn of the traditional hubristic narrative, so radical that, to the Transhumanist mind-set, characters like Gilgamesh, Prometheus, Victor Frankenstein, and Faust would unquestionably be seen as positive figures. So, let's press the forward button and take a look at a contemporary tale, written by one of the most prominent Transhumanist thinkers, Nick Bostrom (more about him later on): *The Fable of the Dragon-Tyrant*.<sup>6</sup> “Once upon a time – the tale begins – the planet was tyrannized by a giant dragon. The dragon stood taller than the largest cathedral, and it was covered with thick black scales. Its red eyes glowed with hate, and from its terrible jaws flowed an incessant stream of evil-smelling yellowish-green slime. It demanded from humankind a blood-curdling tribute: to satisfy its enormous appetite, ten thousand men and women had to be delivered every evening at the onset of dark to the foot of the mountain where the dragon-tyrant lived. Sometimes the dragon would devour these unfortunate souls upon arrival; sometimes again it would lock them up in the mountain where they would wither away for months or years before eventually being consumed.”

A pretty horrifying story, if you ask me. In the imaginary world depicted by Bostrom, tens of thousands of human beings die every day, which is exactly what happens in our world. In fact, as you have probably already figured out, the Dragon-Tyrant is none other than the personification of the aging process and, of course, death. The rest of the story represents, step by step, the actual struggle of humanity – existential, religious, psychological, and technological – to fight mortality, to cope with it, to accept it, and, at least if you are a Transhumanist, to ultimately defeat it. And, of course, just like every fairy tale worth its name – and

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<sup>5</sup>Thomas Mann, *Doctor Faustus*, Vintage Books, New York 1999, pp. 260–261

<sup>6</sup>Nick Bostrom, *The Fable of the Dragon-Tyrant*, «Journal of Medical Ethics», 2005, Vol. 31, No. 5, pages 273–277 <https://nickbostrom.com/fable/dragon.html>

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unlike classic moral fables – this Fable has a happy ending, which is exactly what Transhumanists expect: a never-ending “Happily Ever After.” In fact, after musings, reflections, meetings, and so on, the King and his people figure out a way to defeat the horrible monster that mortality is: they build – after many attempts – a superweapon and kill the Dragon-Tyrant.

The moral that we can extract from this Transhumanist Fable is quite straightforward: aging and death are bad. Period. We could not do anything about it, for the better part of human history, except accept it and rationalize it. But now things are changing, and technology is about to make the defeat of the Dragon-Tyrant possible, or at least thinkable. And this can be done only collectively, if we get rid of our religion-bound “hubris” mentality and decide that we have nothing to lose but our beliefs of a punishment for our “arrogance” in an afterlife that probably does not even exist. Even worse, stories like the ones mankind’s main religions tell are not harmless; their acceptance-based mentality actually represents a concrete obstacle for the development of weapons capable of killing the Dragon-Tyrant. The Fable ends with the King musing and talking about the need for the whole society to reorganize.

### Negentropy Versus Thermal Death

Surely, defeating individual death is not and cannot be the only goal for Transhumanists. After all, if you are planning to stay around for at least a few billion years, eventually you will have to face the issue of the death of the Sun and, after that, the thermal death of the universe, which right now seems the most likely scenario. This brings us to another Fable, courtesy of a well-known postmodern philosopher, Jean-François Lyotard. Trigger warning: in his most famous book, *La Condition postmoderne: Rapport sur le savoir*, Lyotard defines the concept of “postmodern” as “incredulity towards meta-narratives.”<sup>7</sup> These are large-scale visions of the world, scientific theories, and philosophical systems about the world as a whole. For example, the idea that science will be able to answer every question and know everything, the belief in the possibility of absolute freedom, the concept of unstoppable progress, and so forth. So, Lyotard seems to disqualify the Transhumanist dreams as mere “meta-narratives” – and, in this case, let me stress the abysmal difference between “disqualify” and “debunk.”

In some of his writings, Lyotard outlines a “Postmodern Fable” that he thinks constitutes the real fabric of the contemporary human techno-scientific endeavor, an implicit story that, maybe unconsciously, we, the Postmoderns, like to tell ourselves. Let’s call it the “Fable of Negentropy.” So, let’s imagine a very distant

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<sup>7</sup>Lyotard, Jean-François, *La Condition Postmoderne: Rapport sur le Savoir*, Les Editions de Minuit, Paris 1979, p. 7

future – says Lyotard – in which our Sun, reaching the end of its life cycle, will turn into a nova and destroy everything around it, including our beloved home, the planet Earth. Besides Lyotard's scientific error – technically, the Sun will turn not into a nova but rather a red giant, swallowing many planets in the process, and then into a small, superdense white dwarf – the concept is very clear: life is going to end in our system, no matter what. It will die; that's what counts. Are we still going to be around? We, or our post-human descendants? If this is the case, how are we going to get out of this? Anyway, according to Lyotard:

