

New Eschatologies in the Contemporary Virtual Reality

I. Is the “Singularity” near?

New religious eschatologies that I consider in this lecture are closely connected with the concept and expectation of a coming technological “singularity”, which will – according to the opinions and hopes of some optimistic futurists (as Vernor Vinge, Ray Kurzweil et al.) – presumably arise in a relatively near future from the development of computer-superintelligence, i.e. it is going to be established by cyber-technology, possibly also in the direct interaction with human brains (or human minds, if we take this word in the sense of the contemporary cognitive science/philosophy).

The term “singularity” comes from mathematics and physics. In mathematics, a singularity is a point (or a surface) where a function is not defined (in formal terms, where it is not differentiable). In physics, a singularity is “a black hole” in space-time, although when considering black holes we have to distinguish between a black hole as *an area of space-time* beyond the “event horizon”, which is not accessible from the outside and, a singularity in the proper sense, in the middle of a black hole, which is merely a *hypothetical* point, a theoretical construct (i.e. a consequence of the General Theory of Relativity). The futuristic use of the term “singularity” is of course merely analogical.

Vernor Steffen Vinge, a mathematician, computer scientist and writer of science-fiction books, is best known as a futurist for his article *The Coming Technological Singularity* (1993; revised version *Technological Singularity*, 2003). At the beginning of this article, Vinge boldly states, “I believe that the creation of greater-than-human intelligence will occur during the next thirty years. [...] let me be more specific: I’ll be surprised if this event occurs before 2005 or after 2030” (Vinge 2003, 2). Then “[w]e will be in the Posthuman era” (ibid. 4). The human era will have ended, and this could mean also very dark scenarios. Then comes the question of whether such scenarios can be avoided. The starting point of Vinge’s article is the statement that we are “on the edge of change comparable to the rise of human life on Earth” (ibid. 1), i.e. we are faced with the rise of a superintelligent technological Singularity. Vinge announces it as follows:

It is fair to call this event a singularity (the Singularity for the purposes of this piece). It is a point where our old models must be discarded and a new reality rules, a point that will loom vaster and vaster over human affairs until the notion becomes a commonplace. Yet when it finally happens, it may still be a great surprise and a greater unknown. (Ibid. 2)

The technological (and *eo ipso* historical or even cosmic) singularity is thought of in a double analogy with physics: this Event is supposed to be *singular* in the sense of being torn out of our historical space and time; and secondly, it is *hidden* for us since it is now (still) beyond our “event horizon”. According to Vinge, however, there already seem to be indicators that give “the appearance of approaching some essential singularity in the history of the race beyond which human affairs, as we know them, could not continue” (ibid.): supposedly, a new era of

“transhumanism” is going to appear. Vinge has seen the signs of this singular change above all in the ever-accelerating development of computer science and nano- and biotechnology in the last few decades, and if this trend continues at the same rapid pace in the future, the singularity will be unavoidable in as early as the first half of this century.

Ray Kurzweil, a famous computer scientist and inventor and a controversial futurist of cyber-technology, is next to Vernor Vinge the best-known contemporary prophet of the imminent technological singularity and, consequently, of the emergence of “transhumanism” – but, in difference to Vinge, Kurzweil is very optimistic. In his seminal book *The Singularity Is Near: When Humans Transcend Biology* (2005). Some of his “prophecies” are the following:

- In 2029 a computer will successfully pass the Turing test, which means it will become equal to human intelligence.
- In the 2030s the boundary dividing humans and computers will be progressively erased (numerous cyborgs, etc.).
- In 2045 the Singularity will emerge, implying the end of the human era, the beginning of “transhumanism” and the rise of a “new species”—*sapiens 2.0*, and later, possibly also *3.0*.
- Around 2200 the universe will become a “gigantic supercomputer”.

