*Media, Religion and Culture*

# RELIGION IN THE AGE OF DIGITALIZATION

## FROM NEW MEDIA TO SPIRITUAL MACHINES

Edited by
Giulia Isetti, Elisa Innerhofer,
Harald Pechlaner and Michael de Rachewiltz

# Religion in the Age of Digitalization

This book examines the current use of digital media in religious engagement and how new media can influence and alter faith and spirituality. As technologies are introduced and improved, they continue to raise pressing questions about the impact, both positive and negative, that they have on the lives of those that use them. The book also deals with some of the more futuristic and speculative topics related to transhumanism and digitalization.

Including an international group of contributors from a variety of disciplines, chapters address the intersection of religion and digital media from multiple perspectives. Divided into two sections, the chapters included in the first section of the book present case studies from five major religions: Christianity, Islam, Buddhism, Hinduism and Judaism and their engagement with digitalization. The second section of the volume explores the moral, ideological but also ontological implications of our increasingly digital lives.

This book provides a uniquely comprehensive overview of the development of religion and spirituality in the digital age. As such, it will be of keen interest to scholars of digital religion, religion and media, religion and sociology, as well as religious studies and new media more generally but also for every student interested in the future of religion and spirituality in a completely digitalized world.

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# Introduction

*Giulia Isetti, Elisa Innerhofer, Harald Pechlaner and Michael de Rachewiltz*

While working on this introduction, the editors find themselves in Italy, where a total lockdown has been imposed by the government to try to contain the spread of SARS-CoV-2, the virus that caused the COVID-19 pandemic. Currently, more than ever, the way we work, keep informed, interact with other people and even the way we live our own spirituality, heavily rely on new media and technologies, and it is reasonable to assume that, even once this crisis will be over, those will play an even greater role than before.

In this context of social distancing, people struggle with immediate fear of illness and death and cabin fever. In addition to these short-term concerns, there are also fears related to the social, political and economic effects that this crisis might have in store, which could entail for many individuals both psychological and possibly existential threats. A well-known side effect of a calamity such as this pandemic is the intensification of people's need for reassurance. While many traditional religious practices and gatherings are seen as potentially dangerous inasmuch as they might contribute to a spread of the virus, faith helps many people coping with both the existential but at the same time spiritual crisis the world is facing. Turning to faith for comfort during a crisis forced many religious practitioners to find creative ways to minister to their communities: podcasts, social media, virtual ceremonies and meditation, prayer hotlines, message boards and many other tools are being used more extensively. This of course raises important theological and ethical questions: to what extent can – just to cite one example – religions based on rituals and liturgies, which are an integral part of religious life transfer these rites into the virtual realm of digital media without losing their essential sacrality? In other words, could the mystery of transubstantiation take place in a virtual mass? The interdisciplinary area of studies dedicated to the investigation of how new media and religion interact and influence each other is well established and known as digital religion, in which we approach "the Internet and other forms of new media as technologies which create unique mediated contexts, spaces, and discourses where religion is performed and engaged" (Campbell, 2017). In this ever more fecund field of studies, alongside essential works that – at the beginning of the last decade – laid the theoretical framework (such as Cheong, Fischer-Nielsen,

Gelfgren, & Ess, 2012; Campbell, 2013), more recent and geographically focused studies have been flourishing, e.g., on Asia (Radde-Antweiler & Zeiler, 2019) or Africa (Faimau & Lesitaokana, 2018) but also some which focus on a specific religion, such as Hinduism (Murali Balaji, 2017) or Buddhism (Grieve & Veidlinger, 2015), just to mention a few.

The purpose of the present book is twofold: on the one hand, in the first part of the volume, the editors aim to provide a panorama of the latest developments taking place in five major world religions and their engagement with digitalization, more specifically new media and artificial intelligence. In this context the broader term *digitalization* denotes "the conditioning of social structures and practices through the process of being digitized", which applies to different social fields, including religion and spirituality, in contrast to the narrower term *digitization*, which merely "refers to creating a digital copy of a physical phenomenon or an analogue object" (Grieve, Helland, & Singh, 2018, pp. 140–141).

There are many different ways in which religion has been defined. Different cultures have different religious traditions and associated doctrines, ceremonies and institutional organizations. Two of the main different approaches to religion are on the one hand the essentialist and on the other the functionalist approach. Essentialist definitions focus on the essence (lat. *essentia*) or substance of a religion. Here are some examples of the many essentialist definitions that have been proposed (see Löffler, 2019, pp. 13–14):

- "The reference to and existential interaction with one or more divine beings".

  (Günter Lanczkowski)

- "Faith in any spiritual, superhuman or extraterrestrial being".

  (Edward Burnett Tylor, Melford E. Spiro)

- "The division of reality into a sacred and a profane sphere, whereby the sacred is also experientially accessible in some form".

  (Nathan Söderblom, Rudolf Otto, Gustav Mensching et al.)

- "The 'numinous' as the central object of the sacred, as mysterium tremendum et fascinosum, thus as at the same time frightening and fascinating mystery".

  (Rudolf Otto)

- "Religion as a communal human response to transcendental experience expressed in rite and ethics".

  (Theo Sundermeier)

Most of these attempts are based on Western values and the concept of a transcendent God, which would exclude religions without the belief in an immortal soul or in the remission of sins. With this form of definition there is always the danger of reductionism, overlooking important elements and

thus unable to distinguish religious from non-religious phenomena. Functionalist definitions try to avoid such problems by not asking about the nature of religion, but about what functions it has in the life of people and society as a whole. But this approach often leads to definitions which are too broad so that all kinds of phenomena are included, which others would not accept as being religious. For example, one element that is perhaps found in most religions is that it cannot be separated from the rest of one's life, it must be lived and translated into action. But would this not include all systems of beliefs to which we commit our lives, also political ideologies? Similar to religions such ideologies can give meaning and significance to the life of individuals. So maybe it is the "spiritual" significance that religion gives to our lives that makes the relevant difference.

Given the impossibility of providing a universally accepted definition of what constitutes religion (Asad, 1993), for the purpose of this book the editors use the term "religion" as meaning a corpus of beliefs, values and practices – individual and institutionalized – stemming from and intended to induce a spiritual experience. Whereas "spirituality" evokes the feeling of being connected to "something bigger than oneself/beyond and outside the self", which may very well include epiphanies induced by the encounter with a supernatural entity, as well as with the wonders of nature or even by music or poetry, which also deserves some investigation in its relation to new media.

From the established tradition of studies on religion and the Internet, Heidi Campbell (2013) identified six thematic areas emerging, namely authority, authenticity, community, identity, ritual and religion. Moving from these thematic areas, the collected chapters in this book want to address some aspects which, due to the fast pace of technological development, have so far only marginally been investigated, ranging from topics like spiritual robots or IT corporations exerting their influence in the cultural and religious imaginary. Another phenomenon which has received little attention in academia until now, but for which the editors wanted to allow proper space, is the rapidly spreading trend of deliberate abstention and fasting from technology in order to re-establish contact with oneself and the spiritual realm.

Moving from the current use of technology in the field of so-called digital religion studies, the second part of the volume pursues a different objective and investigates somewhat more speculative phenomena surrounding the future of the spiritual mind, conscious machines, artificial intelligence and the new transhumanist ideology. Scholars from the fields of psychology, philosophy, bioethics, theology and political science provide an insight into possible future discussions and help understand the fascinating relationship between technology and spirituality through the multifaceted lenses of different academic disciplines.

In Goethe's *Faust*, Faust's young sweetheart Gretchen asks the scholar about his views on religion: this is the famous "Gretchen-question" which in German nowadays refers to any crucial question which seeks to unveil the

deep thoughts or beliefs a person might have. In a narrow sense, the question about somebody's relation to religion has resulted in many of the current scientistic or naturalistic discussions: these positions reject any supernatural or spiritual forces and religious dogma in general. Transhumanists believe humanity will be radically changed by technology in the future, allowing it to enhance and extend human life and even allow resurrection of the dead (Bostrom, 2003; Istvan, 2013). While most transhumanists are not religious, some do have spiritual or religious views and many hope new emerging technologies will satisfy spiritual needs as well (e.g., Tipler, 1994; Kurzweil, 2006).

One obvious spiritual craving is the hope for immortality (Becker, 1973): in one way or another, most religions teach us that we may live forever, through a surviving soul or resurrection of the body itself. Transhumanists want to free us from human limitations, such as disease, injury, disability, age, pain and death. Putting aside discussions on the meaning of life and of how the possibility of death plays an important role in the quest for meaning, not to mention philosophical arguments that an endless life would be shallow or pointless (e.g., Klemke & Cahn, 2017), it remains a fact that many religious believers cherish the hope of eternal life or resurrection. Other but related hopes of transhumanists and futurists such as Ray Kurzweil (Kurzweil, 1999, 2006) centre around the possible exponential increase in biotechnology and artificial intelligence, which would allow us to create and extend our mental and physical capacities through a form of *cyborgization*, the replacement, repair or improvement of biological limbs or other body parts through the use of artificial limbs, hearts, lungs, video cameras and brain implants. Artificial intelligence, on the other hand might allow us one day to upload our minds to computers, achieving digital immortality, or to create machines smarter than humans thus causing an intelligence explosion resulting in a superintelligence which in turn would trigger a technological singularity, "an explosion to ever-greater levels of intelligence, as each generation of machines creates more intelligent machines in turn" (Chalmers, 2010, p. 7, see also: Moravec, 1998; Kurzweil, 1999; Bostrom, 2014).

Although not officially included within digital religion studies, transhumanism might offer an inspiring angle from which to reflect about topics such as religious practice and spirituality and their relation to technology. This should be done always keeping in mind the broad and non-narrow meaning attributed by the editors to the terms religion and spirituality.

*Religion in the Age of Digitalization: from New Media to Spiritual Machines* was conceived as a capstone of two extremely engaging conferences we had the pleasure to host at the Center for Advanced Studies at Eurac Research, Bolzano (Italy) in 2018, "Digital Religion", and in 2019, "Digitalization, Spirituality and Democracy", as well as the result of a long collaboration between Eurac Research and the Diocese of Bolzano/Bozen-Bressanone/Brixen: we hope that the volume fulfils its prime intent which is to share some of the insights and results of these conferences.

Both hosting the conferences, as well as editing this book, have been a shared effort, as well as a shared pleasure. It has been a privilege to coordinate such an international and multidisciplinary team of contributors, of both established and emerging scholars, that were able to convey valuable insights into the different possible approaches to the subject. We heartily thank Georg Gasser and Lucia Galvagni for their advice while editing this book, as well the conference speakers, all contributors to this volume, all those who peer-reviewed it and the Routledge editorial team, Joshua Wells and Yuga Harini. Finally, we would like to thank all the colleagues at the Center for Advanced Studies who supported us in this project, especially Ieva Kudure, Claudia Marina Lanzidei and Felix Windegger; their assistance has been a precious aspect of our journey in editing this book.

## Chapters of this book

Part I features a selection of case studies of different major religious practices. Of course, in the hyper-connected and globalized world we live in, no religion is a separate sealed unit that neither impacts nor is impacted by other practices. Therefore, the reflections presented in each of the chapters included in this selection should allow for more generic considerations on the role of "digital religion".

The opening chapter by **Ruqayya Khan** with **Ashley Aytes** attempts some definitions of both terms at hand: "new media" and "religion/spirituality". In the first part of the chapter the authors underline the importance of religion/spirituality to humanize and counteract some of the harmful trends of digitalization. This chapter then addresses the intersections between new media and Islam, and it does so through brief comments and analyses of three broad topics: 1) the powerful convergence of timelines between the rise of new, digital media and the aftermath of the 9/11 bombings; 2) the crucial importance of upcoming, new digital "natives" in creating, innovating and/or promoting, optimal interlinkages between new media and Islam, especially as regards Islamic marriage practices, dress codes, fashion and so forth; and 3) the online dimensions of the *hijab* or Muslim women's veil and some of the challenges confronted by the corporate giant Apple in designing emojis, especially in relation to the *hijab* and Muslim identity politics. The question is addressed of how big technology companies such as Apple strive to capitalize upon the connections between emojis and religious identities.

Within the Christian context, **Claudia Paganini**'s contribution "Understanding God in the Web 2.0" focuses on the impact that new media and the encounter with artificial intelligence has on our self-image as human beings and on our very understanding of and believing in God. The analysis of German and English websites with a Christian background shows that in the World Wide Web not only communication between believers takes place, but that some providers also promise users that they will be able to directly communicate with God. This phenomenon has given rise to some of the

difficulties which religious communities are currently facing, especially in terms of authority and authenticity. In order for the Church to handle these changes, new media should not be condemned, instead it is vital to improve the media literacy of the users.

The contribution by **Gregory Price Grieve** and **Daniel Veidlinger** addresses the question of "Buddhism in the age of digital reproduction". Based on three case studies – the digitalization of the Kalachakra ceremony, the meditation application Buddhify[2] and silent meditation in the virtual world of Second Life – the authors draw conclusions on both digital Buddhism and more broadly, on digital religion. The authors outline how new digital communication technologies do not merely represent new ways of transmitting the same content, but rather how they have significantly reshaped and reconfigured Buddhist practice. Digital Buddhism addresses the uncertainties of contemporary life, emphasizing its impermanence; it flourishes in digital, open, networked societies, and has a particular style of communication that aims at the lessening of suffering rather than the mere transmission of information.

In "Hinduism and new media: identities being deconstructed and constructed", **Augustine Pamplany** first takes a general glance at the various tenets of the practice of Hindu rituals and customs in cyberspace. The author then points out the metamorphosis that Hinduism is undergoing because of its exposure to the new media, arguing that the online practice contributes to the construction of a new Hindu identity. The exemplary case of Caribbean Hindus shows in fact how the web can be a promoter of identity and a champion of the causes of the underprivileged in the challenging contexts of religiously driven exodus and migration. Finally, the author suggests that the future of the Hindu cyberspace should be evaluated in terms of its ability to develop appropriate epistemic tools and rectify the conceptual deviations towards completing the positive identities of Hinduism emerging from cyberspace.

The next two contributions go in a different direction. Both Isabelle Jonveaux and Andrea Lieber, address an issue hardly yet explored at the academic level, namely the deliberate choice not to use digital media in religious practice. **Isabelle Jonveaux**'s contribution explores the motivations to use or to avoid the use of the Internet in order to increase the spiritual experience and communication with God. While underlining the growth in the use of digital media for religious purposes in Catholic practice, the author devotes herself to investigate the voluntary renouncement of the Internet for a (short) period of time in order to concentrate on the personal relation to God or spirituality. The author bases her analysis on primary data collected among believers during fasting periods or significant moments of the liturgical year, as well as among monks and nuns from Catholic monasteries in Europe, Africa and Argentina, that are ideally suited as laboratories to observe such tendencies. Results show that abstaining from digital media constitutes a real part of the fasting experience, which allows fasters to free themselves of inner and

outside constraints and to reach a greater fulfilment of the self. Renouncing the digital media, seen as a part of fasting in general, helps therefore to create the freedom and openness needed for being able to encounter transcendence.

This divergence between engaging with technology and refraining from it, is a phenomenon that is not limited to Christian communities, but applies to others as well, as **Andrea Lieber**'s chapter, "Networked individuals: the virtual reality of the sabbath in twenty-first century American Judaism", points out, tackling the issue from a Jewish point of view. The Author focuses on user experiences and how engaging with technology (or refraining from it) facilitates a uniquely twenty-first century means of connecting to traditional religious modalities among non-Orthodox Jewish communities. She highlights the increased use of digital technology, such as the live-streaming of religious services on sabbaths and holidays vis-à-vis the divergent trend to moderate the use of technology ("digital detox") as an expression of sabbath observance. Her analysis, based also on qualitative interviews with community members, sheds light on digital technology as a mechanism for asserting the centrality of personal choice within religiously progressive communities in the United States.

**Pauline Hope Cheong**, in "Robots, religion and communication: rethinking piety, practices and pedagogy in the era of artificial intelligence", discusses emerging developments in the present context of growing datafication and artificial intelligence. In particular, she provides examples of new religious communication practices enabled by AI, such as robots acting as religious agents, communicating sacred texts and facilitating religious rites in varied settings and in different countries. She reflects on the need to investigate such robots not merely as automated tools in the domain of digital religion, but rather as social and religious entities with all the implications that follow for our understanding of religious practices and pedagogy. If the first part of the volume is dedicated to the analysis of how five of the major world religions relate to new media, this final contribution allows for a cross-sectional reflection, shedding some light on the intriguing investigations of religious robotics in different parts of the world, starting from the cases of the robot monk in China, the Buddhist funeral monk in Japan and the Bless-U robot in Germany. In light of the intriguing forays in religious robotics in different parts of the world, the author concludes that future research on the capabilities of social robotics to spur pious thought and action may help in supporting moral development in global times.

Part II features multidisciplinary contributions discussing religion in the digital era. On the one hand, the contributions deal with artificial intelligence and the attempt to overcome human fragility. In addition, ethical aspects of the connection between human being, technology and artificial intelligence are discussed, including the question of whether transhumanism itself should be viewed as a religion. The authors present their different views and explain how digitalization and technology might change the experience of spirituality and religion.

This section is opened by **Roland Benedikter**'s contribution, "Technology: the new God?: techno-metaphysics and homo deus: contemporary attempts towards a radical perspective on the digital change of religion". The author reflects on how "religion in the age of digitalization", driven by the rise of artificial intelligence and unprecedented new options of body and mind modification via technological extension, is facing a profound challenge. In some forms of transhumanism, a radical this-worldliness aims to replace traditional religion by technologically transforming human beings and elevating them to a god-like status, an immortal "homo deus". Other forms of transhumanism or, more generally, many technophilic and technophobic thinkers expect that technology itself may produce an AI-based self-conscious and god-like entity. After the first country granted citizenship to a robot, questions about personal rights and even the right to vote for intelligent machines but also the question whether in an age of self-driving cars morality should be built into machines has become more than just a theoretical dispute. Following this paper's presentation during the conference "Digital Religion", held at Eurac Research in 2018, a discussion between Harald Walach, **Harald Pechlaner** and **Ivo Muser**, Bishop at the local Diocese, took place. The editors decided to include some excerpts of this conversation, to shed some light on possible ramifications for traditional religions and the changes religions have to negotiate in a context where technology may be reigning free and morally unrestrained.

Since transhumanism, unlike most other current philosophical positions, has in some forms the characteristics of a social movement, often including followers or a community **Boris Rähme** in his chapter asks the intriguing question "Is transhumanism a religion?" While many advocates of transhumanism would deny this, some would however point at the historic roots in traditional religions present in transhumanist discourse. Many concepts and ideas make it seems as if transhumanism could be viewed as a form of implicit religion, at the same time transhumanists often stress the importance of rational, secular thought over religious belief. Depending on which forms of transhumanism we consider and what we see as being central elements, different conclusions will be reached.