The narrative of the end of the Earth is not in itself fictional, it's really rather realistic. (...) Something ought to escape the conflagration of the systems and its ashes. (...) The fable hesitates to name the thing that ought to survive: is it the Human and his/her Brain, or the Brain and its Human? And, finally, how are we to understand the 'ought to escape'? Is it a need, an obligation, an eventuality? (...) There remains much to be done, human beings *must* change a lot to get there. The fable says that they can get there (eventuality), that they are urged on to do it (need), that doing it is in their interest (obligation). But the fable cannot say what human beings will have become then.<sup>8</sup>

And it seems that the end of the world as we know it, plus the possible end of the human mind itself in the far future, is going to constitute a huge philosophical problem:

It's impossible to think an end, pure and simple, of anything at all, since the end's a limit and to think it you have to be on both sides of that limit. So what's finished or finite has to be perpetuated in our thought if it's to be thought of as finished. Now this is true of limits belonging to thought. But after the sun's death there won't be a thought to know that its death took place. That, in my view, is the sole serious question to face humanity today. (...) In 4.5 billion years there will arrive the demise of your phenomenology and your utopian politics, and there'll be no one there to toll the death knell or hear it. It will be too late to understand that your passionate, endless questioning always depended on a 'life of the mind' that will have been nothing else than a covert form of earthly life. A form of life that was spiritual because human, human because earthly - coming from the earth of the most living of living things. (...) With the disappearance of earth, thought will have stopped - leaving that disappearance absolutely unthought of.<sup>9</sup>  
(...)

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<sup>8</sup>Jean-François Lyotard, *Postmodern Fables*, University of Minnesota Press, Minneapolis 1997, p. 84

<sup>9</sup>*Ibid.*, *Can Thought go on without a Body?*, in: *Ibid.*, *The Inhuman. Reflections on Time*, Stanford University Press, Redwood City 1991, p. 9

The sun, our earth and your thought will have been no more than a spasmodic state of energy, an instant of established order, a smile on the surface of matter in a remote corner of the cosmos. You, the unbelievers, you're really believers: you believe much too much in that smile, in the complicity of things and thought, in the purposefulness of all things! (...) Once we were considered able to converse with Nature. Matter asks no questions, expects no answers of us. It ignores us. It made us the way it made all bodies – by chance and according to its laws. Or else you try to anticipate the disaster and fend it off with means belonging to that category – means that are those of the laws of the transformation of energy. You decide to accept the challenge of the extremely likely annihilation of a solar order and an order of your own thought.<sup>10</sup>

Human thought works analogically, according to Lyotard, not just logically, and this way of thinking depends on a body and its correlation with a reality that is perceived as inexhaustible. Even more, human thinking is inextricably tied to two other human “endowments”: the ability to feel *pain* – no pain, no gain, we could say, even in the field of thinking and, most importantly, philosophizing – and the ability to *desire*. Will our descendants be able to build machines bearing consciousness, able to think logically *and* analogically and to feel pain and desire?

And here is where the issue of complexity has to be brought up again. I'm granting to physics theory that technological scientific development is, on the surface of the earth, the present-day form of a process of negentropy or complexification that has been underway since the earth began its existence. I'm granting that human beings aren't and never have been the motor of this complexification, but an effect and carrier of this negentropy, its continuer. I'm granting that the disembodied intelligence that everything here conspires to create will make it possible to meet the challenge to that process of complexification posed by an entropic tidal wave which from that standpoint equates with the solar explosion to come. I agree that with the cosmic exile of this intelligence a locus of high complexity – a centre of negentropy – will have escaped its most probable outcome, a fate promised any isolated system by Carnot's second law – precisely because this intelligence won't have let itself be left isolated in its terrestrial-solar condition. In granting all this, I concede that it isn't any human desire to know or transform reality that propels this techno-science, but a cosmic circumstance. But note that the complexity of that intelligence exceeds that of the most sophisticated logical systems, since it's another type of thing entirely. As a material ensemble, the human body hinders the separability of this intelligence, hinders its exile and

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<sup>10</sup>Ibid. pages 10–11

therefore survival. But at the same time the body, our phenomenological, mortal, perceiving body is the only available *analogon* for thinking a certain complexity of thought.<sup>11</sup>

To sum it up, in the natural world, entropy – that is, disorder – tends naturally to increase, but there are “pieces” of this world in which exactly the opposite happens, that is, order, or negentropy, increases. For example, the evolutionary process somehow represents a “negentropic wave” that creates growing tides of order and complexity. As far as we know, the final battle between entropy and negentropy will be won by the former, even though science fiction – which Lyotard is probably not very fond of – has offered us some possible, indeed imaginative, solutions.

Entropy is definitely a serious issue, if you are planning to stick around for many billions of years – maybe killing time with philosophy or art in the meantime. Moreover, being very proactive people, Transhumanists will probably disagree with this passive interpretation of the human species as just a stage or a consequence of this “center of negentropy.” Quite likely, they would like their post-human descendants to “take charge” of this process, to become the conscious and willing embodiment of this negentropic wave against universal entropy, not just “going with the flow” – that is, finding ways to establish “pockets” or “islands” of negentropy in a “sea” of entropy – but establishing its direction and its final destination. One thing is sure: Transhumanism is not just about surviving biological death or universal entropy, which would be a reactive attitude; in fact, this movement has plans and projects that, among its most intellectually brave members, border and actually spill over into religion.

