

'Becoming Gods. The Transhuman Ethic and the Spirit of Silicon Valley

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Introduction

“Does God exist? I would say, ‘Not yet’” Thus spoke Ray Kurzweil in the documentary about his life and work called *Transcendent Man* (2009). In his books *The Age of Intelligent Machines* (1990), *The Age of Spiritual Machines: When Computers Exceed Human Intelligence* (1999) and *The Singularity Is Near* (2005), Kurzweil optimistically prophesizes about the ultimate possibilities of the sciences, biotechnology, ICT and the way these can improve human cognitions, health and wellbeing. But Kurzweil doesn't stop at pointing out the advantages for everyday life. Ultimately, he claims, that humans will merge with technology and become, literally, 'supernatural' creatures. In the nearby future we may upload consciousness in a computer, robot or on the internet and will live eternally like omnipotent gods or angels in the cloud.

Kurzweil cannot easily be seen as an obscure or marginal futurist. He is an awarded, respected and influential computer scientist - well known for inventing the first print-to-speech reading machine for the blind, synthesizers simulating different musical instruments and many other technologies. Since 2012 he is director of engineering at Google's spin-off company Calico on life-extension. His beliefs in immortality through science and technology are exemplary for a worldview that is dubbed 'transhumanism' (e.g., Aupers, 2004; Braidotti, 2013; Fukuyama, 1999; Harari, 2016; Hughes, 2004; De Mul, 2002) and that is developed, normalized and popularized by a select, yet influential group of scientists like Hans Moravec (robotics), Eric Drexler (nanotechnology) and Marvin Minsky (cognitive science, AI). Although much of the academic attention to 'transhumanism' is devoted to the philosophical, political and ethical dimensions and moves between “conservative nostalgia and neo-liberal utopia” (Braidotti, 2013: 11) in their evaluation, it remains understudied in the fields of theology, sociology of religion and religious study. The question raised in this paper is then: how can we characterize and understand this hybrid between science, technology and religion

from a sociological perspective? Transhuman religion, I will argue, is grounded in a long-standing Western cultural trajectory in which, as Emile Durkheim predicted, we are seeing a “religion of humanity” where individual freedom has become sacred (eg. Aupers and Houtman, 2010; Heelas, 1996). Since the 1960s, however, we are witnessing a transference from a more romantic version of humanistic spirituality towards a technology-driven transhumanistic form of spirituality that is fed by the technological culture of Silicon Valley.

Religion of humanity: two trajectories

Emile Durkheim

Humanism knows many forms and varieties. Ever since the Renaissance, philosophers varying from Erasmus, Montaigne and Rousseau have described the individual as a core unity in society that should be protected against external forces, be it war, unequal distribution of wealth or an overpowering state. The sociologist Emile Durkheim has theorized extensively on the primacy and social consequences of this cultural ideal of individual freedom. Although he famously pointed to the erosion of community, sentiments of anomie and suicide in his early work (1893), he argued in the essay *Individualism and the intellectuals* (1898) that individualism, paradoxically, is also a collectively shared value and high-standing ideal in modern societies. This “religion of humanity”, he argued, is legally codified in the Declaration of the Rights of Man and motivates a culture in which “the human person (...) is considered sacred in the ritual sense of the word” (46). Speculating about the future, Durkheim noted that we may witness “religion in which man is at once the worshipper and the God” (1898: 46).

In his later work, particularly in the *Elementary Forms of Religious Life* (1912), Durkheim has further developed the theoretical foundations for this assumption. He conceived religion as a “unified system of beliefs and practices relative to sacred things, that is to say, things set apart and forbidden - beliefs and practices which unite into one single community” (1912: 44). From this perspective everything can potentially be sacred, yet what is considered sacred varies in time, place and is as such a social construction. Provocatively, Durkheim stated that

“God and society are the same”: while people in a particular culture believe they are praying to their god(s) through their practices, rituals and ceremonies, they are actually consolidating and celebrating the values that form the core of their culture. Modern societies, from this perspective, are turning values like liberty, individual freedom, and personal growth into sacred values. I will argue that we can witness two cultural trajectories that exemplify this “religion of humanity”: on the one hand, there’s already a lot of academic work done on the study of humanistic spirituality that is proliferating outside the traditional churches in Western countries (e.g. Aupers and Houtman, 2006; Houtman and Aupers, 2007; Heelas, 1996; Campbell, 2007). On the other hand, however, we are witnessing the formation and popularization of an unacknowledged transhumanistic form of spirituality that is fed by and feeds into the technological culture of Silicon Valley.