In "Are 'spiritual machines' possible?", **Michael de Rachewiltz** asks what in the world must be the case for spiritual machines to exist. This question leads to a classical problem of philosophy of mind, i.e., the connection between body and mind. First some basic concepts and difficulties of the debate are clarified so that the question can be addressed head on. Ultimately the possibility of artificial consciousness, of how a conscious entity can both be a bearer of physical properties and subjective, mental or soul-like properties depends on our views of the relationship between mind and matter and the question if conscious beings are entirely made up of matter or if they are, at least partly, also immaterial things.

The enhancement debate and the transhumanist movement represent an effort to improve and augment the human condition at different levels – physical, cognitive, moral and aesthetic. Starting from this consideration,

and looking at the contribution ethology brought to the relationship between humanity and technology, in "A digital spirituality for digital humans?" **Lucia Galvagni** considers the pertinence of adopting a conjugative model and analyses how digital technology can improve and favour religious experience and spirituality, addressing the issues through the main Kantian questions about the human condition and reflecting on these phenomena from an anthropological and ethical point of view.

The danger, hinted at also in previous contributions (as for example by Ruqayya Khan with Ashley Aytes) of the negative impacts of new media in causing "human downgrading" and in eroding human relations, lies at the core of **Harald Walach**'s contribution. In "Experience and information: thoughts on spirituality in a time of information flooding", the author underlines, on one hand, experience as the essence of spirituality, which requires a calmness of mind and riddance of superfluous information. On the other hand, the information overload which characterizes the age of digitalization seems to push in the opposite direction. Alongside with those who see digitalization as a means for religious teaching and participation, there are others who hold that the technological progress will make religion superfluous. Walach also emphasizes another problem that arises in relation to "the anarchy of the net", namely that of authority. The findings highlight the need for spiritual and religious practice in order to counterbalance the effects of ever-present digitalization and its negative effects.

In the chapter "The correlation between ethics and technology", **Peter G. Kirchschlaeger** argues that the relation between ethics and technology should be understood as an interaction rather than seeing ethics in response to technology. In other words, they reciprocally contribute to each other. By describing ethics as a source of ends and technology as a source of means, the author shows how both technology creates values and innovation with tangible effects on ethics, and ethics contributes to technology by promoting technological research and innovation and especially by providing ethical guidance. Nevertheless, Kirchschlaeger argues that technology and ethics also represent a challenge for one another: ethical values might limit technological advancement, whereas the increasing velocity of this advancement could represent a challenge for ethical approval. In the final part of the chapter, the author proposes human rights as a possible ethical point of reference for technological innovation, due to their universal feature, which makes them valid for every human being and easily translatable into legal measures.

In his outlook, **Georg Gasser** tries to build a bridge between the first and second part of the book. First of all, he notes that we live in a post-secular age in which religious and spiritual exchange is becoming more important again. This development goes hand in hand with the digitalization of our everyday life. While this is an interesting and helpful tool for religious gatherings, Gasser makes it clear that a complete shift of a religious practice into the digital realm is not possible, since a central element is its embodied character. He contrasts this with the anti-bodily attitude of many transhumanists, who

see the vulnerability of man and above all death as a pure evil that must be overcome. This goal is to be achieved by preserving the human mind but not the human body and its weaknesses.

## References


Asad, T. (1993). *Genealogies of religion: Discipline and reasons of power in Christianity and Islam*. Baltimore and London: The John Hopkins University Press.

Balaji, M. (2017). *Digital Hinduism: Dharma and discourse in the age of new media*. London: Lexington Books.

Becker, E. (1973). *The Denial of death*. New York: The Free Press.

Bostrom, N. (2003). *The transhumanist FAQ: A general introduction*. World Transhumanist Association. Retrieved from www.nickbostrom.com/views/transhumanist.pdf

Bostrom, N. (2014). *Superintelligence: Paths, dangers, strategies*. Oxford: Oxford University Press.

Campbell, H. A. (Ed.). (2013). *Digital religion: Understanding religious practice in new media worlds*. Abingdon: Routledge.

Campbell, H. A. (2017). Surveying theoretical approaches within digital religion studies. *New Media & Society*, *19*(1), 15–24.

Chalmers, D. (2010). The singularity: A philosophical analysis. *Journal of Consciousness Studies*, *17*(9–10), 7–65.

Cheong, P. H., Fischer-Nielsen, P., Gelfgren, S., & Ess, C. (2012). *Digital religion, social media and culture: Perspectives, practices and futures*. New York: Peter Lang Publishing Group.

Faimau, G., & Lesitaokana, W. O. (Eds.). (2018). *New media and the mediatisation of religion: An African perspective*. Newcastle upon Tyne: Cambridge Scholars Publishing.

Grieve, G. P., Helland, C., & Singh, R. (2018). Digitalizing Tibet: A critical Buddhist reconditioning of Hjarvard's mediatization theory. In K. Radde-Antweiler & X. Zeiler (Eds.), *Mediatized religion in Asia: Studies on digital media and religion* (pp. 139–161). Abingdon: Routledge.

Grieve, G. P., & Veidlinger, D. (2015). *Buddhism, the internet, and digital media: The pixel in the lotus*. Abingdon: Routledge.

Istvan, Z. (2013). *The transhumanist wager*. Reno: Futurity Imagine Media.

Klemke, E. D., & Cahn, S. M. (Eds.). (2017). *The meaning of life*. Oxford: Oxford University Press.

Kurzweil, R. (1999). *The age of spiritual machines: When computers exceed human intelligence*. New York: Viking.

Kurzweil, R. (2006). *The singularity is near: When humans transcend biology*. New York: Viking.

Löffler, W. (2019). *Einführung in die Religionsphilosophie*. Darmstadt: Wissenschaftliche Buchgesellschaft.

Moravec, H. P. (1998). *Robot: Mere machine to transcendent mind*. Oxford: Oxford University Press.

Radde-Antweiler, K., & Zeiler, X. (Eds.). (2019). *Mediatized religion in Asia: Studies on digital media and religion*. Abingdon: Routledge.

Tipler, F. (1994). *The physics of immortality: Modern cosmology, god and the resurrection of the dead*. New York: Doubleday.

# 1 Islam and new media

## Islam has entered the chat

*Ruqayya Yasmine Khan with*
*Ashley Kyong Aytes*[1]

Powerful convergences exist between timelines of the full-blown rise of new, digital media (i.e., Facebook, YouTube, Twitter) and the aftermath of the tragedy of the 9/11 bombings. Partly due to these convergences, upcoming, new Muslim digital "natives" (i.e., millennial Muslims) play a crucial role in creating, innovating and/or promoting strong, optimal interlinkages between new media and Islam, especially as regards, for instance, Islamic marriage practices and Islamic fashion styles.

This chapter addresses the intersections between new media and Islam and it does so through brief comments and analyses of the following broad topics: 1) the impact of new media upon Islamic ritual practices, especially those relating to marriage (*nikah* and *mahr*); and 2) the challenges confronted by the new media corporate giant Apple and its construction of emojis, especially in relation to the *hijab* and Muslim identity politics.

The phrase "new media" is a catch-all term referring to digitally-based media. About 40 years ago, during the 1980s, this term first entered into the general discourse in parallel with the increasing ubiquity of computers and computerization, as well as with the rise and distribution of media reliant upon such networks. The two phrases, new media and digital media, appear to be largely interchangeable although digital media concern the "digitalization" of new media platforms and thus may be construed as a subset of new media. A broader definition of the term "new media" is that it consists of a variety of continually evolving "phenomena and practices", (Chandler & Munday, 2016) including but not limited to new kinds of communication technologies (interpersonal and mass), entertainment, consumption, as well as novel representations of the self, community and world. New media includes both social media platforms (e.g., Facebook and Twitter and YouTube) and mobile technologies (e.g., smart phones, tablets and other mobile devices); as such, it is efficient to consider the latest mobile communication technologies as new media *par excellence*, especially in relation to social media capabilities.

New media have contributed enormously to "digitalizing" nearly all forms of expression including those related to religious and spiritual communities. Furthermore, digital media have transformed how producers and

users obtain, create, manipulate and exchange information, images, services and goods – with almost revolutionary consequences for the formation and development of religious and spiritual communities.

Both religion[2] and spirituality[3] humanize and counteract some harmful trends of new media and its digitalization. In other words, without an emphasis upon religious/spiritual practices and "things of and from the spirit" (however variously and richly all these are defined), without a societal and individual consideration and integration of this – the phenomenon and practices associated with new media are diminished in terms of their humanity.

Thus, regrettably, a significant influence of new media within society concerns the possible erosion in overall human relations and interactions. Tristan Harris, the co-founder of Center for Humane Technology, has called this negative impact of new media "human downgrading" which he attributes to what he terms "extractive attention economy" (Center for Humane Technology). This begs the question, are people being distracted to death? Are human relations indeed being eroded? In a May 2019, *Los Angeles Times* article, Harris sounds the alarm regarding this "human downgrading" which has been spurred, in part, by the linkages between mobile technologies and social media (Center for Humane Technology). Other concerns raised by the ubiquity of the Internet and new media include invasions of privacy, the spread of misinformation and disinformation on social media platforms and the sharp rise in social, political and religious forms of polarization and polemics.

In terms of study and examination, the Internet and new media, including social media, pose challenges. Such obstacles and criticisms of undertaking Internet and digital and new media research involve considering the effects of the Internet as a non-place, or a space without place, on the events that unfold within the digital world and the best analytics for researchers who wish to study new media and religion. Moreover, the Internet brings up questions about users' anonymity and consent to digital interaction and observation. Furthermore, the tendency for the Internet to be used to polemicize or propagandize must be taken into account though it should not be used to discount other mechanisms by which phenomena arise. Yet another challenge that may arise, as is the case in this present project, is how to generalize findings given the impossibility of canvassing the entire digital world. While an answer is not readily available, the practices here may provide a point of reference. Among the methods and methodologies that the researcher and investigator may undertake are observational research and qualitative analysis of text/rhetoric and images. Both the sets of traits and implications of digitally-mediated communication and entertainment technologies set forth investigative and ethical challenges and hurdles.

## New media and Islam

In my 2015 edited volume, *Muhammad in the Digital Age*, I point out the coincidence of timing between the aftermath of the tragic, terrorist acts of

9/11 with the advent of the age of digital, new media (Khan, 2015). The digital age (whose birth is often dated back to 2002) is marked by an explosion of new media, including but not limited to Facebook, YouTube, Twitter and other platforms. This overlap between the aftermath or fallout of 9/11 and the popularization of the digital age has played a role in exacerbating what may be termed the "Othering" of Islam, the polarization of the discourses of Islamophobia vs. Islamophilia and the polemics concerning the perceived binary of Islam vs. the West or the West vs. Islam. As I state in this edited volume: Islamophobes, or Islam-bashers, uncritically demonize or vilify Islam, Muslims and/or Muhammad, while Islamophiles or Islam-lovers, uncritically idealize the religion and present it and its messenger as a panacea to all problems. Importantly, these two competing polemical constituencies feed off one another and grow in strength and numbers as mediatized images and ideological wars over Islam, Muslims and Muhammad play out in the world of new and digital media.

Islam's two main sects or denominations, namely Sunnis and Shias, engage and/or interact with digital, new media in different ways. Because Sunni Islam and Shia Islam each have their own mode of conceptualizing and construing structures of religious authority and religious interpretation, it may be inferred that such differences also play out in the ways each engages with new media. Muqtedar Khan, an American Muslim intellectual, noted how the Internet has made issuing Islamic legal rulings into something too easy and quick, that is, nearly anyone can consider themselves an expert in Islamic law and jurisprudence (i.e., a mufti). This ability of a self-ascribed muftis to issue or put out fatwas (i.e., fatwa and mufti have the same Arabic consonantal root) is more germane or relevant to Sunni than Shia communities due to the far less centralized, far less hierarchical religious structure (as compared to Shia Islam) in Sunni Islam. In other words, Shia Islam, through a more robust religious authority structure, exercises more control over both the issuance of fatwas and producing commentaries and practising exegeses.

## Millennial Muslim digital natives: a new generation's impact on Islamic practices

Defying regional, national and international boundaries, numerous virtual Muslim communities and new Muslim identities have been formed and forged through the use of the Internet and new media. In such virtual communities (formed on Facebook, connected on Twitter and/or conversing on blogs, Instagram, etc.), much activity is generated by millennial Muslim "natives" to the Internet, typically in their twenties or early thirties. Given their generational demographics, as would be expected, main topics of interest appear to be further educating themselves about Islam (e.g., Muslim schooling), mastering Islamic practices (e.g., reading and understanding the Arabic Qur'an, i.e., the Islamic scripture) and learning about Islamic/Muslim dress and fashion and, perhaps most importantly, becoming more

informed about Islamic practices regarding marriage and dating, including its online forms.

Some Google search results with certain combination words related to Islam are given in the following table:[4]

| | *Search words* | *Number of hits* |
|---|---|---|
| 1 | Online Islam | 300,000,000 |
| 2 | Online Qur'an | 118,000,000 |
| 3 | Online Muslim school | 194,000,000 |
| 4 | Online Muhammad | 231,000,000 |
| 5 | Online Sufi | 29,800,000 |
| 6 | Online Muslim marriage | 65,600,000 |
| 7 | Online *nikah* | 39,000,000 |
| 8 | Online *hijab* | 86,300,000 |
| 9 | Online Muslim dating | 50,300,000 |
| 10 | Online *salat* | 72,300,000 |

## New media and Islamic ritual practices

This section zeroes in on uses and features of new media, including digital media, that concern Islamic ritual practices. In order to better assess how new media impacts and/or engages with Islamic practice(s), it should be pointed out that the term "practice" here includes, but is not limited to, Islamic rituals, Islamic rites of passage and/or Islamic daily, lived religious practices (e.g., wearing Muslim dress, Islamic dietary observances).

It is safe to say that new media shapes mainstream Islamic practices ranging from daily prayer, to attending mosque on Fridays (the Islamic equivalent of the "sabbath" day), to performing recitations of the Qur'an. For example, the digital delivery of the Islamic *khutba* (i.e., the Friday sermon), makes it less necessary to attend in person the Friday congregational prayer service. The attractiveness of being able to listen to the Islamic weekly sermon in the comfort of one's own home or space (especially in areas where there may be challenges even getting to the mosque, or women, for whom traditional roles and expectations may pose challenges in attending the service) is compelling. Is it possible that the relationship between the Muslim believer and the physical place of worship is increasingly becoming a "virtual" relationship? Perhaps. By way of shedding more light on this, the main and historically long-standing Islamic mosque in Los Angeles is the Islamic Center of Southern California, that is, the ICSC. The ICSC provides the following virtual features on its website: live-streaming of sermons and lectures (over a decade of archives, available through its website but also through Facebook and YouTube). It also provides Internet options regarding secure, quick online solicitations of donations for a range of services such as *zakat* (the requisite annual Islamic tithing or alms-giving), Ramadan-related *iftars*

or meals and Islamic educational services. New and other media[5] provide many ways of staying in touch with a local or regional place of Islamic worship and community and thus, such media reduce or mitigate the "need" for physically going to and being present in a mosque. This may affirm the point that the millennial Muslim's relationship with the mosque increasingly is being rendered a "virtual" relationship.

## Islamic marriage and new media: *nikah* and *mahr* in new media

New media both influences and is influenced by Islam's marriage rituals. Though Islam originated in the Arabic peninsula in the seventh century, most of the world's Muslims are not Arab, and this is reflected in diaspora; in other words, there exists a geographically widespread cultural and religious Muslim diaspora all over the world not limited to the Arabic peninsula. As an aside, within the Arab Muslim world, social media like Facebook and Twitter are among the most visited/used (Ibahrine, 2011; Mohammed Bin Rashid School of Government, 2017). However, because Facebook makes it necessary to have familiarity with the user at the other end in order to view and engage with their profiles, Twitter becomes the preferred mode by which to investigate how new media both influences and is influenced by Islam's marital rituals, namely those of *nikah* and *mahr*. Because Twitter, despite its character limit, allows users to create links and post photos and videos, the platform becomes a viable source of information. Instagram, too, is an oft-used, ubiquitous platform with which strangers can easily engage and public posts are accessible to a large audience. Employing these two platforms, one can begin to identify trends and formulate hypotheses concerning Islam and new media as they relate to Islamic marriage.

The Muslim diaspora, especially in the United States and Southeast Asia, has created new media uses and space that are coloured by multicultural, diverse perspectives on Islam and its rituals. This is particularly apparent in the context of *nikah* and *mahr*. The *nikah* mainly consists of a simple ceremony in which a marriage legal contract between two adult individuals, typically a bride and groom, is produced and signed (Denny, 2011). Moreover, *nikah* consists of the presence of adult (male) witnesses, the establishment of an "up-front alimony payment to the bride by the groom" (sometimes deferred and paid later) known as *mahr* and the involvement of a leader in the mosque, that is, an *imam* if possible (Denny, 2011). The ceremony may be conducted in many ways, as demonstrated by the multitude of posts on social media platforms. Users of both Instagram and Twitter present different aspects of the ways in which new media has an impact on the very performance/execution of the Islamic ritual of *nikah*.

New media has not only provided a platform for imagining and demonstrating Islamic ritual practices, like *nikah*, but such media also act as a mediator for exposure to other's cultural and religious practices. On the global new media stage, this has spurred especially the globalization of "western"

practices. This is particularly evident on Instagram where one cultivates and presents an idealized version of the personal self and life. Although wedding culture on Instagram is not singularly limited to "Western-style" weddings (i.e., a big white dress for the bride), an observable trend towards "Western-izing" effects on other non-Western wedding traditions is detectable.

In this section, we offer a series of observations based upon a search of posts containing the particular hashtags "#nikah", "#muslimwedding", "#muslimahbride" and "#weddingmuslim" on Instagram. Weddings are treated as photo opportunities for the festivities: some pictures are taken during the (legal) *nikah* ceremony itself wherein, for instance, couples take pictures with their wedding licenses or certificates. However, most of the photos seem to capture the post-*nikah* or post-ceremony celebrations and festivities. Pictures taken during the *nikah* itself are far outnumbered by pictures of the wedded couple, the venue and the communal celebration after the *nikah*. Instagram is one site that appears to glorify and promote a kind of "Euro-western image" of wedding culture, and it seems to be catching on. Many of the wedding images posted show a departure from, or at the very least, a fusion of regional-religious and cultural tradition and the popularized image of a "western" wedding. This is most apparent in the wedding garb of the bride, with most styles closely resembling and embracing a traditional, large white bridal gown. The visual cultures of the Internet and new media sites promote a degree of voyeurism that, in turn, promotes excessive displays of money and extravagance. This is a departure from the nature of *nikah* as first and foremost a legal union. While weddings in most cultures are highly celebratory events, the Islamic Hadiths or Prophetic dicta tend to urge Muslims towards more modest festivities in keeping with the simplicity of *nikah*.