In other words, Transhumanism represents a movement that unashamedly embodies one of the most human of passions: the burning desire for life and knowledge against all odds and, of course, the related hubris, which – courtesy of the philosophically nihilistic era we live in – has become something not to be punished but to be rewarded.

## Spoiler Alert

In spite of the fact that Transhumanism is quickly going mainstream, this movement still has many detractors, who see it as either dangerous or, more frequently, silly. So, if one wants to find critics of Transhumanist ideas, there are many out there, and one simply has to pick among a wide selection. My approach is different, though. I do not consider myself fully a Transhumanist, because, firstly, I do not like labels of any kind and, secondly, because there are quite a few Transhumanist

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<sup>11</sup>Ibid. p. 22

ideas that I find questionable – not from a moral viewpoint but from a metaphysical one. But, yes, I am kind of sympathetic. In spite of all of the abysmal differences, I do like the Transhumanists, as they are a quite interesting strain of human being and also because, in this post-ideological era – I mean, you are not going to take the political ideologies available nowadays seriously, are you? – they found the ability to dream again. And dream big, I have to say, as I will explain in the following chapters.

So, here are the topics that I will cover in this book. In the first chapter, I will cover what I call, with some reservation, “precursors” of Transhumanism, while Chapter 2 will deal with the Transhumanist movement itself, its main ideas, its main representatives, its organizations, and much more. I will devote the third chapter to a specific Transhumanist topic, the attempt to live as long as possible, maybe forever. Chapter 4 will cover the Transhumanist “plan B,” that is, cryonics – a good idea, if your plan A, immortality, fails. Chapter 5 will analyze another of the “pillars” of Transhumanism, nanotechnology, while Chapter 6 will cover the actual research into enhancing the human body through technology attempted by single individuals, enterprises, and organizations. Chapter 7 will bring us inside the human brain and the possibility of it interfacing with machines, as well as modifying it with different technologies and fundamentally changing the human biological experience – mind uploading will also be considered – in the eighth chapter, we will explore the concept of “Paradise Engineering.” Chapter 9 will cover extensively one of the most beloved Transhumanist concepts, the technological singularity and its consequences; Chapter 10 will examine the controversial relationship between Transhumanism and religion and the desire of the former to ascend to a God-like state. We do not know if Gilgamesh could possibly defeat the Dragon-Tyrant, as he did with Humbaba – aka “The Terrible” – but one thing we know for sure: a Hell of a ride is waiting for us.



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# 1



## Stairways to the Sky

### 1.1 Climbing the Slope, Looking for a Purpose

Overcoming the limitations of our short lives has always been among the deepest, most heartfelt of human desires, no matter how arrogant this may sound. And, by the way, just look at the original Latin root of the verb “desire,” a combination of “de,” which indicates “lack of something,” and “sidus,” that is, “star.” To desire literally means “to miss the stars,” to feel a need for them. Transhumanists, like many others, want to fulfill this “human, too human” desire to reach for the stars, and in a quite literal sense. Reaching the stars, living among them, becoming like Gods, and, of course, living forever, without ever having to meet the Grim Reaper.

Among the forerunners of the Transhumanist movement, we can mention people as diverse as the European alchemists of the Middle Ages, with their obsessive research into the Philosopher’s Stone and the related Elixir of Life, able to grant, or so they say, eternal youth; the Chinese Taoists, with all of their meditative, medical and gymnastic practices; or even the Ancient Egyptians, promoters of the mummification of the Pharaoh’s body, a kind of precursor to contemporary cryonics.

We could go on and on for hours, but this would be getting lost in the meanders of history. As an alternative, I decided to select a few moments from the history of philosophy that Transhumanists themselves consider “foundational” to their own cultural movement. So, what do Transhumanists think about their own family tree? If we ask Nick Bostrom, scholar at the University of Oxford and one of the

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most prominent contemporary Transhumanist thinkers, he would tell us that the starting point can be found in the *Oration on the Dignity of Man* (1486) by Pico della Mirandola, in which the author states that man is “a creature neither of heaven nor of earth, neither mortal nor immortal,” and, as the free and proud shaper of his own being, he should “rise again to the superior orders whose life is divine.”<sup>1,2</sup>

Within the Transhumanist Pantheon, Bostrom also includes Francis Bacon, as, in his *Novum Organum*, the English philosopher didn't just propose a scientific method based on empirical data, he also stated that science should have been used to subjugate Nature and improve men's lives, with the final goal of “making everything possible.” Renaissance ideals, science and rationalism would then constitute fundamental ingredients of the Transhumanist mentality.

Among the spiritual ancestors of this movement, we then find the Marquis of Condorcet, who used to speculate on the possible indefinite, although not infinite, prolongation of life, through the improvement of the human race; and Benjamin Franklin as well, who dreamed of being preserved with some friends in a barrel of Madera, in order to see the future of the country that he founded.