But what are the arguments for such a dramatic chronology of forthcoming events? In similarity with Vinge, Kurzweil also refers to “Moore’s Law” (Gordon Moore, 1965), which says that the ability of computer processors doubles approximately every two years. This has been true for a few decades, but the further validity of this “law” depends on several factors, in particular on the discovery of new hardware technologies (i.e. whether quantum and cellular computers are realisable, etc.), since the limits of traditional hardware are already apparent.

However, regardless of the validity of Moore’s Law in the future, and even taking into account the importance of positive feedback of cyber-technology, it is not at all clear why and how the growth of the *quantity* of hardware (and software, in parallel) could bring about a new *quality*, i.e. the strong (or general) artificial intelligence: computer consciousness, machine “soul” and/or “mind” in the proper sense.

But, on the other hand, even if Kurzweil almost certainly goes too far in this claims, his forecasts deserve proper consideration, since it is a fact that computers are getting nearer to us every year, busily crawling “under our skin”, as he says:

We are becoming cyborgs. The human body version 2.0 scenario represents the continuation of a long-standing trend in which we grow more intimate with our technology. Computers started out as large, remote machines in air-conditioned rooms tended by white-coated technicians. They moved onto our desks, then under our arms, and now into our pockets. Soon, we’ll routinely put them inside our bodies and brains. By the 2030s we will become more nonbiological than biological. [...] by the 2040s nonbiological intelligence will be billions of times more capable than our biological intelligence. (Ibid. 231).

Kurzweil raises also a philosophically interesting question—as many thinking minds have before him—“How relevant is intelligence to the universe?” (ibid. 263). He states that for the “common wisdom”, intelligence seems not to be very relevant in the universe, since people

believe that planets, stars and galaxies have been rotating and will rotate forever independently of our human thoughts and actions, only following the natural laws. “That’s the common wisdom. But I don’t agree with it,” Kurzweil says. “My conjecture is that intelligence will ultimately prove more powerful than these big impersonal forces ...” (ibid. 264).

In this view, Kurzweil has approached, albeit unintentionally, to the cosmology of Paul Davies in his book *The Mind of God: Science and the Search for Ultimate Meaning* (1993), or even to Pierre Teilhard de Chardin’s “Omega Point”, except that Kurzweil conceives of the Singularity as a *technological* Event, which is supposed to be much closer to us in historical time than the cosmological and/or theological “Omega Point”. Besides that, Kurzweil’s Singularity is not the end point of cosmic evolution, as for example in the futuristic and also highly controversial book of a well-known physicist and cosmologist Frank Tipler, titled *The Physics of Immortality: Modern Cosmology, God and the Resurrection of the Dead* (1995).

II. Online *Second Life* and the “Apocalyptic Artificial Intelligence”

The virtual eschatology that is emerging in the age of rapidly spreading cyberspaces is connected not only to the expectation of the imminent appearance of the Singularity, as in Ray Kurzweil’s prophecies. Contemporary cyber-hopes of some kind of “second life” are mostly conceived of and experienced as virtual exits from everyday reality, including from one’s physical body, at least for a while, as escapes “in the mind”—into cyberspaces and avatars, “freely” chosen within some virtual world in order to project one’s own psyche, dissatisfied with the “real” world.

One of the most elaborate internet platforms of this kind is *Second Life*, created by Linden Lab in 2003 and today numbering more than a million permanent users, also known as “residents”. *Second Life* can be accessed freely, at the entrance you choose (even if you are just a curious temporary visitor) either one of the “default” avatars offered to you by the platform or one that you model yourself, in order to “settle” or “incarnate” yourself, at least partially, in him, her or it (avatars can also be animals, robots, Martians, and so on). You then give your chosen avatar a name and begin your “otherworld” journey. Quite soon you get used to seeing the places *there* through the “eyes” of your avatar and to following his/her/its ways. You can walk, run, or even fly in your avatar’s “body”. Moreover, you *participate* in creating the current scene through the direction of your avatar’s gaze and awareness. Perhaps most importantly, your avatar (actually yourself “in” him or her) is able to communicate with other avatars—briefly, there is also a *social life* “over there”.