Virtual discussions and depictions of *nikah* not only take many forms but engender different debates regarding the Islamic practice and ritual and how it ought to be conducted. Twitter is one such media where perspectives on *nikah* as well as *mahr* (an essential component of the *nikah* ritual) are openly discussed, debated and exchanged. Notions of *nikah* and *mahr* are being impacted by new media given that they are increasingly subject to often anonymous, instantaneous, widespread scrutiny by a diverse, ever-widening population of Muslim millennial and other fellow users.

To take some examples from Twitter as a forum by which to witness the debating of the nuances of *nikah* and *mahr* – a search of posts containing the hashtags "#nikah", "#mahr" on Twitter lead to some observations discussed in this paragraph. What may be termed small *nikah* vs. large *nikah* is a subject of debate on Twitter. Some users express some envy or desire for a large, extravagant wedding, while others hold that the Qur'an and Hadith (Islamic canon of the "sayings of Muhammad the prophet") offer strict and clear guidelines for acceptable/good *nikah*, arriving at the conclusion that small is more honourable in the eyes of God. Often, these digital natives draw upon Qur'anic verses, Hadith canon and other Islamic anecdotal material

in their posts. Religious and theological considerations, cultural factors and practical dimensions and other ideas all are hashed out and disputed in this new media space with users expressing how these views have shaped their own wedding decisions. Certainly, the vitality and importance of new media virtual forums and debates in this regard cannot be understated even if their immediate implications are not discernible.

A critical area of virtual contention and debate among Muslim millennial Internet users is over what (in terms of sum of payment) is a proper/acceptable/reasonable *mahr*. Many opinions and perspectives on *mahr* proliferate in these new media debates, ranging from what makes the *mahr* reasonable or unreasonable to reasons for why the groom must give *mahr* to his bride and thereafter, what she is entitled to do with it and when. While males and females weigh in with their perspectives, there appears to be a discernible pattern in that men view the range of *mahr* monetary requests as being unreasonable, whereas many women voice concerns about needing an adequate *mahr* in the event of divorce or dissolution of marriage. *Mahr* seems to be one of those subjects that is too often relegated to the realm of the private after it has had a public function in the *nikah* ceremony, sometimes to the detriment to the parties concerned.

Such Islamic virtual conversations and discussions surrounding *mahr* indicate a deeper reassessment of the ritual of *nikah* and the obligations it entails. While diverse perspectives utilize Qur'anic verses and Hadiths to make their cases, because *mahr* is an essential element of *nikah*, controversies surrounding payments of *mahr* appear to alter and change perceptions in how *nikah*, as a ritual, is itself conducted. The simplest, least monetary, symbolic representation of a *mahr* can even consist of a recitation by the groom of a Qur'anic chapter or portion thereof; perhaps this may be acceptable to a few and there are even those few who claim to have done *nikah* without the requesting/giving of *mahr* at all. Yet, others hold that both the material and symbolic aspects of *mahr* are of crucial importance. All these debated stances are indicative of the power new media, like Twitter, have to pose, articulate and interrogate new experiences and ideas on a global scale. Certainly the virtual dimensions promote such discourses which then, to some extent, become the agents of change. These virtual dimensions are made effective by modes of media, again, like Twitter, which allow for instantaneous, anonymous global engagement and reach.

## New media, *hijabi* fashion and emojis: apple and the *hijab* or Muslim women's veiling

Emojis are a distinctive feature of social media. What are emojis? Emojis may be defined as small size, pictographic symbols (including icons) employed in social media text fields such as within electronic communication (e.g., text messages, e-mail and social media). There are thousands of categories of emojis, but religious and spiritual emojis are a noteworthy topic given that

millions of people worldwide daily use emojis in social media. Indeed, the US, Mexico, Brazil, Indonesia, Thailand, UK, Spain, France, Italy and Germany have the largest numbers of Facebook emoji users. This sub-section briefly takes up how a global technology giant like Apple constructs and markets emojis to individual and communal modes of religious and cultural identities and a few of the challenges this presents. It is within this context that I aim to draw out the meanings and significance of the "Muslim woman's headscarf (or *hijab*)" emoji.

At the outset, it is helpful to make some observations on the word *hijab* (Muslim women's headscarf or veil) and its fashion dimensions on a global scale. The word itself is by now a part of common English parlance and it specifically refers to the cloth head-covering worn by some Muslim women as an expression of both religious and/or cultural fashion identity. A Google search of the phrase "online *hijab*" netted the following astounding number of hits – thus pointing to the importance of virtual practices surrounding Islamic dress and fashion (including haute couture) globally:

| | |
|---|---|
| Online *hijab* | 86, 300,000 |

For many Muslim women, it is not just a matter of wearing the *hijab* but wearing it stylishly or dressing in a certain way to complement the *hijab*. It is for this reason and more that new media, including social media like Instagram, feature large numbers of *hijab* selfies, online tutorials on *hijab* styles and how to best wear a *hijab*, as well as celebrities partaking in *hijab* trends. Arguably, new media has both contributed to "rendering the *hijab* more fashionable" and, in certain ways, consequently chip away at its religious legitimacy. Of course, it also could be argued that new media has consolidated both the significance of the *hijab* as a religious and fashion icon.

Emojis date back to late 1990s and they first surfaced in Japan. In 2017, the American new media technology giant Apple first approved an emoji (i.e., pictographic symbols) with a Muslim *hijab*-wearing character to be released on all its devices including its smart phones. This was the result of a proposal submitted by a 16-year old Saudi woman (Rayouf Alhumedhi) to the Unicode Consortium. The Unicode Consortium is a non-profit international consortium originating in the 1980s based in Mountainview, California. Its voting members include giant, global computer software and hardware companies that are invested in text-processing standards-companies such as Apple, Facebook, Google, Huawei, Microsoft and Yahoo. Unicode, which determines the characters made available for computer programming, sets the worldwide standards for emojis. The symbols of crosses and crucifixes and the wheel of dharma were long a part of Unicode, but the Unicode Consortium added a Kaaba (the sacred cubic shrine in Mecca, site of Muhammad's birthplace), mosque, synagogue and a generalized "site of worship" emoji in 2015. This is also the year in which Apple, one of the

largest supporters of emojis, began releasing religion and spirituality emojis on its devices.

As noted earlier, in the realm of new media, emojis consist of tiny, pictographic and iconic symbols employed in text fields within electronic communications. While it is beyond the scope of this sub-section to deal with compelling lines of inquiry in relation to the intersections between emojis and religion in general, the questions concerning how big technology companies like Apple capitalize upon the connections between emojis and religious identities as they see them and the subsequent challenges arise. Although it is laudable that Apple attempted to represent spiritual and religious diversity in the "emoji universe", it seems that the computer software global giant waded into a sea of controversies through its decision to create a religious emoji of a headscarf-wearing female character. In other words, a Muslim woman in *hijab*, reopened a series of debates and controversies both intra-religiously and inter-religiously.

Within Muslim global communities, the spectrum of interpretations concerning the wearing of a *hijab* range from those who see it as a non-negotiable religious requirement of Islamic female dress to those who view it as a patriarchal imposition, the end result of which is to diminish and/or erase the agency of women. To give one concrete example of the former, many conservative and orthodox Muslims point to certain passages in the Qur'an to justify why Muslim women should veil or cover their heads with a *hijab*. Suffice it to note that in both within Muslim-majority countries and Muslim diasporas, the *hijab* is diversely viewed, interpreted, embraced and resisted. Certainly, it is not without contention and controversy within both Muslim and non-Muslim constituencies.

Contemporary reactions to the emoji's release on Apple's part have been met with both resistance and praise: some accused Apple of supporting "oppression" while others applauded it for being "receptive". In a sense, Apple perhaps unwittingly waded into a sea of Muslim virtual deliberations, debates and contestations over normative interpretations of Islam, normative representations of Muhammad the prophet, as well as over normative definitions of Islamic ritual practices, including those pertaining to Muslim women and dress.

Hence, the question arises: just what did Apple signal through its decision to launch this particular emoji? Is Apple, through its decision to launch this particular type of emoji, supporting and reifying certain kinds of Islamic traditional, orthodox interpretations? Again, it is likely that Apple sought to represent spiritual and religious diversity in its decision to image and create a *hijabi* emoji but it overlooked some of the gendered aspects of this decision. The challenges here pertain to how private, corporate entities with immense global and financial resources, such as Apple, prudently and judiciously wield their enormous power in the cultural and religious imaginary. The "emoji universe" and its creation is a distinct and ubiquitous feature a globalizing cultural and religious imaginary and it is thus incumbent upon

transnational corporations such as Apple to exercise this power of "image-making" only after implementing sets of "best practices" that vet the consequences before release of any or particular emojis.

## Concluding remarks

On a positive note, within all sorts of virtual new media communities, Muslims of all types, including millennial Muslims, self-identified "progressive Muslims", feminist Muslims, gay Muslims, secular Muslims, even ex-Muslims, are engaging in a new virtual world wherein contemporary challenges and events experienced by Muslims are explored in a context that transcends borders and geographical restrictions. Muslims online today are openly wrestling with aspects of Islam in general including but not limited to Islamic identities, Islamic law and practice, Qur'anic interpretations and Muhammad's traditional biographical narratives and Muslim gender-related and women's issues. A point of interest is that, with regard to problematic dimensions of past Islamic history, the traditional Islamic textual sources themselves (e.g., Islamic classical sources and anecdotes) transmit these elements that are considered controversial elements down to the contemporary era via digitized databases. This speaks to the Islamic tradition's own robust capacity for self-critique and ongoing virtual debates amid millennial Muslim digital natives capitalizes upon this capacity. Hence, contemporary Muslim youth, thinkers and theologians can and do continue to subject elements of their own religion to healthy critique by tapping into the Islamic religion's internal strength and versatility. To conclude, intra-faith and intra-religious contemporary advocacies, contributions, engagements, fellowships and collaborations are unfolding within a digital and increasingly socially-driven media; the nature of these spaces is still being understood, as are its implications in other aspects of life in addition to the spiritual and religious, including those outside of Islam. However, new media's ability to give global platforms and channels to the most widely practised religion in the world has created novel observable incidences of the present values, challenges and objectives of Islam.

## Notes

1 I would like to very much thank Ashley Aytes, MA Candidate, Department of English Literature at Claremont Graduate University, for her significant contributions to the research and writing of various parts of this chapter – especially the sub-section "Islamic Marriage and New Media: *Nikah* and *Mahr* in New Media" during the 2019–2020 academic year.

2 As for the term, religion, it has been and continues to be almost impossible to define. Does religion derive its power from the encounter between humanity and divinity? One succinct way is to state that "religion speaks to or concerns the human condition; it speaks to and concerns that which is generically human in us all". A critically important dimension of religion is that it informs us about a given culture's or community's history. Therefore religion, especially through

its foundational and scriptural texts and canons, looms very large in global and world cultures and civilizations. In most global cultures and societies, religion is highly important in public, communal, collective and/or civic life, and only in a few is it conceptualised as being reserved for the private domain(s). www.studyreligion.org

3 Turning to "spirituality", the *Encyclopedia of Religion*'s definition includes the following: "Spirituality is the concern of individuals and groups of human beings with their appropriate relationships to the Cosmos and/or the Natural world (i.e., taking into consideration different worldviews of individuals and communities); Spirituality construed as an orientation towards the spiritual as distinguished from the exclusively material; Spirituality brings to the fore the shared human condition, the profound commonalities we as human beings share on the planet" (MacDonald, 2005).

4 This technique of counting "search results" for key terms and phrases borrowed from the chapter "Hinduism and New Media" published in this volume; thank you to its author for this.

5 A quick, accessible mode of contacting various staff members of the mosque especially for matters relating to dying is a 24-hour hotline that states:

> "If you need to report a death or inquire about our funeral services, please call our 24-Hour Funeral Phone Line at 213.447.2002".

## References

Chandler, D., & Munday, R. (2016). *New media Oxford dictionary of media and communication* (2nd ed.). Oxford: Oxford University Press. Retrieved from https://www-oxfordreference-com.ccl.idm.oclc.org/view/10.1093/oi/authority.20110803100231836?rskey=vTwbYe&result=9

Denny, F. M. (2011). *An introduction to Islam* (4th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

Ibahrine, M. (2014). Islam and social media. In K. Harvey (Ed.), *Encyclopedia of social media and politics* (pp. 736–740). Thousand Oaks, CA: Sage Publications.

Khan, R. (2015). *Muhammad in the digital age*. Austin, TX: University of Texas Press.

### *Internet resources/web sites*

Center for Humane Technology. *Center for Humane Technology*. Retrieved from https://humanetech.com/

MacDonald, M. N. (2005). Spirituality. In L. Jones (Ed.), *Encyclopedia of religion* (2nd ed., Vol. 13, pp. 8718–8721). Detroit, MI: Macmillan Reference USA. *Gale eBooks*. Retrieved from https://link-gale-com.ccl.idm.oclc.org/apps/doc/CX3424502958/GVRL?u=claremont_main&sid=GVRL&xid=db45e327

Mohammed Bin Rashid School of Government. (2017, February 5). ASMR in the media. *Arab Social Media Report*. Retrieved from www.arabsocialmediareport.com/home/index.aspx

## Further reading

Anderson, J. W. (2003). New media, new publics: Reconfiguring the public sphere of Islam. *Social Research*, *70*(3), 887–906. Islam: The Public and Private Spheres. Baltimore and London: Johns Hopkins University Press.

Bunt, G. R. (2000). *Virtually Islamic: Computer mediated communication and cyber Islamic environments*. Cardiff: University of Wales Press.

Bunt, G. R. (2018). *Hashtag Islam*: *How cyber-Islamic environments are transforming religious authority*. Chapel Hill: University of North Carolina Press.

Campbell, H. A. (2010). *When religion meets new media*. London: Routledge.

Khamis, S. & al-Nawawy, M. (2009). *Islam dot com: Contemporary Islamic discourses in cyberspace*. New York: Macmillan Palgrave.

Larsson, G. (2011). *Muslims and the new media*. London: Routledge.

Rozehnal, R. (2019). *Cyber sufis: Virtual expressions of the American Muslim experience*. London: Oneworld Publications.

Siapera, E. (2007). Islam online: The internet, religion, and politics. In N. Karagiannis & P. Wagner (Eds.), *Varieties of world making: Beyond globalization* (pp. 90–107). Liverpool: Liverpool University Press.

# 2 Understanding God in the Web 2.0

*Claudia Paganini*

Although the relationship between humans and their media and in particular the media-mediated religious communication as such have been perceived as problematic throughout cultural history, these – sometimes old – questions are being asked in a new way on the Web 2.0. One of the reasons might be that in the www not only communication between believers takes place but that some providers also promise their users that they will be able to directly communicate with God. In this process various difficulties arise, which will be presented here primarily within the context of German and English homepages with Christian background.

## On media and men

Religious experiences and religious communication are closely related. Even more: If spirituality is understood as an encounter between God and man, religious experience, strictly speaking, is always a form of communication. Besides, the fact that communication has always been transmitted and made possible by media is not new. And it is even irrelevant whether one tends to apply a narrow media concept which regards technical means for transmitting information alone as a medium, or a broader one where any kind of messenger is considered to be a medium, such as a human being or an angel, etc. The extent to which religious experience has been linked to its mediation becomes apparent, among other things, in the fact that media criticism can be found as early as in the oldest religious documents.

In the first five books of Moses (the Greek "Pentateuch" or the Hebrew "Torah"), for example, a detailed discussion about various kinds of media takes place. In Gen 24, Abraham sends out a servant to find a wife for his son Isaac. In verse 2, it becomes clear already that not any servant can fulfil this task, but only the servant Abraham trusts most, the eldest of the household, who administers his master's property. The servant's questions in Gen 24, 5 as well as the request to swear and the oath itself in Gen. 24, 9 then underline the importance of the mission. When the servant finally arrives near the town of Nahor, he prays to God that his act of communication may succeed.

The man that will serve as a medium between God and the people of Israel must fulfil even stricter criteria. Before Moses reports the words of God to the Israelites in Ex 20, there is a story in which Moses is authorized: he is worthy of being this medium due to his origin, his character and his vocation at the burning bush. In the context of the Sinai covenant it is then reported for the first time that Moses writes (Ex 24,4), a new medium coming into view here, which is immediately criticized. It is even said that the most important words, the Ten Commandments, were not written by Moses but by God Himself because God alone can guarantee that nothing goes wrong with the new medium (Paganini, 2012).

Although the mediation of communication – and that of religious communication in particular – was already regarded as problematic in former times as we have seen and has therefore been questioned, today once more we hear the call to critically examine the radical changes due to the "new" media. So, following this call, I will take up the challenge and reflect on the question of what is new and what is different in the Web 2.0, especially when it comes to religious experience and communication.

The Web 2.0 – also known as Social Media – is a way to understand and shape the Internet as a cooperative, collaborative work of many people. It therefore gives high priority to participation, it exploits the users' collective intelligence, supports non-experts in creating and shaping Wikis, Blogs, RSS and Podcasts, etc., it produces user-generated contents and provides platforms where people can meet and where everyone can be at the same time both a consumer and a producer. Due to its strong momentum, some scientists have called the Web 2.0 a "third environment". Others refer to it as a "new virtual temple" (Gutiérrez, 2017) or state that rather than looking for God in the Web 2.0, we should realize that the web itself has meanwhile become a deity. Regardless of these interpretations, the Web 2.0 primarily represents a marketplace where self-presentation is what matters. Of course, the competition for attention may sometimes constitute a form of empowerment, a way in which under-represented voices can create a platform and gain influence. But it can also be a purely economic enterprise subject to the logic of maximizing profits. Both have their justifications, but they definitely become problematic where the desire of being heard is turned into manipulation. We will return to this issue later. Let us first discuss what types of religious communication can be found in the Web 2.0.

## Three types of religious communication

The first type of religious communication to be found in the Web 2.0 is conventional in the sense that it does not differ significantly from how information is and has been shared in the traditional media (print, television, broadcast). It is a communication.

human → human

It is a one-way communication only, from one transmitter to one or many receivers, or from multiple transmitters to one or many receivers, whereby the receiver or receivers themselves do not become transmitters. This type of communication is mainly about sharing information concerning faith. It differs from traditional media, however, in that images take on an increasingly important role as compared to texts, and this revaluation of the pictorial representation benefits religious symbolism (Ernst, 2014, p. 151). So, at first sight, religious content seems to fit well with the design possibilities of the Web 2.0. But while there is a wealth of design possibilities for broadcasters, the recipients are confronted with the problem of how to distinguish "official" and binding statements articulated by their religious community from private opinion.