Last, but not least, let's mention the French philosopher Denis Diderot (1713–1784), who, according to the Transhumanist George Dvorsky, believed that “humanity might eventually be able to redesign itself into a great variety of types whose future and final organic structure is impossible to predict.”<sup>3</sup>

### 1.2 The Nietzschean Knot...

When we speak of a cultural, intellectual and political movement as articulated as Transhumanism, it is difficult to establish the starting point, or identify a date or character functioning as a divide between “before” and “after.” Mostly because – and this is a classic issue in the field of the history of science – we would end up classifying those who share the idea we are analyzing but came before the chosen

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<sup>1</sup> Linguistically speaking, Dante was the first to use a term similar to “Transhumanism.” In the “Divina Commedia – Paradiso,” he uses the verb “transumanar,” that is, “to transcend the human condition.” After reaching Heaven, the “father of the Italian language” meets Beatrice and, looking into her eyes, is “transhumanized,” that is, he gets purified and transcends his human limitations. In the Twentieth Century, we find a similar term in Thomas Stearns Eliot's 1949 play “The Cocktail Party,” in which the author speaks of the human efforts to reach enlightenment as a process in which the human is “transhumanized.”

<sup>2</sup> Cf. N. Bostrom, *A history of transhumanist thought*, in: «Journal of Evolution and Technology», Vol 14, n.1, 2005 <http://www.nickbostrom.com/papers/history.pdf>

<sup>3</sup> G. Dvorsky, *Revisiting the proto-transhumanists: Diderot and Condorcet*, <https://ieet.org/index.php/IEET2/more/dvorsky20101111>

date as “precursors,” a category based on a retrospective view – that is, biased by our privileged position of “people of the present day.”

Sadly, we cannot excuse ourselves from this task: for our purposes, we need to track down a figure or character that functions as a “point of origin” or “father” of the Transhumanist movement.

And this operation is made more difficult by the fact that Transhumanists are not dead and forgotten, but rather alive and well, and they work hard to meticulously back up their theories – and, in doing so, try to enlist as many “mainstream” thinkers as possible, in order to acquire indispensable academic credentials. So, instead of picking one character, I am going to indulge in one of yours truly’s favorite hobbies, creating, in this chapter, a *list* of characters and movements that can be considered “precursors” of Transhumanism. I will call them “Stairways to the Sky,” because they all represent attempts to raise us from our mortal condition and reach for the stars – *per aspera ad astra*, as the Ancient Romans used to say. Anyway, first of all, we have to tackle an issue produced by this typical Transhumanist way of doing things retroactively, which is: does the oft-quoted, but seldom understood, Friedrich Wilhelm Nietzsche and his concept of the “overman” have anything to do with Transhumanism?

German philosopher Jürgen Habermas has defined Transhumanists as a group of eccentric intellectuals who refuse what they consider the illusion of equality and aim to put biotechnology at the service of their super-humanistic fantasies originated from Nietzsche.<sup>4</sup> Is this true? And, above all: is there any connection between Transhumanism and Nietzsche’s thought?

Born in 1844, Friedrich Nietzsche is too famous a philosopher to go on about his thought in detail; thus, I will provide you just a few hints. With a philological background, Nietzsche is considered by most schools of philosophy – certainly at least by the “Continental” one, which today refers to France – an “epochal” thinker, a “breaking point” from the previous tradition, from Plato on. The synthetic and non-appealable statement of Nietzsche in *Gay Science*, “God is dead,” constitutes the first diagnosis ever made of the condition in which the West dwells, that is, nihilism, which consists of the historical-metaphysical process by which “all higher values devalue themselves.”

In other words, consolidated religions, and especially Christianity, fade, and with them the faith in the existence of an after-life in which evil is punished and good is rewarded. And not only that: even the idea of God and, more generally, of a higher metaphysical reality guaranteeing the validity our knowledge fades. In fact, the death of God is not just the verification of God’s and the after-life’s non-existence. It is the awareness that there’s no objective parameter of knowledge – that is, there is no truth, and everything is interpretation –, no moral principle or

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<sup>4</sup>J. Habermas, *Die Zukunft der menschlichen Natur. Auf dem Weg zu einer liberalen Eugenik?*, Suhrkamp, Frankfurt 2001, p. 43.

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guideline able to give meaning to our lives and allow us to face the nothingness waiting for everybody.

Nietzsche contrasts all of this with his well-known and controversial doctrines of the Eternal Recurrence and the Overman. Man is something that must be overcome, and the Overman is a new anthropological type, able to embody an aristocratic ethos, to see beyond the shallows of nihilism and accept, even welcome with joy, life as it is, with all of its beauty and ugliness, so much so that he would wish to repeat it eternally. Of course, this is a simplified version; in Nietzsche, there are a number of controversial points and open loops, in part because of his way of writing aphoristically and inorganically. For instance, it is not clear what Nietzsche really means by Eternal Recurrence – is it an “ironical” device, aimed at finding a new post-nihilist system of values, or does the thinker really believe that time is circular in nature? But, of course, the most controversial concept is that of the Overman, because it was suspected of supporting racist and eugenicist interpretations (the use the National-Socialists made of it was itself enough to foster these suspicions), beyond the more classic/para-Existentialist one: the Overman as a person who can face the Nothingness, accepting it and ingraining his own freely created values into it.