The American anthropologist Rachel Wagner, in her book *Godwired: Religion, Ritual and Virtual Reality* (2012), recognizes in such “transmedia” games new religious rituals that might, following her opinion, replace – at least to a certain extent – classical religious practices, which presumably “fade out” in our modern world. However, this important point of discussion is not in focus of my today’s talk (I discuss it in another chapter of my book *Shadows of Being*), and so I return to the questions of eschatology in cyber-space.

The “highest” cyber-eschatological hopes are bound to the expectation that our “second life”, i.e. the life after our physical death, might be possible as the life of our minds, “uploaded” into some other, “immortal” virtual medium. Such an “immortality” would be possible, at least in

principle, *if* the complete *isomorphism* between somebody's brain/mental contents and "uploaded" computer data obtained (as believe the proponents of the "strong" or "general" artificial intelligence), but this possibility is not only "science-fictional" even for the present rapid development of cyber-technology, it is also theoretically disputable, having been disputed *pro et contra* for some decades (cf., for example, Hofstadter and Dennett 1981, including the discussions of their various opponents, e.g. John Searle, Thomas Nagel, David Chalmers et al.).

Robert M. Geraci, a professor of religious studies at Manhattan College and researcher of religious experiences and practices in virtual reality, is the author of an interesting and quite influential book entitled *Apocalyptic AI* (where "AI" stands for "artificial Intelligence") and subtitled "Visions of Heaven in Robotics, Artificial Intelligence, and Virtual Reality". Geraci enters into consideration of this topic by adopting a kind of phenomenological *epoché* (i.e. suspension of judgement about the value and reality of such experiences), and by focusing on the role of AI in relation to Christian theology and eschatology. (However, in his more recent book *Virtually Sacred* (2014), subtitled "Myth and Meaning in *World of Warcraft* and *Second Life*", Geraci shows a somewhat more sympathetic view towards the contemporary "virtualisation" of religious practices.) His preliminary yet comprehensive answer to the questions he discusses in his book *Apocalyptic AI* is the following:

Apocalyptic AI is a powerful reconciliation of religion and science. The sacred categories of Jewish and Christian apocalyptic traditions have thoroughly penetrated the futuristic musings of important researchers in robotics and artificial intelligence. Those categories have serious political effects in robotics research, virtual reality/online gaming, and contemporary disputes over the nature of consciousness and personhood [...] To study intelligent robots is to study our culture. (Geraci 2010, 7)

To a certain extent, I agree with Geraci, since in spite of the utopian (or dystopian) nature of such futurism, there is surely more than a grain of truth in it. However, to my mind, the principal question is not only if, when and how virtual reality is going to prevail over the material reality of the world—whether in twenty, a hundred or a thousand years (actually, this process has *already* started). I think that the biggest problem and the major danger for humanity lies in the advancing *virtualisation of reality*, which, step by step, is screening the *reality of soul and spirit*. In this process, *something* is coming to the emptied place of the traditional God after his declared "death"—futurists name this Some-Thing "the Singularity"—that is not and cannot be either divine or sacred, but on the contrary, as Nietzsche would say, is just "human, all too human".

III. Virtual eschatology and immortality

If we refer again to the futurism of Ray Kurzweil, we find among his favourite ideas *cryonics*—from the Greek κρύος (*kryos*) meaning "cold"—i.e. "the practice or technique of deep-freezing the bodies of people who have just died, in the hope that scientific advances may allow them to be revived in the future" (Oxford English Dictionary). Cryonics itself is not virtual—quite the contrary, since its aim is to prolong bodily life. Yet its further *intention* is usually related to "resurrection" in a future virtual reality, attained by cyber-eschatology.