And this question arises at every corner because the offer we find in the Web 2.0 is so enormous: a multitude of pages dealing with holy scriptures – like for example the Twitter Bible with its 9,308 tweets – pages where religious communities present themselves and their activities, where religious people share information about family, children, music, lifestyle, etc., NGOs which base their commitment on religious beliefs, events, companies and even hotels characterizing themselves as religious, and so on. Some of these pages simply want to inform, others want to evangelize through the net, and behind others hide fanatical fundamentalists who seek to make people dependent and obedient. When the user is confronted with these diverging messages, she must ask herself which message she wants to believe. But above all, she needs to consider whether she understands religion as an affirmation – which means that everyone has to agree on what is to be considered as true – or as a dialogue in which different opinions are not a disturbance, but normality (Merle, 2014, p. 124). These difficulties, however, do not only affect the unidirectional sharing of information but also the other forms of religious communication available in the Web 2.0.

For while such providing of content has also been common in the Web 1.0, the Web 2.0 is increasingly characterized by communication between the faithful.

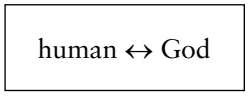
human ↔ human

With the option of being a transmitter or a recipient from one moment to the next, there are many ways of exchanging ideas about religious contents. From Internet pastoral care to event portals on which religious events can be advertised, commented and discussed, from social networks to religious

dating services, there exist many different offers that allow to get into contact with other believers. The desire to distinguish oneself from others varies. In the social networks, for instance, religious groups use explicitly religious online communities like *gnadenmeer-community* or non(-explicitly)-religious networks such as Facebook to draw attention to their ideas and socialize with like-minded people. Rich in images, Bible verses, miracle stories and a commitment to the love of God, Facebook profiles such as *Jesus Daily*, *Jesus Loves You* or *Jesus lebt* advertise actively for sympathizers who visit these online portals by conviction or curiosity, the anonymity of the Web facilitating the initiation of dialogue; and based on the religious content, new relationships are developed.

Users particularly appreciate the fact that most religious networks have strict rules of behaviour and rigorously censure insults or obscene comments. As it explicitly declares, the social network *Godkut*, for instance, aims at uniting people from all over the world by creating a peaceful and loving digital network connected through religion. This human two-way communication offers the opportunity to exchange ideas, make friends, communicate one's own thoughts and convictions, but also to learn more about a specific religion. However, since religion is a product that sells well on the digital marketplace, there are a number of players who try to make money, as is the case when subscriptions to online sermons are sold. Often there are but flowing transitions between authentic testimonies, the effective presentation of a product which is to be sold and the targeted manipulation of the customer.

Nonetheless, in this human-to-human communication most users are aware of the fact that they are dealing exclusively with *opinions* about religious contents, with other people's religious beliefs, sentiments, and so on. But Web 2.0 also offers a third type of religious communication, namely the experience of faith:




The crucial difference between type 2 and type 3 is the (false) assertion that the transmitter (and sometimes also the receiver) is no longer a human, but God. The Web 2.0 thus not only provides us with information about God but pretends to enable us to enter into a dialogue with God Himself. Although God in His freedom may get in touch with humans everywhere and at any time, and thus – possibly – even on the Internet, as *deus semper maior*, however, He resists the human wish to ascertain one's destiny. God's self-assertion and self-communication remain free, they are given by God and cannot be made by humans. But this is exactly what a great number of these websites do promise.

In doing so, they ignore the fact that communication with God transcends the perception of our human senses and they ignore the fact that God is empirically not available (Ebertz, 2008, p. 13). Instead, they claim not only to know God's opinion but also to be God's voice. Pages like *Father's Love Letter* speak in the first person to simulate God's perspective and voice and use specific images and music to create an emotional ambience to influence the viewer. Such tools have also been used by religious groups in earlier days, of course, since spiritual experiences often cannot be verbalized. But the omission of the face-to-face interaction increases the danger of deception and makes the user all the more vulnerable.

However, communication with God is not only offered and promoted as such in the digital media, it can *de facto* take place wherever real life religious rituals are transmitted to the digital world. For instance, prayer requests can be integrated in an online service via email or chat function, in virtual 3D world houses of worship can be visited and in computer games such as *Second Life* the gamer may let his avatar participate in religious rituals, like lighting a sabbath candle together with the avatar of a faraway living sister.

So, there are a great number of "spaces of communication" in the Web 2.0, all of them with different possibilities to express oneself and one's beliefs. This enhances a pluralization of the image of God and the deliberate confrontation with faith, which generally implies the tendency towards the individualization of one's own religious beliefs. From a philosophy of religion's point of view, this seems unproblematic at first because if religion wants to be more than ideology, it has to be about personal relationships, which are necessarily individual and individually experienced. At the same time, however, this individualization of faith entails the danger of the individual withdrawing into filter bubbles and perceiving the opinion of the other person as a disturbance only. The break-off of communication would be its ultimate consequence.

So, what can be done? How should we react? First and foremost, I think that the interruption of communication should by all means be avoided, and the continuation of dialogue maintained.

## Two types of pitfalls

To guarantee the continuation of dialogue and find out how a dialogue between believers can succeed, it seems helpful to outline in a first step how it is bound to fail. This means you have to delineate the pitfalls lurking in Web 2.0 the user should be warned of. Such a pitfall is the claim of absoluteness that is the conviction that you – and you alone – know exactly what is true, the conviction also that therefore you are right and the other is wrong. Anyone who thinks in this way will regard the confrontation with the other merely as a means to convince her vis-à-vis of her own conviction. However, such a communication can hardly be called a dialogue and, if so, only on a

very superficial level. If the other holds the same claim of absoluteness, the communication between the partners is doomed to fail.

The other pitfall is truth relativism, that is, the belief that there is no truth independent of the observer. If people who communicate about religion believe that there is nothing binding in terms of world view, the question arises as to why a dialogue should take place at all and how it can take place. If you think it is totally arbitrary which beliefs you or the other stand for, you can only lead an insignificant conversation. From such a point of view it is not possible to take your vis-à-vis seriously as it is required in a (true) dialogue. For first of all, a religious dialogue means to accept that the other considers her views to be true and to recognize this very claim as the basis of your confrontation.

So how can a religious dialogue succeed in Web 2.0? Or more generally spoken: How can the communication between people succeed? Communication between humans – in and outside of Web 2.0 – shows a number of peculiarities. Let us start with the word "understand" which is used in different ways. When people talk about understanding each other, this can mean that the speaker speaks loud enough, that the addressee is acquainted with the speaker's language, that she trusts the experiences the speaker refers to, that she understands her reasoning and finally – quasi as a climax – that she shares her opinion. As can be seen, the process of understanding is complicated and this is due to the fact that communication always consists of a process of coding – in which the sender transforms some content into a perceptible form (words, images, etc.) – and a process of decoding – in which the receiver perceives somethings and interprets her perception. At the beginning of the communication process therefore stands a concrete person with the intention to send a message. There is a message that is transported through a medium, and finally there is the attempt of the recipient to understand the message. This process is susceptible to error, namely on the levels of perception, language understanding, horizon of understanding, argumentation, etc.

On the other hand, understanding is made more difficult by the fact that the recipient's (and also the sender's) perception is selective, that is restricted, for the very reason that human perception is never free of – conscious or unconscious – interests. It is based on beliefs, it is guided by emotions and it is therefore always an interpretation of what we experience. This is not problematic as long as the dialogue partners are aware of their own limitations, as long as they give in neither to the inclination to let themselves be guided by sympathies and antipathies, nor to the temptation to consider their own limited interpretations of what they have experienced as the only true ones.

Finally, it should be noted that human speech may have different functions. The speaker, for instance, may wish to describe reality, whatever that may mean. But she may also wish to express her feelings, preferences, taste judgments or have the intention to make an appeal, to issue a command.

These different functions cannot always be identified by the grammatical structure of a linguistic expression alone. Statements or commands may be "masked" as questions, as is the case with rhetorical questions, etc. Nevertheless, the correct appraisal of the function of a linguistic expression is crucial for the success of the communication process.

Things get even more complicated when it comes to religious dialogue in Web 2.0. The reason is that this kind of dialogue is primarily a conversation about "life-sustaining convictions". Such beliefs are not localized on a trivial surface – such as the "conviction" that fall begins on September 23rd this year – but they are of deep importance to us. They are beliefs that help us understand our lives, find a meaning to it and deal with the challenges we have to face. For religious people, these beliefs do not necessarily conform to the official doctrine of their religious community, but they often do.

Moreover, it is only to a certain degree that such beliefs are formulated explicitly. Very often they are implicit assumptions hardly ever questioned. A (critical) reflection usually takes place when people find themselves in a crisis – for example, as a result of massive suffering or when being confronted with different religious beliefs. Such situations are normally accompanied by strong emotions and stress and both are not ideal premises for a substantive and differentiated discussion. In this respect, the very nature of religious beliefs tends to make dialogue even more difficult.

Another peculiarity of religious communication lies in the specific function of religious beliefs. Like all human interpretations of reality, religious beliefs pursue a specific purpose. They fulfil an integrative function, that is, they help us establish a coherence of meaning that allows us to endure and ultimately to affirm life with all its contradictions. Religious beliefs, however, clearly differ from the interpretations with which we daily operate. When we think about reality and interpret it, we usually do it with the aim of being able to make clear predictions.

Tom, for example, observes that his colleague Bill is always late for their meetings. He concludes that Bill will be late again today, so he decides that he does not have to hurry but can still drink his tea in peace. Such interpretations of reality have a great advantage: they can succeed or fail. Because if Bill is punctual for the next two meetings, Tom will change his former interpretation and prognosis. He will then hurry to be punctual again. Interpretations that aim at predictions are common in natural sciences and engineering. As our life is more and more affected by scientific and technical progress, they increasingly shape our way of thinking as well.

In contrast, religious beliefs are not meant to deliver predictions but to identify meaning. It is therefore difficult for them to fail for most people tend to interpret what has initially conflicted with their religious beliefs in a way that allows it to be reintegrated into their world view. This temptation is all the greater as much is at stake in religious beliefs: namely to lose what gives meaning to my life, what helps me continue without too much consideration and pondering.

This can be illustrated by one simple example. Tom says: "The window is closed". Moments later, he realizes that the window is open. He can even experience this fact sensually because the wind blows the sheets of paper off the table or because he feels raindrops squirting his skin. In this case, Tom is ready to correct his statement. He says: "I was wrong. The window is open". When it comes to religious beliefs, however, and Tom believes that God invites each and every one of us to relate to him and then finds out that there are many people who do not believe in God and therefore are not in such a relationship, then Tom, who is a believer himself, would probably not be ready to correct his original convictions. He would rather interpret the fact that many people do not believe in God in a way that allows this fact to be reintegrated into his original convictions. He would then say: "Not all men are capable or willing to accept the offer of God". Philosophers call this phenomenon "Direction of Fit" (Anscombe, 1963).

Does this mean then that in the context of religious beliefs everything can be said, and every credo is equally good or equally bad? The philosopher Otto Muck would answer this question with a clear "no" and he argues that there exist criteria of appropriateness for religious beliefs. This means that while religious beliefs cannot fail or succeed in the confrontation with reality as scientific theses do in experiments, they may as well be critically challenged on the basis of certain criteria, such as consistency and uniformity (Muck, 1991, p. 6; Muck, 2002, p. 31). A necessary precondition for a constructive dialogue with people of other religious convictions would therefore be to reflect on one's own religious beliefs, whether they are free from contradictions and whether they make sense without additional assumptions from outside.

In any case, it is clear that a religious dialogue in the Web 2.0 must be more than a trivial chat. It challenges and confronts the actors with their own limitations and calls for self-critical reflection, a never-ending and ongoing effort that has to be made by them. Those who take this task seriously, who practise it and who do not withdraw into their filter bubbles will by and by develop a certain competence that makes it easier for them to engage in dialogue. Breaking the dialogue and isolating oneself from other opinions cannot be an appropriate answer.

On the other hand, there are also situations in the Web 2.0 in which dialogue does not or, rather, cannot take place but in which the user is simply faced with the choice to believe what is presented to her or not. This is basically an epistemological problem as the individual has to decide whether the theological statements she is confronted with make sense to her. Although this topic cannot be dealt with conclusively in this chapter, I would like to rapidly present two approaches.

To begin, I assume that in the Web 2.0 it is not enough to refer to a (religious) authority. As on most pages, the owners can only be traced with difficulty, often confirmation is not possible. In addition, the pluralization and individualization that take place in the net make religious authorities as such questionable. Why should a certain person, a particular institution

know more about God than anyone else or even than I do? This question is hard to answer or can possibly not be answered at all. Therefore, I would like to show how the individual can reasonably reflect on online contents and offers without referring to or relying on a religious authority.

The first option is to focus on authenticity. In this context, authenticity means the veritableness of the act of communication. That is to say that religious communication in the Web 2.0 is authentic if the sender is convinced of what she publishes (Paganini, 2018, p. 207). Whether this is so, of course, is not easy to discover because in principle the inner life of a person is not accessible to another person. There are, however, some indications which, in sum, can be interpreted as a sign for or against authentic communication. Does the transmitter put into practice what she says? Does she remain true to her opinion, even if she is under pressure from someone stronger? Does she courageously advance her views, or does she only say what promises the biggest advantage, economic benefit, etc.? What kind of person is she? And so on.

The second way to gain orientation in the jungle of opinions is to refer to reason. For even if God is always greater than what we imagine, statements about God must not completely contradict reason. To illustrate this, I will conclude by analysing the "love letter of the Father" we have already mentioned. This so-called letter which is a seven-minute video with atmospheric images and emotional music has even got its own homepage, but over the years it has also been presented on the pages of various evangelical Christian groups. Its text, which, of course, was written and designed as a video clip by humans, pretends to derive directly from God Father. It is basically made up of a multitude of Biblical quotations, all of which are distorted, significantly modified or out of context.

The structure of the video responds to a clear black-and-white logic which the viewer experiences as increasingly depressing. Instead of being a liberation, the love offered in this letter is more of a scare. And its statement is clear: he who does not choose the right commitment and immediately presses the yes-I-believe button while announcing his data (Trepte & Reinecke, 2013) can only expect darkness and desperation. That this should be love clearly stands in the way of what reason tells us: if love is love, then it does not frighten, does not restrict and does not coerce the believer.

As to the image of God conveyed by the film, it does not stand the test of reason either, for the fake God who writes the letter always speaks of none but himself. Gradually the continuously present "I" appears intrusive and even aggressive when it clearly devaluates the love of the biological parents, pretending that next to the relationship to God no other relationship is of value. The character behind this type of speech is narcissistic and disturbed, and certainly not divine. For if God really wants to be God, he must be greater than all human limitations, and greater of course than selfishness and jealousy.

We could easily go on with this critical analysis. Unfortunately, the reactions the video *de facto* receives in the net do not bear witness to much reflection. On YouTube, users even answer the letter by publishing prayers

and addressing God directly. Did they ever realize that the words and design of the letter are man-made? We don't know. But this is clear: who thinks so poorly has good chances not to make religious experiences in the Web 2.0 at all nor to find friends but to become the helpless victim of manipulation (Debatin, 2013, pp. 72–74).

But even those who are more critical can be deceived by the skilful use of text, image and sound and may misinterpret messages made by man for the word of God. Moreover, as we have seen, the dialogue between humans, too, is in danger of sliding into absolutism or relativism, thus not promoting mutual understanding at all. This needs not surprise since human communication is vulnerable. And it is even more so when it comes to religious and hence life-sustaining beliefs. What might help here is not to condemn the new media and conjure up the "olden days" – when, by the way, media-mediated communication was problematic, too – but to improve the media literacy of the users.

## References

Anscombe, G. E. M. (1963). *Intention*. Oxford: Blackwell.

Debatin, B. (2013). Media ethics in a fast changing media environment. *Journal of Mass Media Ethics*, *28*(1), 72–74.

Ebertz, M. (2008). Religion im Internet. In R. Gelhot, N. Lübke, & G. Weinz (Eds.), *Per Mausklick in die Kirche. Reale Seelsorge in der virtuellen Welt* (pp. 11–17). Düsseldorf: Verlag Haus Altenberg.

Ernst, C. (2014). Bekenntnisformen im social web. Kommunikation des Glaubens in neuen Formaten, die Tradition haben. In I. Nord & S. Luthe (Eds.), *Social media, christliche Religiosität und Kirche* (pp. 143–161). Jena: edition Treskeia.

Gutiérrez, S. (2017). Faith in the net: Towards the creation of digital networks of religious acknowledgement and recognition. *ESSACGESS: Journal of Communication Studies*, *2*, 93–111.

Merle, K. (2014). Religion im Internet: Von neuen Erfahrungsräumen und Hybrid-Identitäten. In I. Nord & S. Luthe (Eds.), *Social media, christliche Religiosität und Kirche* (pp. 115–142). Jena: edition Treskeia.

Muck, O. (1991). *Herausforderung: Dialog als Lebensform, Skizzen zu einem Vortrag an der Universität Graz (KHG)*. Retrieved from www.uibk.ac.at/philtheol/muck/publ/dialog_lebensform.pdf

Muck, O. (2002). Dialog und (religiöser) Glaube. Zur Interpretation religiöser Rede. In P. Tschuggnall (Ed.), *Religion – Literatur – Künste II. Ein Dialog* (pp. 30–40). Im Kontext 14. Anif and Salzburg: Müller-Speiser.

Paganini, C. (2012). Auf der Suche nach positiver Öffentlichkeit. Teilen und Mitteilen von Informationen im Alten Testament. In W. Sützl, F. Stadler, R. Maier, & T. Hug (Eds.), *Medien – Wissen – Bildung: Kulturen und Ethiken des Teilens* (pp. 195–207). Innsbruck: Innsbruck University Press.

Paganini, C. (2018). *Entwurf einer rekonstruktiven Medienethik. Analyse und Auswertung internationaler und nationaler Selbstverpflichtungskodizes* (Vol. 2). München: zem::dg papers.

Trepte, S., & Reinecke, L. (2013). *Privacy online: Perspectives on privacy and self-disclosure in the social web*. New York: Springer.

# 3 Buddhism in the age of digital reproduction

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This chapter orbits around a seemingly simple question: what is digital Buddhism? The question arises because over the last 25 years new digital communication technologies have significantly reshaped Buddhist practice. To give just a few examples: in July 2014, during the 33rd celebration of the Kalachakra festival in Leh, Ladakh, His Holiness the Dalai Lama digitally streamed his esoteric tantric Buddhist teachings (Grieve, Helland, & Singh, 2019). That same year, on a turbulent plane flight in the United States, a Norwegian woman used the meditation application buddhify[2] on her iPhone 6 to calm herself (Grieve, 2017a). Meanwhile, in the virtual world of Second Life, convert Zen Buddhists used their avatars to practise online silent meditation (Grieve, 2017b).