So, should or should not Nietzsche be considered the forefather of Transhumanism, that is, the idea that human beings should take control of their own biologic evolution, freely designing it through technology, in order to reach a post-human stage? Yes, according to the German scholar Stefan Lorenz Sorgner. An expert in Nietzschean thought, the philosopher, who teaches at John Cabot University, Rome, created a provocation in 2009 in the online Transhumanist *Journal of Evolution and Technology*. In his paper *Nietzsche, the Overhuman, and Transhumanism*,<sup>5</sup> Sorgner supported this connection, stressing the similarities between the Transhumanist concept of genetic enhancement and the Nietzschean concept of education. Basically, while Bostrom rules out Nietzsche from belonging to the list of Transhumanism’s ancestors, Sorgner tries to identify similarities between the two. According to the latter, both promote a dynamic vision of life and ethics, and the Nietzschean notion of Will to Power would for Transhumanist purposes work nicely. More specifically, the impulse towards self-improvement and “the feeling that power is growing” dear to Nietzsche would embody the “technological enhancement” of the human faculties desired by the Transhumanists. Sorgner tries to institute a parallelism between the educational process, which Nietzsche sees as the main tool for creating the Overman, and the few types of genetic enhancement sought by the Transhumanists, which Nietzsche couldn’t have known, but that he possibly would have liked, or at least considered acceptable as a means of education.

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<sup>5</sup>S. L. Sorgner, *Nietzsche, the Overhuman, and Transhumanism*, «Journal of Evolution and Technology», Vol. 20 n. 1 – March 2009 – pages 29–42, <http://jetpress.org/v20/sorgner.htm>

Contrastingly, Bostrom connects Transhumanism and the Utilitarian and Pragmatist thought belonging to the Anglo-American philosophical tradition. What worries Bostrom the most is stressing the democratic nature of Transhumanism and distancing it from any tradition of thought – Nietzsche and eugenics *in primis* – that had ties to the twentieth century’s tragedies. To Bostrom, the main point is to promote a liberal interpretation of eugenics, that is, to see Transhumanism as a set of proposals that every individual can choose among or refuse to choose.

To Sorgner, Transhumanism is not very well developed from an ethical viewpoint, and Nietzsche might provide Transhumanists a chance for reflection and better self-knowledge. On the other side, Transhumanists might help to concretize the figure of the Overman, which Sorgner doesn’t mean in metaphorical or ironical terms, but as an actual enhanced human.

The Transhumanist philosopher Max More comes to the rescue of Sorgner; according to the former, between Nietzscheanism and Transhumanism, there are no mere parallelisms: the first has directly influenced the second. The proof? Max More himself, whose musings have been inspired directly by the reading of Nietzsche.<sup>6</sup> According to More, Nietzschean thought contains different conflicting concepts, and some of them, like that of Eternal Recurrence, are not compatible with Transhumanism. Other conceptions are, though, and the latter, like those of the Overman and Will to Power, are the ones that inspired More.

More tells us that studying Nietzsche’s thought is what pushed him to write, in 1990, his essay *Transhumanism: Towards a Futurist Philosophy* and to elaborate his “Extropic Principles,” which we’ll mention again later. So, maybe not every Transhumanist has been inspired by Nietzsche, but some were – the correctness of their interpretation is, as they say, a horse of a different color. Likewise, other authors, like Bostrom, borrowed from completely different traditions, like Enlightenment Rationalism.<sup>7</sup>

The lively debate on the relationship between Nietzsche and Transhumanism has enriched the pages of the *Journal of Evolution and Technology* with many other interventions. So, for example, Bill Hibbard, researcher at the University of Wisconsin, has tried to read the Nietzschean conception of Eternal Recurrence in physical terms, showing that, if time really has a circular structure, if every event is really destined to repeat itself, this would very strongly connect the Transhumanists’ scientific worldview and Nietzsche’s thought.<sup>8</sup>

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<sup>6</sup>M. More, *The Overhuman in the Transhuman*, «Journal of Evolution and Technology» – Vol. 21 n. 1, January 2010, <http://jetpress.org/more.htm>

<sup>7</sup>N. Bostrom, Op. cit.

<sup>8</sup>B. Hibbard, *Nietzsche’s Overhuman is an Ideal Whereas Posthumans Will be Real*, «Journal of Evolution and Technology» – Vol. 2, n. 1, January 2010 – pages 9–12, <http://jetpress.org/v21/hibbard.htm>



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As Sorgner belongs to the Nietzschean community, could the latter avoid joining the debate? Of course not. In fact, in 2011, the journal of Nietzschean studies *The Agonist* published a few analyses, by as many Nietzsche scholars, regarding the relationship between Nietzscheanism and Transhumanism.