Following Kurzweil, the hibernated body is to be reawakened in the time *after* the coming of Singularity, when “eternal life” is already technologically possible, whether “only” as a virtually real immortality, or as an infinite prolonging and sustaining of a person’s terrestrial life. Kurzweil is one of the most well known proponents of cryonics, being himself a client of the Alcor Life Extension Foundation, a company offering cryonic services after death. In his book *The Singularity is Near*, Kurzweil compares sustaining the human body to maintaining a house, a metaphor he borrows from Aubrey de Grey, a renowned gerontologist at Cambridge University: “De Grey uses the metaphor of a house. How long does a house last? The answer obviously depends on how well you take care of it ...” (Kurzweil 2005, 172).

We may object that no house in the history of mankind has remained exactly the same as it was originally built—but this is not because maintaining it in this exact state is not possible from the technical point of view (it would not be too demanding a technical task, for example, to maintain a Greek temple in its original or reconstructed form for the next two millennia or more), since the principal problem with sustaining things or bodies over long periods is the all-encompassing change that affects everything in time: it is not only material entities that are constantly changing but also motives, valuations, and the very reasons for sustaining things. It would be naïve to think that Alcor, with its modern mummies, will exist forever, or even for many millennia into the future. But a “smart guy” like Ray Kurzweil does not stake everything on this card. He prefers the more realistic option that after his death Alcor will take care of his body at least for a few decades, just long enough the coming of the Singularity and thus the return to life, to eternal life—and in this way “virtual eschatology” is here once again in its new, secular, cyber-technical variant.

The key question we must ask when confronted with the ancient human desire to survive bodily death, a desire expressed over and over again throughout history, remains the same whether we are talking about ancient Egyptian mummification or contemporary cryonics and is, quite simply – *why?* Why do human beings wish to *bodily* survive their departure from this world? Already the ancient Egyptians firmly believed that immortality is not possible without the body, i.e. a mummy of the deceased person, or at least his or her spiritually physical “double” in the form of a sculpted figure, called the *ka*. In Greek mythology we can follow the development from the dark, “dead” Homeric shadows to the bright, “alive” Orphic and later Platonic shadow-souls, yet we note that with both kinds of shadows, though they are not corporeal, there is a desire to preserve their names and forms. Teaching that is in many respects similar, *mutatis mutandis*, may also be found in Buddhism: in the transition from a previous life to the next, “name-and-form” (*nama-rupa*) is preserved—although this is not the same person as “myself”, as my this-worldly *ego*, since the Buddhists acknowledge and even emphasise that *my*-self has to be extinguished together with my body and my five senses. In this context we also recall Saint Paul’s famous words on resurrection, namely that a redeemed soul will not be awakened in her previous, terrestrial body, but in a *new*, “heavenly body”—that nevertheless is still a *body*. Behind this belief there probably lies the deep-rooted idea that a living *figure* always has to be bodily, even when the body is changed, transformed into “different”, spiritual, heavenly, oneiric matter. To put it in more general terms, we believe that every *structure* is possible only as a composition and/or form of *something*.

In the case of cyber-eschatology, it is interesting to note that when Kurzweil compares maintaining a house to conserving an ageing human body and sustaining it *post mortem* through cryonics, he also speaks in terms of a *structure* that has to be preserved, even though all its “bricks” change over time (something that is already happening now, in this life). There are, however, as we have already stated, serious problems with the idea that some specific structure will last forever, or at least for an unlimited time. Naturally we want structures, whether animate or inanimate, to last as long as possible, particularly if they are dear and precious for us. The passing away of beings, the extinguishing and dissipation of structures that we wanted to remain, is one of the hardest pains of our souls. Particularly if this means the parting of a beloved person, the gradual and irresistible forgetting of the “name-and-form” of somebody with whom we were bound by love, friendship, fellowship. It is hard to think that all forms, not just bodily figures, will be eventually erased from our personal and collective memories. Christianity comforts its believers with the promise that redeemed “bright” souls will live “for ever and ever” in their still human “names-and-forms”, in their “enlightened” heavenly bodies. Yes, indeed, since what should the individual immortality of a soul mean at all, if her “countenance” were not preserved? How could a soul recognise herself in eternity, if she were without her bodily figure? Moreover, how could the other souls, especially those who loved her, recognise her if she were only a bodiless and shapeless “spirit”? Finally, how could even the Father in Heaven recognise and love her if she were, by His will, deprived of all personal form?