While it can't be denied that Buddhism has undergone radical changes, it is less clear if these transformations merely represent newfangled ways of transmitting the same content that oral communication, manuscripts and other pre-modern media might have delivered, or if they represent a fundamental reshaping of how the religion will look going forward. We might also question whether these changes are unique to Buddhism, or whether they are similar to those affecting other religious traditions. In other words, do digital media universally shape our engagement with religion in particular ways or do Buddhists engage with digital media in ways significantly different from other religions? A clear answer to these seemingly simple questions often gets gummed up with layers of moral panic, which deride digital Buddhism as inauthentic, trivial, faddish and even toxic (Grieve, 2017a). The accusation of "spiritual toxicity" that clings to digital Buddhism stems from a long-standing scepticism in Western thought about mediation more generally (Plato, 1952), which is echoed in religious communication (Ong, 1967), as well as in critiques of popular culture (Benjamin, 1967).

The problem here, as made evident by the examples given previously, is that while critics might be sceptical, Buddhist practice thrives in digital environments. In this chapter, to understand digital Buddhism's flourishing, we first theorize the categories of Buddhism and digital media. Next, we describe three case studies: the 33rd celebration of the Kalachakra festival in Leh, Ladakh, the use of the meditation application buddhify[2] and online

silent meditation in the virtual world of Second Life. We then lay out our findings that digital Buddhism engages with the uncertainties of contemporary life, thrives in open, networked societies and has a particular style of communication that aims to cause the lessening of suffering rather than the mere transmission of information. We conclude our chapter by outlining how our understanding of Buddhism is significant for the study of religion in the age of digital reproduction more generally.

## Buddhisms

We argue that there is not one authentic form of Buddhism, digital or otherwise (Grieve & Veidlinger, 2015; *contra* Hubbard & Swanson, 1997). Instead we theorize *Buddhisms*. Yet, while there may not be one prototypical Buddhism, or a spiritual litmus test for what makes a religious practice Buddhist, Buddhism does not refer to every variety of spiritual or religious practice under the sun. Accordingly, it is important to indicate the tradition's family resemblances so that we can judge what adherents are talking about when they say they are practising digital Buddhism. Here we identify three strong family traits: The Four Noble Truths, the law of dependent origination and the concept of emptiness.

The first trait that most Buddhisms hold in common is some version of "The Four Noble Truths" laid out in the *Dhammacakkappavattana Sutta* which is viewed as the first sermon of the Buddha given shortly after he became enlightened. Here, he says that all things are characterized by *dukkha*, most commonly translated as "suffering" but also having connotations of unsatisfactoriness. An important part of the ontology of suffering in the Buddhist conception is the idea of impermanence. All things are impermanent and in a constant state of flux. Whatever comes into being will eventually cease to exist, whether it be a person, a mountain, an idea or even a god. As a corollary, the idea of no-self (*anātman*) holds that there is no permanent, eternal substrate that forms the core of the human being, such as a soul, but rather we are a conglomeration of five separate and ever-changing aggregate parts that include the physical body, sensations, perceptions, mental formations and consciousness. The second Noble Truth says that suffering arises due to a cause, namely desire. Our desire to possess things leads to suffering because, since all things are impermanent, including the objects of our desire and we ourselves, these desires, even if they are temporarily satisfied, will always remain ultimately unsatiated. This leads to suffering. The third Noble Truth explains how to achieve the cessation of suffering, which is effected through ridding ourselves of desires. If we can fully conquer our desires, then we can escape from the cycle of continual craving and dissatisfaction. The fourth Noble Truth outlines an eightfold path to achieve this blissful state, known as Nirvana, which includes disciplined living, moral behaviour and meditation.

The second family resemblance is the law of dependent origination (*pratītyasamutpāda*), which states that all phenomena arise only in dependence upon other things: if this exists, that exists; if this ceases to exist, that also ceases to exist. Dependent origination holds in the moral realm as well, leading to an ethical system based on the idea of *karma*, which says that all morally charged actions have a related effect: good deeds will lead to good results in this life or in a future life, and bad deeds will lead to bad results. As long as one has karma, one will be reborn, and when desire is completely rooted out, the force that binds karma to oneself is destroyed and one can achieve full Nirvana after which one is reborn no more.

The third trait, stemming from the law of dependent origination, is emptiness (*śūnyatā*), which states that all phenomena are empty of intrinsic existence. The mutual conditioning of all things, and the lack of any self-existent substrate mean that all things are interconnected in a web of causes and conditions, with no one thing truly existing independently. Some Buddhists took this to mean that nothingness is the fundamental ontological reality and that the world of our senses is a kind of illusion, without substantial reality. The notion of two truths was developed to account for the apparent opposition between the conditional reality of the world as we perceive it, replete with real substances that are different from each other, and the ultimate reality of undifferentiated emptiness. Others focused more on the role of the mind in the creation of the world of experience and have developed schools that have been taken to be forms of idealism by some philosophers.

## Digital religion

To describe digital religion (Campbell, 2013), we first need to depict digital media more generally. As Veidlinger (2015) illustrates, the key aspect of digital media is that here information is "digitized", meaning that it is reduced to a series of ones and zeros that can be stored and decoded by machines to render the content visible once again. Smart phones, MP3 players, dashboard GPS devices, DVDs, personal computers and video games are all examples of digital media, and of course the Internet itself operates based on digital signals flowing at light speed through the vast network of satellites and cables that spans the Earth. These media harness the power of electricity to store, send and display messages in different ways, and they are an extension of modern developments in both communication and mass production that started in the nineteenth century.

Because digital media reduce all images and sounds to numerical codes, this means that they can be described in mathematical terms and can be manipulated algorithmically, regardless of whether they consist of sound, pictures or text. Another feature of digital media is that the representation of information in terms of binary numerical code means that, unlike analogue media, the content has become independent of the medium. Digital

information can be stored in virtually any form, as long it can record at least two different pieces of information representing a 0 and a 1. Digital media "speak" to each other through the universal language of binary codes and can be connected into complex networks that communicate with each other and can expand and integrate new nodes, giving them the ability to completely transform existing social institutions, communities and practices. In fact, the breathtaking range of affordances of digitization has promoted an ideology of this new technology that itself borders on the religious. Digital media are often seen as "more than a new way of communicating, but as a new vision for society: its practices are often posed as revolutionary, and tied to the triumph of human creativity and freedom over dogma and blind tradition" (Grieve, 2013, p. 109). It is therefore inevitable that any religion that becomes wrapped in these technologies will soak up some of this millennial outlook.

Grieve (2013) identifies three main ways that digital religion differs from analogue religion which should be considered here: interactivity, hypertextuality and in its method of dispersal. He defines interactivity as "the technical ability of users to intervene, respond, and see the effects of their intervention in real time" (108). For instance, when one goes to a site online where one can click on a prayer wheel and cause it to turn, and then read a message saying: "you have just received good karma", that is interactivity. Hypertextuality is the use of links that connect one set of content with another. These links can connect text to associated pictures, videos, audio content or other webpages and create the sense of immersion into an endless sea of connected information. For example, hypertext technology allows one who is reading about the chanting styles of Tibetan monks to click on a link that will take them to a video of monks chanting. Lastly, "dispersal" refers to the decentralization of digital media and highlights the fact that they are woven into a whole host of everyday items, from one's phone to one's car. As Grieve points out, "these three traits differ from analog media, and hence analog religion, which is typically static in its production and engagement as well as linear in its format, which demands sequential engagement. Thus digital religion offers higher degrees of flexibility of engagement" (2013, p. 108).

## Case study #1 – the Kalachakra

How Buddhism plays out in the digital age can be seen in three case studies. Our first case study occurred, on July 7, 2014, on day two of the Preliminary Teachings of the 33rd Kalachakra, his Holiness the Dalai Lama read from the second-century Indian Buddhist philosopher, Nagarjuna's *Precious Garland* (*Ratnāvalī*) and *Letter to a Friend* (*Suhṛllekha*). This was part of the 33rd Kalachakra ceremony, which was an esoteric tantric empowerment centred on the *Kālachakra Tantra*, held in Leh, Ladakh, India, between July 3–13, 2014 and led by the 14th Dalai Lama, Tenzin Gyatso. The immediacy of the Dalai Lama's charisma was palpable. The ceremony, however, was also being

digitalized – tweeted, blogged, Facebooked and video-streamed over cyberspace and across the globe. Moreover, the digitalization of the Kalachakra, and the Dalai Lama's charisma, were not an afterthought, but had been calculated in advance and had been incorporated into the ceremony's discussions, community building and symbolism. For instance, as the teachings began that day, the Dalai Lama thanked "those who are here physically, and those who are not"(33rd Kalachakra Empowerment Preliminary Teachings).

A Tibetan Buddhist (*Vajrayāna*) ceremony, the word Kalachakra means cycles of time, and involves practices of purification, teachings and tantric empowerment. During the 33rd Kalachakra, the Dalai Lama spoke in person to an estimated 150,000 participants consisting of local Ladakhis, Tibetan refugees, Indian nationals and international spectators. The 2014 ceremony was also digitalized and disseminated across the globe. Since 1954, either in India or abroad, the Dalai Lama has conducted the Kalachakra teaching, usually every year or every other year, with the 2014 ceremony in Ladakh being his 33rd initiation. The event in 2014 lasted 12 days, commencing on July 3 and concluding on July 14, and consisted of three main components: ritual performances by monks, public teachings and the Dalai Lama initiating disciples into the tantric traditions. Monks performed numerous rituals associated with Kalachakra including the earth-offering dance, the construction of a sand *maṇḍala*, apotropaic rites to ward off evil spirits, the production of talismans and offerings to deities associated with the tantra. The initiated disciples gained authorization from the Dalai Lama to practise and study the rituals and traditions of the *Kālachakra Tantra*, specifically under the guidance of gurus within the Kalachakra lineage. In 2014, between the tantric ritual ceremonies, the Dalai Lama also gave a series of teachings on Buddhist philosophy, aimed at the global audience, which emphasized Buddhism as a universal "mind science" (a term used in English).

Besides offering a fascinating mythological drama, the ceremony took place not only in physical and mythical locations but also in a digitalized mediascape, a term that describes the virtual environments created by digitized global media flows. Although Leh, Ladakh is a remote and isolated community in the Himalaya Mountains, network connectivity with the event was prioritized by the Indian Government and an enormous effort was made to allow the live web streaming of the ritual. A dedicated team of people working for the Office of His Holiness the Dalai Lama ensured that the ritual practices were beautifully presented online for anyone to witness. This included the several rituals associated with preparing the site, the preliminary teachings, empowerments and also a special camera above the Kalachakra sand *maṇḍala* so people could see its construction and development as the ritual progressed. By allowing for this form of intimate connection to occur through the Internet, new media allowed for new observers to participate in fundamentally new ways.

Because Tibet's mediascape no longer merely augments actual geographic locations and physical events, and is not limited to synchronous time but

holds together and maintains (*dhṛ*) a global community (*sangha*) of practitioners, it can neither be understood through the categories of centre and periphery, nor referent and represented. This is not merely the transmission of content, but the conditioning of distinct practices. For example, on that same day, a deeply devoted practitioner from the United States rested in a hotel room in Leh, located about eight kilometres from the teaching site. She had been lying in bed, exhausted, watching the Dalai Lama's teachings live on her computer. She held her prayer beads and a book of teachings on Nagarjuna's texts that had been handed out during the first day of teachings. At the same time, she was online and supplementing the live teachings with additional materials, looking up terms and concepts, and even posting information to her friends. That afternoon she told us that she was deeply grateful for the live webcasting of the teachings and that her exhaustion had not caused her to miss any of the day's important events. When we asked her if she felt part of the ceremony, she answered with no hesitation: "Oh yes, I was definitely there with you" (personal communication).

## Case study #2 – buddhify$^2$

The second case study focuses on the application buddhify$^2$ and moves from the high Himalayas to a recent domestic airplane flight in the United States of America. A Norwegian family of four that we imagined consisted of a mother, father and a son of about 7 and a daughter of approximately 12 sat in row 23 The woman was wearing earbuds connected to a white Apple iPhone 6 plus whose screen displayed the meditation application buddhify$^2$. The application's website describes buddhify$^2$ as "the mindfulness app for your modern life. Practical, playful and beautifully-designed, buddhify$^2$ increases your wellbeing by teaching you mindfulness-based meditation on the go".[1] Smartphone apps are popular examples of "digital religion", those religious practices that utilize electronic devices that communicate and store content as numeric data and that almost always have an online social media component. This chapter asks, how does buddhify$^2$ work? And what does it tell us about religion and popular culture in our contemporary Network Consumer Society, that is, the late capitalistic forms of consumer-driven corporate free market economy that are intertwined with digital media practices?

Apple Inc.'s app store, a digital distribution platform for mobile devices, sold buddhify$^2$ for $4.99.[2] Buddhify$^2$'s design is not arbitrary. Digital devices, like all technological tools, are made to solve particular problems for particular groups of people. Much digital media is designed to sell commodities by creating an experience of anxiety and increasing distraction, dissolving the boundary between work and private life and creating the fear that users are missing out and being left out. Buddhify$^2$ was released on January 6, 2014 and is a technological solution aimed at the cultivation of mindfulness for the urban professional to counter the disruption that digital media often create in everyday life. Such pragmatic benefits are not unusual in how

Buddhism has been appropriated by contemporary society. As Jeff Wilson writes in *Mindful America: The Mutual Transformation of Buddhist Meditation and American Culture*, "The most important aspect of the mindfulness movement is its orientation towards practical benefits, an orientation we find present in Buddhist meditation groups, MBSR [Mindfulness Based Stress Reduction] seminars, and the self-help aisle of the nearest bookstore" (Wilson, 2014, p. 187).

Buddhify[2]'s target audience is hip young urban professionals. As Gunatillake said, in a 2011 Buddhist Geeks Conference presentation titled "Disrupting the Awaking Industry", "the people I talk to are all [inaudible], they live in sort of urban centres in England, Scotland and Europe and they're digital, they're relational, and something's not landing for them" (Mindfulness Everywhere). The target audience can be seen in the design of the app itself. To give a small example, the buildings in the lower band of the screen resemble Manhattan looking from Brooklyn, New York and hint that the application is aimed at urban professionals. Reviews of buddhify[2] also evidence its intended audience. In the blog Business Insider, Matt Johnston writes, "I've been using the meditation app on my phone for a week and it's changing my life". Johnston goes on to describe how he works in New York and that his mind "is endlessly fluctuating between sort of stressed out, and totally and completely stressed out. There are only two speeds". Johnston imagines being on a train to work, putting on headphones, and using buddhify[2] "to clear your mind to prepare for the day".[3]

## Case study #3 – Second Life

The third case study is Zen Buddhist communities on Second Life, a three-dimensional, immersive, interactive virtual world housed in cyberspace and accessed via the Internet. Through on-screen representations, called "*avatars*", millions of Second Life users explored the virtual world, communicating and socializing with one and other, as well as creating, selling and purchasing virtual goods. Second Life differs from other *MMORPG*s (massively multiplayer online role-playing games) because the content – buildings, *objects* and even bodies – were created by users rather than by game designers. For instance, on June 7, 2010, after asking the resident, Fae Eden, what she did on Second Life she explained, "I meet *friends* and interact, *roleplay*, shop, *build*, and tune my avatar".

Here we describe Second Life's Zen Buddhist community concentrating on the year 2008 and the region known as the Hoben Mountain Zen Retreat.[4] In June of 2008, the Second Life Zen community consisted of five *groups* that had 3,756 members and five regions and held approximately 75 events a week. Often labelled Western, nightstand or "convert Buddhism", such popular forms like those at Hoben focused on several facets of the Buddhist tradition: the therapeutic, the nonhierarchical, the nonviolent, the ecological and, most importantly, the meditative. For the most part, convert

Buddhists live in the West, North America or Europe and other parts of the developed world but can also be found in many of the cosmopolitan centres of developing nations. Most Second Life Zen adherents approached their practice very seriously and were conscious of Buddhism's legacy and of how Zen had been introduced to the West, and consciously and mindfully strove to translate Buddhist practices into Second Life. As Hoben's founder, Cassius Lawndale, said in a conversation on July 1, 2009, "we are a real Buddhist community in a virtual world".

In September 2009, the largest of the Zen groups, with 1,358 members, was Hoben, which was described as "an owned and operated Buddhist practice centre in the virtual universe of Second Life". Hoben was the largest – and with weekly traffic of 4,841, the most popular – location for Zen meditation in Second Life. Although Hoben was founded by Cassius Lawndale, unlike some of the other groups it was very much a community endeavour, with a large group of over 30 people taking some part in management. Hoben's traffic was generated both by meditation sessions and also by the purchase of Buddhist-inspired commodities available at the shopping mall.

In September 2009, besides Hoben there were two other important groups. First was the Bodhi Center, created by Zeus Ides, which was the second largest group. The Bodhi Center was, as a note card described, "open to everyone", and its mission was to "introduce more disciplined practice into Second Life". Its basic tenet was that Buddhism "must be unequivocally and purely taught by experienced monastics and laypeople of Second Life". The Bodhi Center supported itself by selling many of Zeus Ides's Buddhist-inspired objects, such as *maṇḍala* paintings and Buddha statues. The second group, Gekkou, differed from Bodhi Center in two ways. It was more elitist in its approach, was spread mostly by word of mouth and was composed of residents who spent more time *inworld*. First, it only had 155 members. Second, its founder, Mystic Moon, described its philosophy as a "traditional free flow improvisation", which centred on his self-authored Golden Sentences that he used during meditation sessions as "seeds for insight". Unlike the larger groups, Gekkou was supported by donations, and the members had near the end of my team's ethnography closed the last of their retail stores. It was also more exclusionary than the other groups, in that one had to be invited to join.

Two other groups were the originals for the Zen cloud but had by 2009 been eclipsed in activity and number of members. First, the Zen Center Retreat was described as "a gathering place for those on the path to awareness". Wayne Wanderer, who was an early Second Life adopter with an avatar created in 2003, founded the group. The Zen Center Retreat's build was a very well-crafted monastery building that was created on December 10, 2003, making it one of the oldest religious sites that we encountered. During our research, however, the Zen Center Retreat had more or less been abandoned. It had only two active managers, with no events or notices. The final group was the Zen Sitting Group founded by Yidam Roads, which sought "to nurture inner and outer peace in Second Life and real life". Its

chief function was to "sponsor twenty minute Zen meditation daily at 6PM Second Life Time". It was located on Second Life's Mainland, and the region was a very beautiful Zen-inspired garden. By 2009, the Zen Sitting Group was the most active, and it was in the first to specifically design practices for Second Life.