With some distinctions, the Nietzscheans' responses to Sorgner seem to be relatively negative, starting with the one by Keith Ansell Pearson,<sup>9</sup> scholar at the University of Warwick, who has stressed the distance between Nietzsche and Transhumanism in a book as well.<sup>10</sup> Also, Babette Babich, from Fordham University, New York, disagrees with Sorgner; to her, the Nietzschean Overman does joyfully accept every single aspect of existence, including the most cruel, banal and sad, which is something quite different from the Transhumanist ambition of redesigning human life, starting with its main characteristic, which they dislike the most, that is, mortality.<sup>11</sup> In other words, to Babich, Transhumanists' dreams are "human, too human," and their vision is nothing more than a form of that renunciation of the real world so criticized by Nietzsche. Paul S. Loeb, University of Puget Sound, expresses some sympathy toward Transhumanism; to him, the advent of a new post-human species would require the incorporation into Transhumanism of Nietzschean concepts such as the Overman and Eternal Recurrence – as the core of Transhumanism is precisely the desire to somehow control time, just like the Nietzschean Overman embraces Eternal Recurrence with the purpose of *willing* the past.<sup>12</sup> For Loeb, the Nietzschean conception of Eternal Recurrence should be taken very seriously, as it would describe, for Nietzsche, the world as it is; actually, it would be the only possible way for the Overman to *assume real control over time*, as, if time really flows circularly, then our will, directed toward the future, would end up including the events of the past inside its sphere of influence – and so those past events would not be necessary, unavoidable or superimposed on our will, but would rather be simply a consequence of the latter.

At the end of the debate, Sorgner reaffirms the purpose of his work, which is to stress the few structural similarities between Nietzscheanism and Transhumanism.<sup>13</sup> The bottom line? Nietzsche is not exactly an *ante litteram* Transhumanist, but you can make him one if you wish; you can get inspired by him in your Transhumanist

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<sup>9</sup>K. Ansell Pearson, *The Future is Superhuman: Nietzsche's Gift*, in: «The Agonist», Vol. IV, n. 2, Fall 2011.

<sup>10</sup>K. Ansell Pearson, *Viroid Life: Perspectives on Nietzsche and the Transhuman Condition*, Routledge, New York 1997.

<sup>11</sup>B. Babich, *Nietzsche's Post-Human Imperative: On the "All-too-Human" Dream of Transhumanism*, in: «The Agonist», Vol. IV, n. 2, Fall 2011.

<sup>12</sup>P. S. Loeb, *Nietzsche's Transhumanism*, in: «The Agonist», Vol. IV, n. 2, Fall 2011.

<sup>13</sup>S. L. Sorgner, *Zarathustra 2.0 and Beyond. Further Remarks on the Complex Relationship between Nietzsche and Transhumanism*, in: «The Agonist», Vol. IV, n. 2, Fall 2011.

speculations and musings, and you can even merge Transhumanism and Nietzscheanism, thus creating a kind of “philosophical cyborg.”

Our story is not over, though. In 2017, Cambridge Scholars published an anthology with all of the papers of the first “round,” plus other contributions that would make our debate even more lively: *Nietzsche and Transhumanism: Precursor or Enemy?*, edited by Yunus Tuncel.

As pointed out by one of the contributors, the Australian philosopher Russell Blackford, Transhumanism is a broad intellectual movement with no body of codified beliefs and no agreed-upon agenda for change; it is a cluster of philosophies, based on a few assumptions (human beings are in a state of transition, change is desirable and it will happen through technological means, and so forth).

Transhumanism is a grassroots movement, an aggregate of loosely tied ideas, concerning the possibility of enhancing human capabilities through technological means, the radical extension of human life, youth, and health, and, of course, the opportunity and desirability of self-directed human evolution, that is, the opportunity for our species to take human evolution in our own hands. Accordingly, Transhumanism is compatible with any ideology, religion, or philosophy that is willing to accept, or at least not oppose, these goals. This is why we can find blends of Transhumanism with Liberalism, Anarchism, Socialism, Communism, Fascism, Atheism, Christianity, Mormonism, and so forth. Similarly, we can blend Transhumanism with any philosophical view of reality, for example, with materialistic reductionism, naïve realism, post-humanism, and, of course, with the thought of Friedrich Nietzsche – as attempted by Ted Chu in his 2014 book *Human Purpose and Transhuman Potential* (Origin Press).

It is difficult to summarize the dense philosophical content of the anthology; so, permit me to mention a few interesting suggestions that the reader can find and benefit from.

Ashley Woodward compares and confronts the concept of education in Nietzsche, which he identifies with the “Technologies of Self” mentioned by Foucault, such as reading, writing, meditation, dietary regimes, physical practices, etc., with the technologies that Transhumanists are very fond of, the “GRIN” technologies of genetics, robotics, information technology and nanotechnology. Woodward hints at a future in which these two expressions of the human spirit might interact and interlace.