The desire for personal survival, which should include the body, the figure, the countenance, memories, feelings, etc.—in other words all the principal features of my personal *structure*—is still very much alive in many contemporary religious beliefs, and also in secular and mundane cyber-eschatology. Modern forms of the desire to survive death and expectations regarding survival beyond death are heirs to the traditional Christian hope of heavenly immortality. Yet, from the philosophical and/or theological point of view, there is another way to conceive of immortality: when a soul comes *there*, “beyond”, when she stands “face to face” with the Father in Heaven, then she returns completely to the everlasting, eternal Spirit, being totally absorbed in His supreme Light, and therefore neither needs nor yearns to preserve individual memories from her earthly life, her past personal feelings, discursive thoughts—in short, she does not desire to retain the specific “structure” of her mind any more, since *everything is present* there, in mystical contemplation and ecstasy, when a soul is “reunited” with the One and/or the Good, as Plotinus testifies with his own living experiences to his disciples and followers. Such an impersonal conception of immortality is more present in Eastern spiritual teachings and practices (Buddhism, the Upanishads, Daoism, Zen etc.), yet we can also find it in some currents of Western spiritual history, in those which are, paradoxically, either very rationalistic or highly mystical (e.g. the philosophical teachings of Averroes, Pomponazzi, Spinoza on the one hand, and the mystical insights of Eriugena, Eckhart, Böhme, et al. on the other). It is surely no coincidence that both ways of striving for impersonal immortality were condemned by the Church or suspected of being heretical, at least for a time ...

Questions and dilemmas remain open, of course ...

Bibliography

- Chalmers, David. 1996. *The Conscious Mind: In Search of a Fundamental Theory*. Oxford: Oxford University Press.
- Dennett, Daniel C. 1993. *Consciousness Explained*. London: Penguin Books.
- Geraci, Robert M. 2010. *Apocalyptic AI: Visions of Heaven in Robotics, Artificial Intelligence, and Virtual Reality*. Oxford: Oxford University Press.
- . 2014. *Virtually Sacred: Myth and Meaning in “World of Warcraft” and “Second Life”*. Oxford: Oxford University Press.
- Hofstadter, Douglas R. and Dennett, Daniel C. (eds.). 1981. *The Mind’s I: Fantasies and reflections on self and soul*. New York: Bantam Books.
- Kurzweil, Ray. 2005. *The Singularity Is Near: When Humans Transcend Biology*. New York: Viking, Penguin Group. Available also online: <http://www.grtl.org/Singularity-Is-Near.pdf>. Accessed March 30, 2018.
- Second Life*. <http://secondlife.com/>. Accessed March 12, 2018.
- Tipler, Frank J. 1995. *The Physics of Immortality: Modern Cosmology, God and the Resurrection of the Dead*. New York: Random House, Anchor Books.
- Uršič, Marko. 2018. *Shadows of Being: Four Philosophical Essays*. Newcastle: Cambridge Scholars Publishing.
- Vinge, Vernor S. 2003. *Technological Singularity* [revised edition of *The Coming Technological Singularity*, 1993]. Accessed March 31, 2018. http://cmm.cenart.gob.mx/delanda/textos/tech_sing.pdf.
- Wagner, Rachel. 2012. *Godwired: Religion, Ritual and Virtual Reality*. New York: Routledge.
- Wertheim, Margaret. 1999. *The Pearly Gates of Cyberspace: A History of Space from Dante to the Internet*. New York and London: W. W. Norton & Company.