Humanistic spirituality: finding the ‘God within’

‘Humanistic spirituality’ (Heelas, 1996) has been part and parcel of a long-standing history that is grounded in Western esotericism and manifested itself amongst others in diverse movements like Blavatsky’s theosophy in the late 19th century, Jungian psychology at the beginning of the 20th century and the ‘hippy’ counterculture of the 1960s and 1970s (Asprem, 2014; Hanegraaff, 1996; Hammer, 2002). In the 1980s and 1990s, it was the core of the popular New Age movement (Aupers and Van Otterloo, 2000). The sociologist Paul Heelas (2), has done path-breaking work in laying bare the precise nature of this ‘humanistic spirituality’, pointing out the primacy of the sacralization of the self or ‘self-spirituality. In the spiritual milieu, Heelas explains, modern people are essentially seen as “gods and goddesses in exile” (19): “The great refrain, running throughout the New Age, is that we malfunction because we have been indoctrinated (...) by mainstream society and culture” (18). The latter are thus conceived of as basically alienating forces, estranging one from one’s ‘authentic,’ ‘natural’ or ‘real’ self - from who one ‘really’ or ‘at deepest’ is:

(T)he most pervasive and significant aspect of the *lingua franca* of the New Age is that the person is, in essence, spiritual. To experience the ‘Self’ itself is to experience ‘God,’ ‘the Goddess,’ the ‘Source,’ ‘Christ Consciousness,’ the

‘inner child,’ the ‘way of the heart,’ or, most simply and (...) most frequently, ‘inner spirituality’ (19).

This, then, is the binding doctrine of humanistic spirituality: the belief that in the deeper layers of the self one finds a true, authentic and sacred kernel, basically ‘unpolluted’ by culture, history and society, that informs evaluations of what is good, true and meaningful. Those evaluations, it is held, cannot be made by relying on external authorities or experts, but only by listening to one’s ‘inner voice’: “What lies within - experienced by way of ‘intuition,’ ‘alignment’ or an ‘inner voice’ - serves to inform the judgements, decisions and choices required for everyday life” (23).

In my own research in the Netherlands, I found that respondents would use a variety of vocabularies derived from different religious traditions to describe this ‘inner spirituality’. They would talk about ‘the higher Self’ (theosophy), ‘the inner spark’ (Gnosticism), the ‘inner child’ (humanistic spirituality), the ‘Buddha nature’ (Buddhism) or ‘soul’ (Christianity). In essence, however, they considered the individual Self as intrinsically sacred:

I experience god, the divine, as something within me. I feel it as being present in myself. I connect with it as I focus my attention on my inner self, when I meditate. (...) It’s all about self-knowledge, being conscious about yourself. (...) It has nothing to do with something that’s outside of you that solves things for you.

I think spirituality is something that lives inside of you. It has a lot to do with becoming the essence of who you are and being as natural as possible.

I am god. I don’t want to insult the Christian church or anything, but I decide what I’m doing with my life. (...) There is no ‘super-dad’ in heaven that can tell me ‘You have to do this and that, or else....’ I am going to feel!

These quotes demonstrate that humanistic spirituality has a distinct ontology, epistemology and soteriology. 1) People in the field assume there is an essential spiritual core (“the essence of who you are”) that 2) can and should be known

through embodied experience (“I am going to feel”) whereas 3) salvation can only be reached by using natural tools and techniques like meditation, holistic healing, massage, t'ai chi, Reiki and other manipulation techniques of the body.