Paul S. Loeb – whom we already mentioned – gives us an interesting take on the topic of the Overman/post-human and its relationship with time. So, let’s go back to his perspective, with some more details. Far from being a prison, Eternal Recurrence represents – when taken as a real feature of the world, and not as an ironic device – a powerful ontological tool, a way for the Overman to will himself backwards in circular time, an Eternal Recurrence-enabled mnemonic control of the past. The Overman is thus able to defeat the contingency that informs our lives, gain complete control over time, autonomy, self-affirmation, and

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self-knowledge. After all, if you are able to will yourself backwards and turn your past, including any minimal detail, into a personal choice, you can know absolutely everything about yourself, your life, your relationship with your social and cultural context. This entails absolute self-knowledge and absolute autonomy (and freedom from any form of contingency, any type of external causation). This is quite an evolutionary jump, for the Nietzschean Overman!

In *Nietzsche's Overhuman is an Ideal Whereas Posthumans will be Real*,<sup>14</sup> Bill Hibbard analyzes a famous Nietzsche quote:

Here man has been overcome at every moment; the concept of the 'overman' has here become the greatest reality – whatever was so far considered great in man lies beneath him at an infinite distance. (Nietzsche 1888, 305.)

Hibbard takes this quote very seriously, stressing the importance of this “infinite distance.” The Overhuman is real, or he/she/it(?) will be, and is defined by Hibbard as an individual that “has no need for improvement, having achieved satisfaction with life.” The Overhuman is an ideal that post-humans of the near and far future will struggle to achieve. There is an assumption here, quickly recognized by Hibbard: that humans and different post-humans will agree on what improvement means and on this ideal of the Overhuman, which, in fact, might not be the case. Anyway, the sentient being that we call the Overhuman has achieved such a state of satisfaction with life that he/she would gladly repeat it forever and ever. An infinite degree of satisfaction, as infinite as the distance between what is considered great in humanity and the Overhuman her/himself. So, taking the statement by Nietzsche very seriously and literarily, Hibbard introduces this element of infinity into the human struggle for satisfaction. Which appears also to be a synonym for evolution: infinite is the distance between the man and the Overman, and this distance is occupied by an infinite series of post-human existences, which we can call  $s_1$ ,  $s_2$ ,  $s_3$ , and so forth. What Hibbard is trying to do here is to treat this infinite sequence of improving post-humans mathematically; the point is to show that, in a finite universe, improvement is finite, and there is an achievable state beyond which any improvement is physically impossible. Not ideally, just physically. But, the universe being what it is, the post-human that achieved that ultimate state would be a *de facto* Overman, and would rest satisfied with his own life. There is another assumption here, which is that there is only one universe, and not an infinite series of universes, or a higher order multiverse, or a ladder of more and more complex universes, leading to an ultimate, infinitely complex reality – if there is such a thing. Anyway, if we abandon this assumption, we reintroduce the idea of infinity into the human struggle for improvement in all of its full force.

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<sup>14</sup>Y. Tuncel (ed.), *Nietzsche and Transhumanism: Precursor or Enemy?*, Cambridge Scholars Publishing, Cambridge 2017, p. 37.

And we need to deal with it. If this idea of “infinite distance” has to be taken seriously, then we have to deal with the idea that either the state of the Overhuman is ultimately non-achievable – too vast is the distance between it and the human – or the Overhuman *is* achievable, as thought by Nietzsche himself, according to some interpretations. If the latter is the case, then the post-humans of the far future should try to imagine a way to bootstrap themselves toward/into the infinite complexity that lies ontologically ahead of us. Short of some form of mystical union, which I am not even going to attempt to outline, it being outside the purpose of this writing, I would say that I have no idea as to how to do that. That is, how to bootstrap humanity into an infinite complexity. Maybe the post-humans, in their superior wisdom, will know better.

We have to raise another question though: is this what Nietzsche was thinking? Quite likely, not. I am no Nietzsche scholar, but I think that is a safe bet. Should we care? No: unless you are a Nietzsche scholar – which is fine with me, of course –, what really matters is to develop *brand new ideas* about our future evolution, and this confrontation between Nietzsche and Transhumanism seems a good breeding ground.

If we want, we can metaphorically consider Transhumanism a kind of “stair” extended toward the Sky – a Tower of Babel 2.0, basically – and all of the “precursors” of this movement as the many attempts to climb Olympus. According to this view, Nietzsche could be considered, if we wish, a first stair. An ambiguous stair, though, and even a bit of a shaky one, a stair that we can shore up right away, with another cultural movement that opened the way to Transhumanists: Futurism.

### 1.3 ...and the Futurist One

Comparing Transhumanism and Futurism is easier; if you have ever covered the latter, you’ll at least vaguely remember the Futurists’ enthusiasm toward speed, machines, technology and human ingenuity, able to rule over Nature. Founded by the Italian poet Filippo Tommaso Marinetti, this was a movement born against the worship of the past, so much so that it provocatively asked for the closing down of museums and universities, which the new movement accused of being mere keepers of the past.

Futurism was officially launched in 1909, with the publication of the *Futurist Manifesto* – the first of a long series –, in which Marinetti explained the principles underlying his view of art, from contempt for the past to the worship of technology and machines, to the search for a style representing a break with everything done so far. Many painters joined the movement – Umberto Boccioni, Carlo Carrà, Giacomo Balla, Gino Severini, Lucio Russolo –, but Futurism actually invaded every area of art, from architecture to music, and even fashion and cuisine.