## Findings

What is digital Buddhism? This chapter has described Buddhisms and digital religion, as well as given three examples: the digitalization of the Kalachakra ceremony, the iPhone application Buddhify[2] and silent meditation in the Virtual world of Second Life. Taken together, we conclude with the following three findings about Buddhism in the age of digital reproduction:

(1) Much current digital Buddhism engages with the uncertainty of contemporary life. As Grieve (2015) argues about digital religion more generally, digital Buddhism operates as a workaround, or an innovative temporary solution, to our experience of religiosity in contemporary life. Digital religion emerges within what Zygmunt Bauman (2005) calls liquid modernity, a period of global capitalism where life is constantly changing, highly mediated, hurried and uncertain. Digital Buddhism and digital religion more generally are a means of overcoming the problems of a "liquid modern life", though by definition it also implies that a permanent solution is not ready at hand. In that sense, digital religion is ever-changing, as the Buddhist notion of constant flux holds. Modern life, in part due to those very same digital technologies, is moving and changing at such a pace that no institution, and certainly no religion, can remain in place. A constant game of catch-up is being played where the changes in the ways we live, work and play demand changes in our religious views and practices as well.

(2) We found that there is more to Digital Buddhism than simply being a quick fix to contemporary problems, and that its emphasis on impermanence helps it to flourish in digital networks. As Veidlinger (2018) maintains, Buddhisms have always thrived in open, networked societies. He argues that networked digital media allow people to connect with each other instantly in a web of communicative activity and thus provide an ideal environment for Buddhism to flourish, as long as information and ideas are allowed to pass fairly freely amongst the population and where interlocutors are heterogeneous in some ways – culturally, socially, linguistically, philosophically or otherwise. Buddhist ideas dovetail particularly well with the contours of this kind of media landscape, and even before digital media, for example along the Silk Road, which was the low-tech Internet of its day, Buddhism flourished in the open discursive networks that were the trade routes and market cities of the region.

The central ideas of impermanence (*anitya)* and no-soul (*anātman*) for example, are key features of Buddhisms that afford the cognitive effects of digital media. The idea that a human person has no enduring soul but is merely

a tissue of conditioned elements coheres well with the ontological insights and patterns of identity formation that tend to arise through a life lived in engagement with digital media that offers opportunities to present multiple, transient identities through flickering impermanent pixels on a screen. Networked communicative environments afford four other ideas characteristic of Buddhisms. First, the Internet doubtless fosters in the user a deeper understanding of the idea of interdependence or dependent origination (*pratītya samutpāda*) than does any other technology. Second, if we turn to look at the central Buddhist idea of compassion for all beings (*mahākarunā*), we find that in general, compassion for others beyond one's immediate kin has been increasing in human history as the circle of communication has expanded along with new developments in technology that allow us to communicate with – and thus get to know and care about – other people even over long distances. Third, a religion such as Buddhism that downplays strict adherence to ancient dogmas and encourages personal experience of the truths that it claims to represent will also benefit from a highly networked environment, where people can discuss and debate in the marketplace of ideas the different experiences that they have had. Finally, Buddhism, as a religion in which the somatic features of ritual *can* play a fairly small role, also stands to benefit from a digitized world in which the human body and its movements become transformed in daily life as pixels replace flesh.

(3) While Buddhism may lack a static transhistorical essence, we found that digital Buddhism thrives in part because of a theory whose aim is not merely to transmit content but to create conditions which lessen suffering (Dissanayake, 2009, 1983). The Buddha taught that cessation of suffering depends on the cessation of craving, and that this in turn depends on replacing delusion with wisdom. Key to understanding a theory of Buddhist communication is the concept of dependent co-origination. Specifically, the Buddha communicated that such wisdom proceeds from the understanding that we are not isolated individual selves but rather emerge from a web of interactivity with both human and non-human elements. Rather than transmitting "data", information that can be stored and transmitted, to be sent from a source to receiver, a Buddhist theory understands communication as mutual conditioning whose aim is to lessen suffering (Miike, 2008). "Conditioning" here refers to how a person, event or process plays a role in generating, and being generated by, another person, state or process. In a Buddhist theory of media practice, media must be approached mindfully because they afford different types of interactions, which, depending on the mediascape, allow for the skilful teaching of different types of Dharmic messages.

## General conclusions about religion in the age of digital reproduction

Besides the importance of understanding Buddhism, our analysis holds the tools to understand how digital Buddhism, and thus digital religion more generally, is actually being practised today. Early scholarship on the Internet

and religion often dichotomized on- and off- line as completely separate social realms (Helland, 2000). And this offline space was considered to be utopic (Rheingold, 1993). Digital Buddhism, however, rather than providing an alternative social space for a few, has instead altered Buddhist practice for many (Campbell, 2013; Grieve, 2017b). Furthermore, digital religion has also folded back, and online practices are now affecting how real world religion is practised (Hjarvard, 2014). In other words, "digital Buddhism" refers not just to online practices but also indicates how digital media reconfigure Buddhism in the actual world and allows us to articulate the current state of Buddhist practice in relation to its digital reproduction. Being aware of the second order categories through which we interpret digital religious phenomena allows researchers to be conscious not only of how society and culture shape religion but also of how religious media contributes to social change. Furthermore, it addresses how local theories of religion and media affect the understanding of the category of digital religion itself.

## Notes

1 Mindfulness Everywhere (a). iTunesPreview, "buddhify – mindfulness & meditation for modern life", buddify. https://itunes.apple.com/us/app/buddhify-mindfulness-meditation/id687421118?mt=8 (accessed April 4, 2016).
2 Mindfulness Everywhere (a).
3 Matt Johnston, "I've Been Using a Meditation App on My Phone for a Week and It's Changing My Life", *Business Insider*. www.businessinsider.com/ive-been-using-a-meditation-app-on-my-phone-for-a-week-and-its-changing-my-life-2015–3 (accessed April 4, 2016).
4 Places as well as practitioners are pseudonym.

## References

33rd Kalachakra Empowerment Preliminary Teachings. Retrieved May 29, 2019, from www.dalailama.com/videos/33rd-kalachakra-empowerment-preliminary-teachings

Bauman, Z. (2005). *Liquid modernity*. New York: Polity.

Benjamin, W. (1967). The work of art in the age of mechanical reproduction. In *Illuminations* (pp. 217–251). New York: Schocken Books.

Campbell, H. (2013). Introduction. In H. Campbell (Ed.), *Digital religion: Understanding religious practice in new media worlds* (pp. 1–21). London: Routledge.

Dissanayake, W. (1983). The communication significance of the Buddhist concept of dependent co-origination. *Communication* (8), 29–45.

Dissanayake, W. (2009). The production of Asian theories of communication: Contexts and challenges. *Asian Journal of Communication*, *19*(4), 453–468.

Grieve, G. (2013). Digital religion. In H. Heidi (Ed.), *Digital religion: Understanding religious practice in new media worlds* (pp. 104–118). London: Routledge.

Grieve, G. (2017a). *Cyberzen: Imagining authentic Buddhist identity, community, and practices in the virtual world of second life*. London: Routledge.

Grieve, G. (2017b). Meditation on the go: Buddhist smart apps as video game play. In B. D. Forges & J. H. Mahan (Eds.), *Religion and popular culture in America* (pp. 193–213). Oakland, CA: University California Press.

Grieve, G., Helland, C., & Singh, R. (2019). Digitalizing Tibet: A critical Buddhist reconditioning of Hjarvard's mediatization theory. In K. Radde-Antweiler & X. Zeiler (Eds.), *Mediatedized religion in Asia: Studies on digital media and religion* (pp. 139–163). London: Routledge.

Grieve, G., & Veidlinger, D. (2015). *Buddhism, the internet, and digital media: The pixel in the lotus*. New York: Routledge.

Helland, C. (2000). Religion online/online religion and virtual communities. In J. Hadden & D. E. Cowan (Eds.), *Religion on the internet: Research* (pp. 205–224). London, JAI Press and Elsevier.

Hjarvard, S. (2014). From mediation to mediatization: The institutionalsization of new media. In A. Hepp & F. Krotz (Eds.), *Mediatized worlds: Cutlure and society in a media age* (pp. 123–139). Baskingtoke: Palgrave Macmillian.

Hubbard, J., & Swanson, P. (1997). *Pruning the Bodhi tree: The storm over critical Buddhism*. Honolulu: University of Hawai'i Press.

Miike, Y. (2008). *Wimal Dissanayake and the beginnings of Asian communication theory*. Paper Presented at the National Communication Association, San Diego, CA.

Mindfulness Everywhere (a). iTunesPreview, "buddhify: Mindfulness & meditation for modern life", buddify. Retrieved April 4, 2016, from https://itunes.apple.com/us/app/buddhify-mindfulness-meditation/id687421118?mt=8

Ong, W. (1967). *The presence of the word: Some prolegomena for cultural and religious history*. New Haven: Yale University Press.

Plato (1952). *Plato's Phaedrus*. Cambridge: Cambridge University Press.

Rheingold, H. (1993). *The virtual community: Homesteading on the electronic frontier*. Reading, MA: Addison-Wesley Publications.

Veidlinger, D. (2015). Introduction. In G. Grieve & D. Veidlinger (Eds.), *The internet, and digital media: The pixel in the lotus* (pp. 1–20). New York: Routledge.

Veidlinger, D. (2018). *From Indra's net to the internet*. Honolulu: University of Hawai'i Press.

Wilson, J. (2014). *Mindful America: The mutual transformation of Buddhist meditation and American culture*. Oxford: Oxford University Press.

# 4 Hinduism and new media

## Identities being deconstructed and constructed

*Augustine Pamplany*

### Introduction

The observation by Lal (2003, p. 112) that "Hinduism and the Internet . . . were happily made for each other", holds some value on account of the analogical similarities between the two. Multiple traditions, polycentric sources and a lack of centralized authority and regulated practices are some of the commonalities shared between Hinduism and new media. The engagement between the two may embody the paradoxical convergence of the most ancient and the most modern.

According to the market research agency Kantar IMRB, India's Internet usage was expected to hit 627 million in 2019, the second largest in the world next to China. Estimates show that smart phone penetration will be 36.2% in the Indian population by 2022. The national census of 2011 found that 79.8% of the 1.2 billion Indians identified themselves as Hindus. Going by statistics, a study of the engagement between Hinduism and new media is certain to offer some useful frameworks for exploring the evolving complexities of religions in this interactive, digital age. It should be noted that unlike other mainstream religions with definite structures and standards, Hinduism is a complex landscape entangled with religious, political and social constituencies. Though such intersections are common to every religion, the structure of contemporary Hinduism embodies this complexity in unprecedented degrees. Accordingly, there can be no exclusive study of Hinduism and new media without engaging the political and the social domains of their interaction. The research questions in this chapter are: How does new media facilitate the practice of Hindu religion? Does the online practice of Hinduism contribute to the construction of a new Hindu identity? What are the imminent challenges and prospective directions for cyberspace Hinduism in the remaking of its identity? The first section presents an overall picture of the various tenets of the practice of Hinduism in cyberspace. The second section explores the dynamics of a fresh identity that cyberspace indirectly bestows upon Hinduism. Based on the subsequent observations and analysis, the third section identifies some dormant challenges at stake in the present engagement and recommends some prospective directions for a more productive interface between the two.

## 1 Hindu rituals vis-à-vis new media

Dodge and Kitchin (2001) define cyberspace as a "conceptual space" inside the technologies of information and communication. Rather than being homogeneous, it is a multitude of expanding spaces, each providing a different form of digital interaction and communication. The attributes such as conceptual, expanding, non-homogenous, etc., are aptly becoming to Hinduism as well. The inherent ambivalence about the very understanding of Hinduism is, not surprisingly, also reflected on Hindu digital platforms. Many of these focus on one or two specific aspects of Hinduism varying from facilitating a certain set of *pujas* or rituals through teaching the traditional philosophies to facilitating a kind of mysticism.

There are no systematic and comprehensive data available on the online activity of Hinduism. A random Google search with the combination words of online *puja*, online *darshan*, Hinduism and philosophy, Hinduism and gods, etc., returns hundreds of thousands of results. This superabundance of online resources on Hinduism is not surprising as Hinduism with its varying sects, traditions, scriptures and forms of worship is enormously complex. Scheifinger (2008) opines that the pluralistic and decentralized nature of Hinduism and the open features of cyberspace facilitate common spaces between them. Google search results with certain combination words related to Hinduism are presented in the following table:

| | *Search words* | *Number of hits* |
|---|---|---|
| 1 | Online astrology | 399,000,000 |
| 2 | Hindu beliefs | 99,100,000 |
| 3 | Hindu philosophy | 25,000,000 |
| 4 | Hinduism yoga | 20,200,000 |
| 5 | Hindu saints | 17,000,000 |
| 6 | Hinduism courses | 15,400,000 |
| 7 | Hindu gods | 14,700,000 |
| 8 | Hindu matrimony | 3,390,000 |
| 9 | Online *Darshan* | 3,010,000 |
| 10 | Online *Puja* | 197,000 |

Online astrology, Hindu beliefs, virtual rituals and matchmaking are some of the most popular portals in cyberspace Hinduism. Rinehart observes that virtual spaces have grown to the realm of virtual temples transmitting religious experiences.

> Chat rooms and list servers dedicated to Hindu topics create a "virtual" space for devotees around the world to discuss and debate religious matters. Religious experiences are even available online through "virtual temples" and sites that allow users to purchase rituals at faraway temples.
> (Rinehart, 2004, p. 293)

The engagement between Hinduism and cyberspace in the initial decades of the Internet was mostly confined to the Western and South Asian migrant Hindus. The migrant Hindus in South and South East Asia are found to be more involved in online communities and discussion groups whereas Twitter is mostly used by home-based Indians (Selvan, 2018). Understandably, the minority status of the Diaspora Hindus and their need for religious affiliations initially gave rise to the formation of online platforms like mailing list-servers and discussion groups. Interest in Hinduism facilitated by new media was the dominant factor that united them across national and geographical boundaries. As the Hindus positively embraced digital technologies almost universally, today even the traditional and conservative temples and organizations are adapting more and more to the language and tools of cyberspace (Selvan, 2018). For instance, the *Tirupati* Temple in Chittoor district in the state of Andhra Pradesh in India, considered to be one of the most affluent religious institutions in the world, offers a live *darshan* of the Lord *Venkateswara*. Given the vast number of sites for online *pujas* and other Hindu rituals, Brasher (2004) coined the term *e-tirtha* (Chetty, 2018, p. 26), to refer to sacred cyberspace.

Selvan (2018) conducted a longitudinal study during 2000–2014 to investigate the salient features of Hindu online forums. Selvan's case study of an online discussion group (alt.religion.hindu) and a Twitter hashtag (*# Hinduism Analysis)* showed that 42.2% of the activity on the discussion group focused on religious discourse, whereas propagating Hinduism scored 32% in the hashtag (Selvan, 2018, pp. 52, 57). Online communities act as forums to promote and nurture Hinduism. His study also found that online communities are inclined to produce a space that is more homogeneous and intolerant. Online groups created for Diaspora Hindus are said to have eventually become "bastions of victimization" (Balaji, 2018a p. xx)

The fidelity to tradition and rootedness in the ancient past do not prevent Hindus from entering cyberspace. Diversity of practices and plurality of expressions are inbuilt in the Hindu way. Online facilities have generated new saints and new models of piety. For instance, the renowned hugging saint *Mata Amritanandamayi* in the Indian state of Kerala and *Sri Sri Ravi Shankar*, the exponent of the *Art of Living*, in the Indian state of Karnataka, have as many followers on Twitter and Facebook as in other regular platforms. The internationally popular *Akshardham* Temple in New Delhi of the *Bochasanwasi Shri Akshar Purushottam Swaminarayan Sanstha* (BAPS), The International Society for *Krishna* Consciousness, the *Saiva Siddhanta* Church (SSC), etc., are the frontrunners in using cyberspace to disseminate their message. The state police of Kerala annually manages a huge crowd of around 15 million pilgrims in a short period of just over a month at the pilgrim centre *Sabarimala*, with an online app to register for a virtual queue that saves hours and even days for the pilgrims.

Though the presence of Hinduism in cyberspace is strong in general, the online engagement with Hinduism is comparatively lower, particularly in

regions outside India. This observation may be substantiated with the example of Fiji. Charu Uppal (2018, pp. 141–142) conducted an empirical survey in Fiji to assess the presence in cyberspace of Hinduism in comparison with Christianity. Fiji has a religious demography of 64.5% Christians and 27.9% Hindus. However, in the said study, while googling "churches in Fiji" produced 1,270,000 hits, "Hindu Temples in Fiji" produced only 11,000. Further, an examination of the first ten sources showed that while all the churches were located in Fiji, Hindu temples referred to links to temples located outside Fiji. The analysis of the questionnaire showed that though use of the Internet is significantly increasing in Fiji, cyber activity in relation to Hinduism has not caught up with the momentum and the study of the North American diaspora also confirmed less online activity for Hinduism in comparison with Christianity and Islam.

Seeing and hearing, the leading tenets of the visual media, are close to the epistemological legacy of Hinduism. Hinduism in cyberspace is in a way a restoration of the ancient "oral" tradition of Hinduism. The ancient sacred scriptures of Hinduism are called *Sruti*, which means that which is heard directly from the Divine by the sages. The *Vedas*, the most ancient religious literature, are said to be directly heard and seen by the sages. As new media replaces the text with speech and visuals, it is no wonder that a new practice is achieved by the believers as they directly hear and see the ancient experiences enacted before them. For instance, a video format of the *Bhagavad-Gita* (Song of God) – the most popular Sacred Scripture of the Hindus – posted on YouTube in 2012 had 6,896,135 views as of September 9, 2019.

## 2 Cyber Hinduism – a new identity in the making

There is a silent but noteworthy metamorphosis underway in Hinduism driven by the dynamics of its exposure to new media. Cyber Hinduism is en route to a new identity being processed by the divergent principalities of the cyber world. Balaji's observation that the exposure to new media "has certainly transformed the way the religion is practiced" (Balaji, 2018a: p. xv) is true to a great extent, particularly in the case of Hinduism. This section discusses the various ways by which cyberspace imparts a wider communal and global identity to Hinduism, freeing it from certain traditional and structural barriers.

### *2.1 An emerging identity of solidarity*

Cyber Hinduism predominantly strikes a positive note as it better reflects a communion and solidarity of believers. The history of Hinduism, marred with the malady of divisive philosophies and practices such as the infamous caste system, is now witnessing an unsung reformation in the digital world. Cyberspace forms a unique public space where every Hindu irrespective of caste, creed or gender has a just and legitimate share in the otherwise forbidden

territories of Hinduism. There are imposing examples of this emerging identity of communion for the followers of Hinduism in India and outside India. From a tradition where the lower castes were not allowed to study *Vedas* or to enter the temples, new media is unwittingly dragging Hinduism into public spaces of shared and collective identities. Universal access to rituals and the unhindered representation of the voices of marginalized Hindus are two leading examples of the emerging identity of Hinduism in cyberspace.