Ever since the 1960s and 1970s this type of humanistic spirituality is proliferating in the West and it is particularly prominent in the most secularized area's in Europe - those countries, like the Netherlands, France, and Sweden, where people rapidly leave the Christian churches (Houtman and Aupers, 2007). This trend has brought some observers to the overly sweeping conclusion that we are actually witnessing a ‘spiritual revolution’ (Heelas and Woodhead, 2005) or ‘Easternization of the West’ (Campbell, 2007) in which the Christian tradition is making way for humanistic spirituality. I will argue, however, that there's another type of self-centered spirituality that is ideologically, historically and culturally related to humanistic spirituality yet, simultaneously, forms its counterpoint. In this type of spirituality it is not nature, but technology that allegedly brings salvation.

Transhumanistic spirituality: ‘we’re becoming gods’

“The new religions are unlikely to emerge from the caves of Afganistan or from the madrases of the Middle East. Rather, they will emerge from research laboratories (Harari, 2016: 351)

Counterculture: from alienation to technological salvation

To understand the emergence and popularization of, what we call, transhumanistic spirituality we need to look at the counterculture in the Bay Area. In most academic accounts this counterculture - consisting of young, middle-class ‘hippies’ protesting against the alienating ‘system’ - can be considered an important hot-bed for the development, growth and popularization of humanistic spirituality (Roszak, 1972; Zijderveld, 1973; Heelas, 1996). Man-made, rationalized technology, in this perspective, was considered as being symptomatic for everything that was wrong with the system - a problem rather than a solution to mankind since it could only further alienate individuals from ‘who they really are’.

The period of the 1960s and 1970s, however, has also planted the material and ideological seeds for, what we call, transhuman spirituality. First of all, there

were rapid transformations in the technological domain. In the 1950s, computers were still owned and deployed by (military branches of) the government and large corporations such as IBM. Back then, computers were central to the so-called military-industrial complex and as such exemplified the status of technology as a supra-individual and alienating system for many people. In the 1960s and 1970s, however, hackers working at MIT and in Silicon Valley dreamed about bringing 'computer power to the people' - about designing a personal computer that enhances human happiness, control and provided a space where "every man can be a god" (Levy, 1984). In part, this countercultural dream of personal liberation - shared by people like Steve Jobs, Steve Wozniack and Bill Gates - has provided the ideological foundation for the actual construction of the PC in 1975 and the development of the Internet as an open playground in the 1990s (Castells, 1999). As Roszak (2000: 6) argues "it is within this same population of rebels and drop-outs that we can find the inventors and entrepreneurs who helped lay the foundations of the California computer industry".

Once computer technology became personalized and privatized, it motivated spiritual dreams about salvation through technology. Indeed, recent studies have pointed out that the counter culture's spiritual branch was in fact less uniformly anti-technology than it is often taken to be. Beside 'luddites' it also featured many 'technophiles' - young computer experts who were simultaneously deeply involved in spirituality (e.g., Aupers, 2004; Bey 2001[1996]; Goffman, 2005; Zandbergen, 2010; Ziguras, 1997). Many of those who initially belonged to the counter culture's luddite branch came to understand personalized computer technology as a means towards spiritual salvation later on. Key figures of the early Californian New Age milieu, like Ken Kesey, Terrence McKenna and, most notably, Timothy Leary, fall within this category. Leary argued that 'hard technology' may in fact promise a more effective avenue towards the goal of personal salvation than 'soft techniques' like yoga, t'ai chi, or chakra healing. He compared the personal computer to LSD (e.g., Dery, 1996) and suggested in the 1990s that one can escape an "alienating" and "repressive" society by immersing oneself in the new otherworldly realm of cyberspace that was opened up by computer networks:

Recite to yourself some of the traditional attributes of the word 'spiritual': mythic, magical, ethereal, incorporeal, intangible, non-material, disembodied, ideal, platonic,. Is that not a definition of the electronic-digital? (..) These 'spiritual' realms, over century imagined, may, perhaps, now be realized!