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The Futurists even attempted to enter the political arena, cultivating contradictory positions and alternating their attraction towards Fascism with one towards Communism. And so, sometimes Futurism is patriotic and war-prone and sometimes it is close to the working class and animated by internationalist feelings – a stance stemming from the fact that its influence reached even Russia. Initially favoring Fascism, Futurism went on to distance itself from it, because of its cult of the past and the attempts by Mussolini to build good relationships with the Church – hated by Marinetti and his colleagues.

It's worth noting that Futurism arose in conjunction with a period of strong technological development characterized mostly by power and speed, while Transhumanism became established during an age characterized by progress of an even more radical sort, that of biotechnologies, which, as we see every day, allow us to get into the control room of life. Now, the question is: besides some superficial analogies, do the Transhumanist ideology and the Futurist movement have something deeper in common? In other words, if Nietzsche represents the first, shaky philosophical “Stairway to the Sky” of the current world, does Futurism represent the second one?

The problem here lays in the fact that Futurism has always been considered “just” an artistic movement, and not a “total” and “proactive” worldview. Or is it?

According to Riccardo Campa – professor of sociology of science at the Jagellonian University of Krakow and a well-known Italian Transhumanist – this is exactly the case. In his interesting *Trattato di filosofia futurista*, Campa tries to identify the philosophy underlying Futurism, which, according to him, represents a consistent and complete form of Transhumanism *ante litteram*.<sup>15</sup> So, Futurism would represent, in particular, a real philosophy of technology, a movement that doesn't see the latter as “dehumanizing,” but, on the contrary, as something that should be welcomed in an ecstatic way – and I am not exaggerating when I mention the notion of “ecstasy,” as there has been a lot of talk among historians about the “technological sublime” of Futurism, that is, the fact that the power of technology would provoke in the soul of the Futurist that mixture of wonder and terror provoked by natural forces in the soul of the Romantics.

Superhuman and demiurgical tendencies can be detected as far back as the title of a 1915 text by Giacomo Balla and Fortunato Depero: *Ricostruzione futurista dell'universo*; but it is Marinetti himself who, in *Fondazione e manifesto del futurismo*, states the hope for “a violent assault against the unknown forces (of Nature), in order to force them to bend the knee in front of Man.”<sup>16</sup> Anticipating the modern culture of advertisement, Futurists coined several effective slogans, from

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<sup>15</sup>R. Campa, *Trattato di filosofia futurista*, Avanguardia 21 Edizioni, Rome 2012.

<sup>16</sup>F. T. Marinetti, *Fondazione e Manifesto del futurismo*, in Various authors, *I manifesti del futurismo*, Edizioni di «Lacerba», Florence 1914.

“challenge the stars” to “rebuild the Universe,” from “climbing the Sky” to “create the mechanical man with interchangeable parts.”

We cannot deny that there is a great degree of self-glorification in Futurism, which borders on a form of delusion of omnipotence – even though it is not clear how seriously the Futurists took themselves. The interpretative key offered by Campa is very clarifying, though: to him, Futurism is a philosophy of Becoming, just like that of Heraclitus. And, like all philosophies of Becoming, Futurism is also aware of the impermanence of things, of the fact that everything is dragged away and corroded by the time flow; in the case of Marinetti and colleagues, the only way to contrast this irresistible process of annihilation would be to welcome it, intensifying it in every possible way. Not through the adoption of a Dionysian lifestyle, though, but through the development of a technology able to confer upon us a demiurgic role.

And, if we look carefully, Futurism does have an explicit wish to create a post-human being. For example, in 1910, Marinetti writes, in *L’Uomo Moltiplicato ed il Regno della Macchina*, that the goal of Futurists is exactly the creation of a “non-human type” or the “identification of the Man with the Engine”; that countless human transformations are possible; that, as the future world will be characterized by speed, humans will have “unexpected organs, adapted to the needs of an environment made by continuous impacts.” Last, but not least, the multiplied man “will not know the tragedy of aging.” A very Transhumanist idea indeed.

Poet Paolo Buzzi talks about the “Impossible Children of the Future,” Fedele Azari states that surgery and chemistry will produce a standardized kind of man-machine “resistant, un-consumable and almost eternal,” and Futurists in general aim to create a “mechanical anthropoid” able to merge Dionysian instincts, speed and superb technological progress. Speed is actually the main symbol of the Futurist post-human, in the sense that technology, faster and faster, confers upon us a kind of *sui generis* immortality: so, for example, Azari stresses – in *Vita simultanea futurista* – that everyday life is consumed mostly by banal activities, from personal hygiene to personal beauty care, from feeding to moving from one place to another, from dressing to doing the chores; but the speed provided by technological progress will free us from these needs, making them temporally more compact, and freeing more time than we have now for intuition, art, sport and creative activities.

So, this is the Italian Stairway to the Sky, which follows the Nietzschean one. From the viewpoint of Transhumanist history, these are ambiguous characters and topics, whose role as Transhumanist precursors deserves more research. If you are looking for a group of thinkers openly connected and connectable to Transhumanism, we have to look at Russia, and especially at the Cosmists.