According to Scheifinger (2010), *puja* becomes the dominant parameter of the online Hindu identity. The primacy of *puja* is due to the theological association with the Hindu notion of embodiment. According to Herman (2010), "the Internet . . . bridges the distance between the devotee and deity in new ways: the digital image is inches away in the virtual realm, its tangible referent miles away or even non-existent". Balaji calls it "the collectivizing of Hindu practices through cyberspace" (Balaji, 2018b p. 152).

Online access to *darshan* is said to have facilitated the solidarity with the transgender community who are unwilling to appear in public (Selvan, 2018). This observation highlights the tremendous potential of new media towards the eradication of a deep-seated evil practice in the Indian society, that is, *jati vyavasta* (the caste system). The caste system is a sabotage and manipulation of the original *varna vyavasta* (class system) of the ancient Indian society, which has its Scriptural roots in the *Purushasukta* of the *Rigveda*.[1] Its original intent was to facilitate the organic functioning of society.

The criterion for membership in a class was not birth, but aptitude. New media acts as a powerful catalyst in promoting the universal solidarity and fraternity of the believers irrespective of caste and creed.

A useful example of this emerging universal Hindu identity from outside India is the experience of Caribbean Hindus in the West Indies with American Hinduism. The voices of this marginalized Hindu society in the Caribbean were brought to the forefront by the digital space. Caribbean Hindus were looked down upon by the Western Diaspora Hindus, forcing them to form their own conclaves separated from American Hindus. As Henke (2001, p. 82) commented,

> Immigrants from India shun the Indo-Caribbean population in the United States, and there are few formal links between both communities. The reason is that the Indians from India think of themselves as being "purer" than the Indo-Caribbeans, whom they regard as "polluted" by their Caribbean life.

Studies show that the web has come to the aid of such marginalized communities by preserving and transmitting their identity and differences. As Balaji articulates (2018c p. 150),

> the web has become a powerful medium through which Caribbean Hindus can communicate their identities, pass down stories, share challenges,

> and moreover, feel more connected with an Indian heritage. . . . It also provides a space by which a subaltern group . . . can communicate its identity without losing what makes it distinct.

The case of Caribbean Hindus shows how the web can be a promoter of identity and a champion of the causes of the subaltern in the demanding contexts of a religiously driven exodus and migration. Far from facilitating communication or promoting online communities, "the networking of religion via social media is a vital one for survival and resilience" (Balaji, 2018c p. 163).

The evolving ecumenical dynamics of the Hindu identity should be credited to new media, as evident particularly in American Hinduism. A study by Bradley Ackroyd (2006) claims that the Internet proves the capacity for adaptation and transformation by Hindus as American Hindus have dropped several Indian elements of practice and have transformed many other practices. Contrary to the findings of Selvan (2018), Ackroyd (2006, p. 1) argues that American Hinduism in cyberspace is, on the whole, ecumenical and inclusive. He is optimistic that the Internet will "continue to generate and reflect the diversity and flexibility of Hinduism, and the many global and individual variations in practice and belief" (2006, p. 2).

### *2.2 Deconstructing structural identities*

Cyberspace has emerged as a corrective mechanism in reinstating the central identity of Hinduism as a non-structured and non-hierarchical religion. Although Hinduism can boast of being freed from a supreme pontiff, magisterium or any overly-binding organizational hook-ups, the rise of several social, political and religious organizations in India in recent decades has led to the development of significant hierarchies, ossification of power relations and the proliferation of "soft" doctrines (Sharma, 1978; Prentiss, 1999; Balaji, 2018a, p. xiv). However, in Hinduism, cyberspace is still by and large free from gatekeepers. New technologies help adherents embrace Hinduism as more personal and proximate (Selvan, 2018; Eck, 1998; Karapanagiotis, 2010). Perhaps, the soft structures or the structure-free model of Hinduism may prefigure the outcome of the interface between new media and the Abrahamic religious traditions. An overview of the state of affairs at the intersection between new media and Hinduism seems to suggest that structural and hierarchical challenges are likely to be at the forefront of the challenges to religions from new media.

### *2.3 Move from the ethnic to the global identity*

New media is expanding the horizons of the Hindu identity. The literature on Hinduism tends to identify Hinduism with Indian ethnicity. For instance, a scholar of religion, Huston Smith (1958), labelled Hinduism as an ethnic religion. For Babb and Wadley (1998) Hinduism is a South Asian religion.

Many scholars have challenged this point, arguing that this "jingoistic idea of Hinduism" (Selvan, 2003) does not do justice to the essential elements of Hinduism, as it conflates the religious with the political and the social (Balaji, 2018a). The global networking of Hindu communities in new media is now settling this debate towards a global identity freed from ethnic contours. Though the rise of nationalist and political Hinduism goes unhindered in its homeland, the open space of new media is challenging the nationalist determination of the Hindu identity. As noted previously, the concentration of the use of cyberspace Hinduism predominantly by Diaspora Hindus carries a powerful impetus to redefine the Hindu identity along global lines. This new identity construction is facilitated by the format and content of the engagement of new media with Hinduism. For instance, in cyberspace the traces of the ethnic and religious roots of *yoga* are almost absent, though it originally stems from the Hindu philosophy and spirituality. In new media, though conscious of their original Indian roots, groups like the *Shaiva Siddhanta* Church and the International Society for *Krishna* Consciousness (ISKCON) are facilitating the global outreach of Hinduism. Many American groups with their inclusive approach downplay the Indian origins of their practices in order to attract American participants (Ackroyd, 2006, p. 6). Ackroyd contends that "amorphous and ecumenical" (2006, p. 34) are the primary features of American Hinduism.

## 3 New media and Hinduism – correcting future trajectories

Though Hinduism and the Internet are said to be made for each other on account of certain strange similarities, a critical examination of the various tenets of their present engagement calls for epistemic and substantive caution. An uncritical student opting to research Hinduism relying exclusively on web resources may end up demoralizing Hinduism in almost all its distinctive features. An uncritical accommodation of Hinduism in cyberspace would be like opening a Pandora's Box, with a real danger of the superstructures of new media with its own epistemic tools playing the spoilsport with the deep structures of traditional Hinduism. Accordingly, this section dwells at some length on the points of caution to be considered concerning the prospective directions that could be taken by an engagement between Hinduism and cyberspace. It warns of an epistemic and hermeneutical challenge on the one hand and a substantive conceptual challenge on the other.

### *3.1 The epistemic and hermeneutical challenge*

An intrinsic irony of the Hinduism and new media dialogue is that the "participatory" mysticism of Hinduism encounters a "non-participatory digital religion". In the Hindu epistemology, meaning is experienced and not just deciphered; to know is to become the known. Hinduism is yet to develop the epistemic tools against the unorthodox conflation between the experiential

and the digital horizons. It would be difficult to appropriate the holistic, integral and unified metaphors and images of Hinduism using the analytical, logical and descriptive language of new media. What is uncritically lost herein is the true experiential horizon of the ultimate non-distinction between the subject and the object and the non-disjunction between the seer and the seen that is central to the Hindu epistemology.

The epics and myths of ancient Hinduism were an attempt to overcome the limitation of language and hence the recourse to strange and paradoxical symbols, stories and metaphors. The concept of *aum*, with its nuances on the three ontological levels of mystical experience, could be reduced to merely being a religious symbol. As Wertheim observes, "due to the nature of cyberspace, a new kind of 'non-physical' space, i.e., with emphasis on 'dualism' . . . was bound to be embraced by Hinduism" (Chetty, 2018, p. 26). Scheifinger (2018, p. 3) argues that the landscape of scholarship on digital religion overlooks some important aspects, notably, "non-participatory digital religion".

Paul Soukup (2005), with his expertise in religious communication, is perhaps the first to warn about the hermeneutical cautions required in engaging with new media. Based on Walter Ong's (1995) work he argues that every communication facilitated mostly by technology warrants an interpretation. This is crucial in the context of Hinduism. The decentralized structure of Hinduism has no teaching authority to remedy the added distortions and deviations of the original meanings of the Hindu doctrines in cyberspace. The present engagement of Hinduism with new media is extremely vulnerable to subjective and skewed interpretations of the Hindu discourse.

### *3.2 The conceptual challenges*

Academic writers on Hinduism strive not to conflate religious Hinduism with its social and political outfits. However, such methodological differentiations can discredit the value of a project on Hinduism and new media, as one of the most vehement outcomes of the Hindu discourse in cyberspace is the mutation of Hinduism into a hyper-nationalist ideology. A critical interest in the study of Hinduism from the perspective of new media cannot overlook the unorthodox way in which new media has been utilized to baptize politics in religion in India. Academic scholarship in religion and new media needs to underscore the vital task of rescuing Hinduism from its newfound nationalist and jingoistic rhetoric. This ideological rectification is termed herein as the conceptual challenge.

The current political landscape of India is a telling example of the uncritical engagement between the most ancient and the most modern. The naïve epistemic tools and structures of new media have been largely instrumental in begetting some of the worst corruptions and manipulations in the history, discourse and doctrines of Hinduism towards amassing political power. For

instance, the ideological base of the right-wing political party of India, the *Bharatiya Janata Party*, is founded on a skewed interpretation of Hinduism by the *Rashtriya Svayam Sevak* (RSS)[2] think tanks.[3]

In India, religion and politics have always been intertwined. The ancient Indian philosophical and religious tradition considered the king as the embodiment of gods (*raja pratyaksha devata:*). This ancient holistic paradigm has been domesticated in current times to serve political interests. The right-wing Hindu political party *Bharatiya Janata Party* is staffing the most aggressive social networking digital platforms with thousands of highly qualified and highly paid professionals to facilitate a hyper-nationalism rooted in Hindu ideology. Hinduism with a political and nationalist ideology is termed *Hindutva*. As the elections in India are fought also on religious and communal levels, this nexus between religion and politics results in hosting some of the worst unprincipled engagements in cyberspace. The *Hindutva* narrative in new media provides vast unchartered domains for the religion-new-media theorists to test their hypotheses.

While surveying the faces of Hinduism in new media, the contrasting contingency of the "Internet-Hindu" cannot be ignored. Though the term and its meanings are disputed, Mid-Day columnist Daipayan Halder describes them as a "fast-growing tribe of fanatics who tweet and are e-friends" (Chetty, 2018, p. 36). For them, new media is a platform that changes the game by liberating the Hindu identity from the liberal left and secular political ideologies. On the other side of the spectrum, the Internet-Hindu is presented on blogs as a natural corollary to denigrating the ethos of the Hindus, trying to liberate Hinduism from pseudo-secularists, Muslim communalism and Christian fundamentalism. "Hindus have begun to harness technology to strike back with deadly effect" (Chetty, 2018, p. 36). As new power equations are formed by the religious discourses in new media, the success of the Internet-Hindu is due to their critical "ability to create and sustain a discourse that can unite individuals within a Hindu nationalist collective" (Chetty, 2018, p. 37).[4]

Chopra (2006) sympathizes with Hinduism that, "In web resources . . . Indian civilization is equated with Hindu civilization. . . (T)he professed universalism of Hindu culture does not extend to Indian minorities". Chetty (2018, p. 42) concludes his case study of the Internet-Hindu: "cyberspace challenges (Hindu's) very understanding of religion, its critical approaches, and its methodologies, and beckons creative and constructive ways in which issues of religious identity impact social context". As the mindset of millions of Indians has been domesticated by technology today, India and Hinduism present the paradoxical challenge of the antithetical tension between religion and new media.

Yet another facet of the sort of conceptual lethargy that is haunting Hindu cyberspace is its tenacity and complacency with orthodoxy. Without contradicting the progressive potential of Hindu cyberspace as highlighted in the

second part of this chapter, one should not shy away from lamenting the absence of adequate self-criticism and reformist spirit in the open folios of new media.

The history of Hinduism is punctuated with intermittent movements of reformation. Despite the outreach of digital media to the educated global Hindu youth, to date, there is no reformist momentum challenging the superstitious and unorthodox social and religious practices that have found inroads into the virtual space of new media. A provocative example would be the *Sabarimala* episode in the southern state of Kerala. Although the Supreme Court of India passed a historical verdict in 2018 allowing women of any age to enter the *Sabarimala* temple,[5] the state witnessed massive, aggressive resistance to the entry of women in *Sabarimala*. The verdict is not likely to be implemented anytime soon. The story was no different in cyberspace. If new media could be equated with Alvin Toffler's Third Wave Revolution, "the actionable knowledge" (Lal, 2003, p. 99) that should stem forth from it is not on the horizon in Hindu cyberspace. Still worse are the cases where new media platforms like Facebook and WhatsApp have been misused by ultra-Hindus for mob lynching, particularly of men of other faiths who have been allegedly, often falsely, found to be in possession of beef, the cow being a sacred animal.

A contribution to the volume of *Digital Hinduism* was made by an American Hindu who identified as queer and who opted for the pseudonym, *Shikhandi*, Sanskrit for transgender (Shikandi, 2018). The name alludes to a male warrior character in the epic *Mahabharata* who was born a girl but became a eunuch while changing her sex. It is exactly this identity crisis or lack of identity that the author tries to highlight in his essay. Thanks to new media he was able to form an LGBTQIA community in cyberspace. However, its management was very challenging and vulnerable to attacks. Though he argues that "Hinduism is a deeply queer religion", he painstakingly acknowledges that "queer Hindus . . . must negotiate with two identities that at times come into conflict with each other, and . . . cyberspace is so critical to this negotiation". *Shikandi* observes that Hindu-specific queer affinity groups are almost absent online (Shikandi, 2018, p. 89).

Højsgaard and Warburg (2005, p. 7) envisage cyberspace as a place where

> conventional or exclusive beliefs, practices, and organizational authorities are being confronted with alternative solutions, competing worldviews, and sub-or inter-group formations. In this interactive environment of increasing pluralism, reflexivity, and multiple individual possibilities, new ways of structuring and thinking about issues such as reality, authority, identity, and community are inevitably emerging.

The Hindu cyberspace is yet to rise to this revolutionary potential.

Sowing and nurturing the reformist potentials in new media is of vital importance to the pluri-religious context of India that is notoriously marred

by interfaith conflicts. It is a routine procedure that the first preventive measure initiated by civil authorities at the spark of communal violence in any part of the country is to terminate new media services. Despite the encircling glooms of religiously motivated and digitally perpetrated violence, new media has not failed to strike the chords of religious harmony and solidarity. Ravi Grover (2018) reports the case study of the *Dharma Deen*[6] Alliance – a website launched in 2010 with the professed objective of promoting Hindu-Muslim unity that has been well received across the nations, particularly in India, Pakistan, Bangladesh, Nepal and Myanmar. Their objective is to counter fanaticism by promoting interfaith communities of harmony and solidarity. Their Facebook page is eclectic in nature with members even consisting of atheists and agnostics. Though far from being accomplished, the *Dharma Deen* paradigm supports the potential of new media to be the most promising way to achieve the professed motto of the Indian identity rooted in the ethos and world view of Hinduism, i.e., *unity in diversity*.

Apart from anchoring Hinduism to its authentic roots, restoration of such pristine conceptual ideals of Hinduism also fixes the negative images of Hinduism in the West, such as the *Hinduphobia*, another misnomer perpetuated by new media. Appropriate strategies in new media could liberate Hinduism from being viewed in Eurocentric lenses (Adluri & Bagchee, 2014; Nicholson, 2010) by offering new academic frameworks.

## Conclusion

This chapter has explored the various aspects of the engagement between Hinduism and new media. The first section gave a general introduction to the various tenets of the practice of Hindu rituals and customs in cyberspace. The second section reflected on the expanding horizons of the Hindu identity in cyberspace. The final section suggested ways to correct the future trajectories of this engagement by identifying the challenges operative in the present interaction. It was opined that the future of Hindu cyberspace should be evaluated in terms of its ability to develop appropriate epistemic tools and rectify the conceptual deviations towards completing the positive identities of Hinduism emerging from cyberspace.

It may be noted that though cyberspace Hinduism stands tall in mainland India, its visibility in cyberspace as a whole is significantly low when compared to other major religions like Christianity or Islam in other parts of the world. However, unlike other major religions in cyberspace, cyberspace Hinduism embodies the paradoxical convergence of perhaps the most ancient religion and the most modern media, the Internet. The auditory and visual appeal of new media puts it in closer proximity to Hinduism than any other religion owing to the foundational appeal of Hinduism to *hearing* and *seeing*, the two intuitive modes by which it is believed that the ancient sages heard the eternal *Vedas* (Ancient scriptures) and saw the ultimate reality with their inner eyes. Exploring the complex intricacies and subtle nuances

of the interface between Hinduism and new media may provide a kaleidoscopic landscape for appropriating the evolving complexities, issues and dynamics of religions in the age of new media.

## Notes

1 *Purushasukta* is a cosmogonic hymn in *Rigveda* 10.90. The organic interconnectedness of the entire cosmos is the message of the hymn.
2 RSS is predominantly a Hindu organizational outfit with trained activists across India. It is known for its extreme views on Hinduism and nationalism. It was founded by K.B. Hedgewar in 1925.
3 The works of Sasi Tharoor, a renowned writer and former Under Secretary General of the UN, offers an intellectual alternative to the RSS discourse on Hinduism. See the works of Tharoor listed in Bibliography.
4 While this is the case in India, cyberspace Hinduism outside India is said to be different. Ackroyd argues that in Hindu cyberspace in America, the Hidutva sankritizing ideology is only a minor element and is not aligned along the homogenization of history or anti-Muslim ideology.
5 As the deity in *Sabarimala* is believed to be celibate, women of menstruating age are considered to be too impure to enter the holy place.
6 *Dharma* and *Deen* are almost Sanskrit and Arabic equivalents referring to the Hindu and Islamic ways of life respectively, complying with the belief systems, moral laws and religious practices of the respective religions.

## Bibliography

Ackroyd, B. S. (2006). *Hinduism in cyberspace*. Retrieved September 13, 2019, from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.472.9983&rep=rep1&type=pdf

Adluri, V., & Bagchee, J. (2014). *The Nay science: A history of German indology*. Oxford: Oxford University Press.

Babb, L. A., & Wadley, S. S. (1998). *Media and the transformation of religion in South Asia*. New Delhi: Motilal Banarsidass Publishing.

Balaji, M. (2018a). Introduction: Digital paths to the divine? New media, Hinduism, and the transformation of dharmic discourse and practice. In M. Balaji (Ed.), *Digital Hinduism: Dharma and discourse in the age of new media* (pp. ix–xxv). New York: Lexington Books.

Balaji, M. (2018b). Digitalizing the diasporic subaltern: How Caribbean Hinduism is preserved through the web. In M. Balaji (Ed.), *Digital Hinduism: Dharma and discourse in the age of new media* (pp. 149–166). New York: Lexington Books.