And Leary was no exception. He was but the *eminence grise* of a much broader 'technophile' wing of the counterculture that, especially in the early 1990s, gathered around hackers, Internet gurus and cyberpunk writers like William Gibson, Rudy Rucker and others - a group of people that constituted "counter culture 2.0" (Dery, 1996) in and around Silicon Valley and dreamed of spiritual liberation in cyberspace. About this notable counter-cultural convergence of digital technology and spirituality, Rushkoff (1994: 6-7) has remarked that "The mission of the cyberian counter culture of the 1990s, armed with new technologies, familiar with cyberspace and daring enough to explore unmapped realms of consciousness, is to rechoose reality consciously and purposefully. Cyberians are not just exploring the next dimension; they are working to create it".

These developments in the spiritual milieu in the early 1990s were closely related to a broader (pseudo) religious discourse about modern technology, cyberspace and spiritual salvation amongst technicians. Back then, renowned technicians and academics also heralded the newly emerging realm of cyberspace as a spiritual space with an immaterial and ephemeral ontology. It was described as "Platonism as a working product" (Heim, 1993), a 'paradise' where we "(W)ill all be angels, and for eternity!" (Stenger 1992[1991]: 52), "new Jerusalem" (Benedikt 1992[1991]: 14) and a "technological substitute of the Christian space of heaven" (Wertheim, 1999: 16).

All in all these examples indicate that the spiritual counterculture in the Bay Area was less 'luddite' and more 'technophile' than conventional studies account for. Particularly the privatization of computer technology - the invention and application of Personal Computer, Internet and cyberspace - shifted the focus in the counterculture from nature to technology as an effective mean towards the

spiritual goal of ‘becoming god’. We can see, then, that the core soteriological assumptions of humanistic spirituality about salvation is radically transformed.

Institutionalization: transhumanistic spirituality in Silicon Valley

“Can Google solve death?” (Time Magazine, 2013)

The discourse about technology, human enhancement and spiritual salvation from the 1960s to the 1990s was by and large expressed by spiritual dreamers in the “cultic milieu” (Campbell, 1972), formulated in science fiction books like Gibson’s *Neuromancer* (1981), and high-tech journals like *The Whole Earth Catalogue*, *Mondo 2000* and *Wired Magazine* (Davis, 1998; Dery, 1991). Transhumanism as a social movement, however, became more organized, professionalized and institutionalized during the 1990s and the 2000s. On the one hand, different groups, organization and journals were founded that explicitly formulated the philosophy, assumptions and goals of transhumanism, like the ‘Extropians’ and Extropy Institute (founded by Max More in 1988), the *World Transhumanist Association* (1998) and the *Journal of Transhumanism* (1998) (Hughes, 2004).

More arrestingly, however, transhumanism transformed increasingly from an eccentric ideal to a research program in and outside Silicon Valley (Geraci, 2010). Respected academic researchers from different disciplines are working on human enhancement, life-extension and solutions to human suffering and death in Silicon Valley, at MIT or high-tech companies. The large investments of Google in unlimited life-extension even lead to the question at the front-cover of *Time Magazine* in 2013: “Can Google solve death?” Another important aspect of this increased professionalization and institutionalization of transhumanistic spirituality, is the coalition between different disciplines like ICT, Artificial Intelligence, nanotechnology and genetic engineering. This interdisciplinary focus and co-operation on the solution of illness, human suffering and death in the applied sciences has been dubbed ‘converging technology’ (Fuller, 2008). In the US, converging technology was amended by the government in the report *Converging Technologies for Improving Human Performance* (2002) - a report from the *National Science Foundation* in which it is optimistically argued that “the

engineering of the mind is much more than the pursuit of scientific curiosity. It is more even than a monumental technological challenge (..) the success of this convergent technologies priority area is essential to the future of humanity". Convergent technologies, it is understood by transhumanists, provide the means to be saved from evolutionary, natural, physical limitations and the ultimate road to personal freedom. After all, since Rocco and Bainbridge argue "If the Cognitive Scientists can think, the Nano people can build it, the Bio people can implement it, and the IT people can monitor or control it" (Bainbridge, 2002: 13).

Transhumanistic spirituality, in short, is no longer a countercultural dream but considered by many a plausible scenario in the heartland of Silicon Valley. What scientific scenario's, then, are imagined to set humans free from the body in their striving to attain the status of "homo deus" (Harari, 2016) and immortality? Analytically, we may distinguish three transhumanist scenario's popular in silicon Valley and beyond. First of all, there is the scenario of conserving the body through cryonics - freezing the body after death. One may, transhumanists argue, have faith in the Christian promise of an afterlife, heaven or believe in reincarnation, but science is considered to be a safer bet. In the nearby future, they argue, the scientific knowledge and technologies will be available to resurrect the dead. An example is the Cryonics Institute: "Imagine a world free of disease, death and aging. At the Cryonics Institute, we believe that day is inevitably coming and cryonics is presently our best chance of getting there. Our mission is to extend human lifespans by preserving the body using existing cryogenic technologies - with the goal of revival by future science" (<http://www.cryonics.org/>)

A second scenario to attain a godlike existence and immortality is re-designing the body. The body, in this discourse, is weak, clumsy and highly ineffective - even in comparison with other animals - and informed by the converging technologies paradigm there are countless complementary strategies to solve this problem. The argument for bodily interventions are generally supported by claims against biological evolution. Why passively accepting our current biological state if we can become who- or whatever we want with ICT, nanotechnology and genetical engineering? Why not radically take control over our own evolution? From the perspective of robotics, for instance, Hans Moravec (*Mind Children*, 1988) imagines to construct new body-parts, effective arms, legs and

hands with more fingers and thousands of sensors to enhance our touch. But in effect, the whole body - including all other senses, i.e. sight, smell, and hearing, can be amplified by AI, computer-chips and other techniques. Such interventions obviously turn humans into cyborgs (Harraway, 1985; Hughes, 2004; Lupton, 2015).

But human consciousness can and should also be enhanced. In the materialist transhuman worldview, consciousness is basically a by-product from our large and overly complex brains that are loaded with information and activated by billions of neural connections. Transforming consciousness, from this perspective, becomes a technical issue as well. The pharmaceutical industry is now motivating a “neurotransmitter revolution” (Fukuyama, 1999): instead of focussing on the mentally ill it increasingly provides synthetic drugs to re-program the mind, eliminate negative feelings and increase happiness. More fundamentally one may also re-design the body from the inside through nanotechnology or genetic engineering. In his book *Engines of Creation. The coming Era of Nanotechnology* (1986), Eric Drexler described the power of miniature computer chips and robots that - once programmed the right way - could be injected in the bloodstream to work on illness, cancer, Alzheimer and other deceases. Ultimately, nanotechology allegedly might repair dying cells thereby postponing physical decay or even abolishing death.

Thirdly, there's the much debated transhumanist scenario amongst transhumanists to 'upload' individual consciousness in a computer, robot or on the internet to attain full-fledged immortality. This scenario of getting rid of the body proves to be the most hostile vis-à-vis nature and physical existence. In a veritable dualistic, Manichean or gnostic fashion, the body is in this scenario devaluated as “meat”, “flesh” that imprisons the, essentially, “immortal mind” (Noble, 1999). Paradoxically, it is exactly the radical materialistic view on consciousness that feeds the religious dream of spiritual liberation amongst transhumanists. Unlike in religious traditions - like Gnosticism, Christianity, Islam, Hinduism or humanistic spirituality - the self is not considered to possess a real spirit, soul or mysterious property that is distinguished from the body. Our consciousness and sense of self is nothing more than the by-product of patterned information stored in the brain. As a group of Transhumanists called *Society for Universal Immortalism* puts it succinctly: “We have a soul and its informational by nature”. Once we can

retrieve, scan and reproduce that information, we should be able to simulate our consciousness and sense of self in cyberspace. Unburdened by the body we can then live free and potentially forever - like angels, gods or omnipotent entities.

This technological procedure of uploading (sometimes referred to as Whole Brain Emulation) is particularly popularized by Marvin Minsky (AI), Hans Moravec (robotics) and Ray Kurzweil. Based on findings in neurobiology and extrapolating trends in computer power ('Moore's Law'), ICT and AI, the latter prophesizes that around 2045 we will have the knowledge and techniques to upload consciousness. This explains his statement quoted at the beginning of this paper: "Does God exist? I would say, 'Not yet.'" Unlike with humanistic spirituality discussed above we are not so much gods by nature - we will becoming gods, in the nearby future, through the use of applied science and technology. God is not something 'out there' - as in traditional religion; it is not something 'in there' as in humanistic spirituality; it is not something we discover in (human) nature: it is rather something we can and should make in the nearby future. This distinctly constructivist ontology is clearly expressed by Giulio Prisco - a very vocal advocate of transhumanistic spirituality: "Let's engineer resurrection and the afterlife. If there is no God, let's build a God, or let's become Gods". This, then, is the *lingua franca* of transhumanistic spirituality. In my study in Silicon Valley on the convergence between technology and religion, a programmer I interviewed typically argued about 'uploading consciousness' in a computer:

We're becoming Gods as soon as we make ourselves the way we want. The interesting part for me is not the physical world (..) I would eventually leave my body behind. But: only because it limits my independence. Being human is not a matter of shape, being human is what's in your head. It's that mental set of processes and that's the thing that is going to change. We are coming now in a stage of history where we can do all the things we dream of"

The ability for me to become much more than human, much much more than human, to a point where I cannot conceive of what I will become. I will

become a god! Everyone who wants to become a god will become a god. It is obviously the way to go. It's inevitable. If you choose that path”

Conclusion and discussion

According to many sociologists, we are nowadays not so much witnessing secularization in Western countries, but rather religious transformation (e.g., Luckmann, 1967; Possamai, 2005). Empirically, various academics have pointed out the proliferation of non-institutionalized forms of spirituality outside of the churches that, in line with the work of Durkheim, are investing in a sacralization of the individual self (e.g. Aupers and Houtman, 2006; Partridge, 2005; Heelas, 1996; Hanegraaf, 1996). In this debate on ‘humanistic spirituality’ (Heelas, 1996), however, there is a blind spot for another type of spirituality that is sacralizing the individual, yet breaks with its underlying romantic-naturalistic paradigm and opens up to technological salvation. It differs radically on the dimensions of ontology, epistemology and soteriology. Perceptions of the divine, I demonstrated, are not so much essentialistic but constructivistic; knowledge of the divine is not so much based on embodied experience but disembodied information whereas salvation is not so much enhanced by contact with (inner/human) nature in the here and now, but stimulated by new, digital technologies in the nearby future (see table 1).

Table 1. Religions of humanity

	Humanistic	Transhumanistic
Ontology	Essentialist / being	Constructivist / becoming
Epistemology	Embodied experience	Disembodied information
Soteriology	Natural tools	Technical tools

Interestingly, this transhumanistic type of spirituality is developed, normalized and even institutionalized in the laboratories and companies of Silicon Valley. This is first of all surprising since the rationalized logic of technology and

religious belief, are generally assumed to be incompatible (e.g. Wilson, 1990). Science and technology, Max Weber famously claimed over a century ago, is essentially an “irreligious power” (1919: 153) that motivates a progressive ‘disenchantment of the world’ which “means that principally there are no mysterious incalculable forces that come into play, but rather that one can, in principle, master all things by calculation” (Ibid: 139). Transhumanism is a fascinating hybrid in this respect. On the one hand, its advocates embrace a highly scientific, positivistic and disenchanted worldview in which ‘all things’, including the body, mind and consciousness, can be mastered ‘by calculation’. Paradoxically, however, it is exactly this scientific, positivistic and disenchanted worldview that motivates their religious-spiritual beliefs. If the case of transhumanistic spirituality is instructive in any way, it may indicate a scientifically based, technologically enhanced ‘re-enchantment of the world’.

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