Balaji, M. (2018c). Conclusion: Digital dilemmas and new paradigms in digital dharma. In M. Balaji (Ed.), *Digital Hinduism: Dharma and discourse in the age of new media* (pp. 167–173). New York: Lexington Books.

Brasher, B. (2004). *Give me that online religion*. New Brunswick: Rutgers University Press.

Chetty, D. (2018). From newsgroups to #Hashtags: Mapping pattern of online Hindu religious practices. In M. Balaji (Ed.), *Digital Hinduism: Dharma and discourse in the age of new media* (pp. 25–46). New York: Lexington Books.

Chopra, R. (2006). Global primordialities: Virtual identity politics in online Hindutva and online Dalit discourse. *New Media & Society*, *8*(2), 187–206.

Dodge, M., & Kitchin, R. (2001). *Mapping cyberspace*. London: Routledge.
Eck, D. L. (1998). *Darśan: Seeing the divine image in India*. Chambersburg: Anima Books.
Grover, R. (2018). Dharma Deen alliance: Cyber resistance and building online Hindu-Muslim unity. In M. Balaji (Ed.), *Digital Hinduism: Dharma and discourse in the age of new media* (pp. 97–110). New York: Lexington Books.
Henke, H. (2001). *The West Indian Americans*. Westport, CT: Greenwood.
Herman, P. K. (2010). Seeing the divine through windows: Online puja and virtual religious experience. *Online-Heidelberg Journal of Religions on the Internet*, *4*(1), 151–178.
Højsgaard, M., & Warburg, M. (2005). Introduction: Waves of research. In M. Højsgaard & M. Warburg (Eds.), *Religion and cyberspace*. London and New York: Routledge.
Kantar IMRB: Internet users in India to reach 627 million in 2019: Report. Retrieved November 22, 2019, from https://economictimes.indiatimes.com/tech/internet/internet-users-in-india-to-reach-627-million-in-2019-report/articleshow/68288868.cms?from=mdr
Karapanagiotis, N. (2010). Vaishnava cyber-pūjā: Problems of purity and novel ritual solutions. In S. Heidbrink & N. Miczek (Eds.), *Heidelberg Journal of Religions on the Internet*, *4*(1), 179–195.
Lal, V. (2003). North American Hindus, the sense of history, and the politics of internet diasporism. In R. Lee & S. C. Wong (Eds.), *AsianAmerica.Net: Ethnicity, nationalism, and cyberspace*. London and New York: Routledge.
Nicholson, A. (2010). *Unifying Hinduism*. New York: Columbia University Press.
Ong, W. J. (1995). Hermeneutic forever: Voice, text, digitization, and the "I". *Oral Tradition*, *10*(1), 3–26. Retrieved September 29, 2019, from http://journal.oraltradition.org/files/articles/10i/5_ong.pdf
Prentiss, K. P. (1999). *The embodiment of Bhakti*. New York: Oxford University Press.
Rairikar, S. (2010, April 7). The Internet Hindus. *Haindava Keralam*. Retrieved from www.haindavakeralam.com/hkpage.aspx?PageID=10793&SKIN=M
Rinehart, R. (2004). *Contemporary Hinduism: Ritual, culture and practice*. Santa Barbara: ABC-CLIO.
Sanchit. (2010, March 14). *"Who is an internet Hindu?" Vu-point: Different views different points*. Retrieved from http://vu-point.blogspot.com/2010/03/who-is-internet-hindu.html
Scheifinger, H. (2008). Hinduism and cyberspace. *Religion*, *38*, 233–249.
Scheifinger, H. (2010). Internet threats to Hindu authority: Puja offering websites and Kalighat temple. *Asian Journal of Social Science*, *38*(4), 636–656.
Scheifinger, H. (2013). Hindu worship online and offline. In H. A. Campbell (Ed.), *Digital religion: Understanding religious practice in new media worlds* (pp. 121–127). New York: Routledge.
Scheifinger, H. (2018). The significance of non-participatory digital religion: The Saiva Siddhanta Church and the development of a global Hinduism. In M. Balaji (Ed.), *Digital Hinduism: Dharma and discourse in the age of new media* (pp. 3–24). New York: Lexington Books.
Selvan, K. S. A. (2003). Support and spewing: Everyday activities of online Hindu groups. In K. C. Ho, R. Kluver, & K. C. C. Yang (Eds.), *Asia.com: Encounters on the internet* (pp. 228–248). New York: Routledge.

Selvan, K. S. A. (2018). The formation of online religious identities: A case study of the internet-Hindu in India's cyberspace. In M. Balaji (Ed.), *Digital Hinduism: Dharma and discourse in the age of new media* (pp. 47–66). New York: Lexington Books.

Sharma, A. (1978). The *Puruṣasūkta*: Its relation to the caste system. *Journal of the Economic and Social History of the Orient/Journal de l'histoire economique et sociale de l'Orient*, *21*(3), 294–303.

Shikandi. (2018). Creating spaces for progressive voices in Hinduism: My experience with the queer Hindu blogosphere. In M. Balaji (Ed.), *Digital Hinduism: Dharma and discourse in the age of new media* (pp. 87–93). New York: Lexington Books.

Smith, H. (1958). *The world's religions: Out great wisdom traditions* (Rev.ed. 1991). New York: HarperOne.

Soukup, P. A. (2005). Looking is not enough: Reflections on Walter J. Ong and media ecology. *Proceedings of the Media Ecology Association*, *6*(1). Retrieved August 28, 2019, from www.media-ecology.org/publications/MEA_proceedings/v6/Soukup.pdf

Subramanian, L. C. (2018). Mirabai sings on YouTube: The transmission of a poet-saint in the age of digital devotion. In M. Balaji (Ed.), *Digital Hinduism: Dharma and discourse in the age of new media* (pp. 69–86). New York: Lexington Books.

Tharoor, S. (2018). *Why I am a Hindu*. London: C. Hurst & Co. Ltd.

Tharoor, S. (2019). *The Hindu way: An introduction to Hinduism*. New Delhi: Aleph Book Company.

Uppal, C. (2018). Digital divide, diasporic identity, and a spiritual upgrade. In M. Balaji (Ed.), *Digital Hinduism: Dharma and discourse in the age of new media* (pp. 129–148). New York: Lexington Books.

# 5 To use or not to use the Internet to support religious and spiritual life

*Isabelle Jonveaux*

Digital media are increasingly becoming part of all dimensions of daily life. For instance, 48% of people between 18 and 35 years of age in France check their Facebook page as the first thing they do after waking up (Fourquet-Courbet & Courbet, 2017). In this context, the religious use of digital media is often taken for granted and is integrated into normal Internet usage.

The Internet is not only the place of religious experiences but also its use might mirror the ascetic dimensions of religion. Parallel to the development of religious practices online, we observe a growing tendency of people disconnecting from the Internet for religious purposes (henceforth referred to as "disconnection"), for instance, during Lent or Ramadan. So why do believers choose to renounce the Internet for religious or spiritual purposes? Do they consider that digital media can have a negative influence on their religious experience? Does it mean that "online religion" (Helland, 2005) is called into question?

In this chapter, I will explore the motivations to use or not to use the Internet to increase the quality of spiritual life. The first section is devoted to the question of voluntary renouncement of the Internet for a (short) period of (re)intensification of spiritual life. Then, I introduce some dimensions of religious practice online that could explain the growth of digital media usage in important moments of religious life. Finally, I will dedicate the last part of this chapter to Catholic monasteries to explore the use of the Internet by monks and nuns who are, according to Max Weber, "virtuosi of asceticism".

This chapter is based on field inquiries conducted partly with people who were attending a fasting week in Austria and France[1] and partly in Catholic monasteries in Europe, Africa and Argentina. Included are answers given to questionnaires completed by participants attending fasting weeks in 2017, users of online programmes from Austrian Franciscans (YouTube videos, sermons online) also in 2017 and young Catholic people on Facebook (2014).

## 1 Motivations to renounce the Internet for spiritual life

Using the Internet for religious purposes is no longer a way to distinguish yourself from the others. On the contrary, we can observe a new tendency to disconnect from the Internet for religious purposes. In their typology,

Wyatt, Thomas, and Terranova (2002, p. 36) identify a category of "rejectors". For these authors, rejectors are "those who have stopped using the Internet voluntarily, perhaps because they find it boring or expensive, or because they have perfectly adequate alternative sources of information and communication" (Wyatt et al., 2002, p. 36). The category of people I am studying here also "reject" the Internet but only for a short period and to concentrate on something they find more important: their relation to God or spirituality. This topic of disconnecting from the Internet for spiritual reasons is less studied than online spiritual practices and it is an area of research that deserves to be thoroughly considered. In general, Keller, Massou, and Morelli note that the "non-use" of digital media is rarely studied and needs, therefore, to be considered as a practice in itself (Kellner, Massou, & Morelli, 2010, p. 8).

### *a. Disconnection during important religious periods*

Disconnection for religious purposes can be observed in different contexts. For instance, when studying practices in Israel, Yoel Cohen showed (2013, p. 44) that "the Haredi outlook is characterized by taking steps to distance their members from the wider world by erecting cultural walls to exclude the influence of non-religious and Non-Jewish matter". In 2006 only 20% of Haredi households were connected to the Internet (Cohen, 2013, p. 46). In this case, they avoid the Internet and modernity in general, corresponding with the profile of non-users that make a deliberate choice, for instance, as a stand against modernity and the supremacy of technologies (Kellner, Massou, & Morelli, 2010, p. 8). The pause of the Shabbat is also observed by some Haredi homepages:

> For example if you access the pages of the Israeli Haredi political party, Shas, from the Czech Republic during time of Shabbat (in the Czech Republic, that is) you will see the following notice: "The Web Shabbes Service: Dear Surfers! This site observes Shabbat and Jewish holidays, and these days surfers cannot enter. Now the site is closed because: Today is Shabbat [or Jewish holiday]. The Shabbat in the Czech Republic will end in X hours and Y minutes. We'll be glad to serve you at other weekdays".
>
> (Čejka, 2009, pp. 7–8)

Female Muslim YouTubers who display their modesty as an expression of Muslim morality in their videos are another example of the ascetic use of digital media (Le Guen-Formenti, 2015).

In the Catholic framework, we note a tendency to disconnection among churchgoers at specific points during important moments of the liturgical year, for instance, during Lent or Advent. In a questionnaire I conducted in 2014 among young Catholic people in Austria concerning their religious

behaviour online, 30% of those who say they go to Mass once a week answer that it is important for them to limit their use of online social networks during major religious periods. Only 12% of the whole sample gave this answer; indicating that the disconnection increases with religious practice. In another survey of users of online services offered by the youth ministry of Franciscans in Austria (conducted in 2017), 40.8% stated that it is very important to limit the use of digital media during certain religious periods moments, and 28.6% said it is quite important. When asked in which form this limitation takes place, 46% said they are less present on online social networks, 27% limit their use of the Internet in general and 27% limit their use of electronic media as a whole. The majority (79%) said they do not announce this disconnection, 12% announce it as a social media message and 7% with a profile photo. Indeed, on Facebook some people make their withdrawal from this online social network visible with a profile photo like "Absent de Facebook pendant le carême" (Away from Facebook during Lent) or "Facebook Fasten" (Fasting from Facebook). Since Lent 2016, the youth ministry in Austria has been proposing a new form of fasting for Lent: "Freestyle fasting" with the dimension of fasting from Facebook and showing an adapted full-colour profile photo. This is also evident in groups like "Je n'irai pas sur Facebook les vendredis de carême" (I will not be on Facebook on Fridays during Lent).

### *b. Fasting from the Internet*

For my habilitation, I studied new forms of fasting with a spiritual goal, especially according to the method of Buchinger-Lützner, where people do not eat anything for one week or more and drink only liquids. This form of fasting is a personal demarche by the individual. It corresponds to what Paul Heelas and Linda Woodhead call the "subjective-life form of the sacred" and no longer to the "live-as form of the sacred" where individuals answer to the prescription of the institution (Heelas & Woodhead, 2005, p. 6). One of the main aims is a total purification of body, spirit and soul. In this context, a media fast, especially from smartphones and the Internet, is recommended by the fasting trainers. During a fasting-trekking week on which I conducted participant observation in 2014, the fasting trainer asked participants not to use their smartphone during the whole week. I observed that this rule was respected during the day while people were maintaining silence, but some used phones in the evening to call their family.

It is interesting to note that the term "fasting" was used in the interviews only in relation to food and media. For instance, a seminarist in Graz describing a Buchinger fasting week he attended before Christmas mentions the media just after the food. In the Christian ascetic tradition, fasting is the first step of asceticism (Régamey, 1963, p. 58) and is also considered the first virtue (Montanari, 1988, p. 5). The idea of the Internet fast establishes a parallel between the need for food and the need for using the Internet as fundamental human needs. Some fasters confessed it was more difficult for

them to fast from the Internet than from food, which means that the "Internet fast" constitutes a real form of virtuosity nowadays.

### *c. Less Internet for more inner life*

Why do individual believers need to withdraw from the Internet or online social media in significant moments of the liturgical year or during a fasting week? The first reason given by interviewees is to "find themselves". This refers to a kind of asceticism, the "souci de soi" (care of the self) described by Foucault (1984). Here, the experience of the fasters concerns the development of "relationships with the self, for self-reflection, self-knowledge, self-examination, for the decipherment of the self by oneself, for the transformations that one seeks to accomplish with oneself as object" (Foucault, 1990, p. 29). A digital media fast is not presented as an added dimension to the fasting week but as a real part of the fasting experience. The Internet is also seen by fasters as slavery from which one must free oneself. In one interview, a 39-year-old woman answered that she wants to "fast also from modern enslavements". Fasters try to renounce the digital media in order to free themselves of inner and outer enslavements and to reach a greater fulfilment of the self.

In the questionnaire sent to participants of the Buchinger fasting weeks in France, the following answers were given to the question of why they find it important to disconnect during the fasting week: "To feel myself 'free' of the virtual" (Woman, 59), "To free my spirit" (Woman, 66), "To be really free and receptive" (Man, 42). This freeing allows individuals to find the connection with themselves again, as we can see in other answers: "In order to be available for the inner ear, to leave a free space to receive what has to come in the self, to be in a deeper hearing" (Woman, 66); "No media during fasting in order to reconnect to myself" (Woman, 49); "To find again the inner silence, which is indispensable for the encounter with my deepest being" (Woman, 58); "To facilitate interiority" (Woman, 75).

Therefore, it is considered that media produce interferences in one's relationship to oneself. The goal of disconnection from the Internet is to allow this reconnection with the deepest self. This reconnection to facilitates a renewed communication with God on a deeper level. Some people directly establish a link between a digital media fast and access to a more intense spiritual life. For example: "For more spirituality" (Woman, 69) or "To make me innerly available to the spiritual adventure" (Woman, 65). For some participants, it also means a new intensification of their relationship with God: "For a better 'connection' to God and us" (Woman, 52) or "To disconnect and to connect differently with God" (Woman, 48). Renouncing digital media helps, therefore, to create the freedom and openness needed to be able to encounter transcendence.

Hence a digital media fast is seen as a part of fasting in general, with the same goal as fasting from food: to find themselves, to increase the spiritual experience and communication with God.

## 2 Motivations to use the Internet for spiritual life

Sociologists of religion speak about online religion which "allows people to live their religious beliefs and practices through the Internet medium itself" (Helland, 2005, p. 12) or describe how religious communities develop online tools "to give rise to prayer" (Douyère, 2015) like Canadian nuns studied by Douyère show in their prayers embedded into PowerPoint slides. In the latter, is the tendency to disconnection during important moments of religious or spiritual life a contradiction? Does that mean that programmes offered by online religions do not reach their goal of producing a religious experience? However, in the questionnaire about the Franciscans' online programmes in Austria, 17% of people said they do not disconnect during important religious periods, but on the contrary, increase their use of the Internet for religious purposes. This would imply that digital media helps them to deepen their spiritual experience.

### *a. When religion does not reach people*

One reason why people have increased their digital media usage for religious purposes is that religious services are not always easy to reach. Or, for example, because of the reduction of available priests, which are increasingly lacking. In this context, the Internet can provide an alternative access to religious services like a liturgy or a sermon. In particular, the Internet can bring religion into homes of people who are geographically remote from religion, for instance, to people who are working abroad.

Digital media can also bring religion to isolated people who have mobility issues related to their disabilities. For instance, among people who participated in the online retreat for Lent organized by French Dominicans in 2006, an online message was received from someone who is deaf; another from a disabled lady who can no longer leave her house (Jonveaux, 2007, p. 162). Studying a Mass broadcast online by a small parish in Styria (Austria), Veronika Feiner showed that people were motivated to watch this liturgy because of illness (25%), to have contact with their homeland (10%) and because they had nobody to drive them to the church (6%) (Feiner, 2010, p. 270). As a solution to the difficulty many people, particularly the elderly, have finding transport to go to Mass, a new website and app "GoMesse" was launched on April 14, 2019 to allow them to reach the church easily using a designated car service.

In the survey concerning online programmes offered by Austrian Franciscans, a 56-year-old woman explains in an open question: "I presented an online sermon to a hard of hearing woman who can no longer hear anything during the Mass: 'Wonderful, I understood each word!'".

These examples show that the use of online religious services does not always correspond to what the initiator intended. The online retreat from the Dominicans was, at the beginning, conceived as a tool to reach young people avoiding the Church but using the Internet. But in the end, they

reached, in particular, housewives between 50 and 65, who already come to the Church (Jonveaux, 2007, p. 163). In the 2014 study, 66% of participants are female, and the average age is 58. The online services from the Franciscans I studied here were created by the youth ministry seeking to reach people between 16 and 35 years old. However, more than half of the people who answered the survey were over 36, with 6.5% over 70. The audience reached is, therefore, not always the target.

### *b. Looking for a community*

People can resort to digital media in moments of their spiritual life (re) intensification because they are looking for a community. For instance, when people are living alone during a fasting week, they often look for a community in online social networks. In Facebook groups for fasting, people announce that they are beginning a fasting week and ask if someone wants to do it with them. Young Catholic men in Graz, who were fasting according to the American programme "Exodus", created a WhatsApp group to share their experiences and their difficulties. It is clearly recommended in the description of the programme that it also should include fasting from digital media "Computer for research ONLY", but the goal of the WhatsApp group was to support the individuals in their ascetic effort.

According to Turner (1969, p. 360), the community is a characteristic of social groups that are living the same kind of liminality at the same time. During the liminal experience, the community builds itself through the ascetic test.

> The attributes of liminality or liminal *personae* ("threshold people") are necessarily ambiguous since the condition and these persons elude or slip through the network of classification that normally locate states and positions in cultural space. Liminal entities are neither here or there; they are betwixt and between positions assigned and arrayed by law, custom, convention, and ceremonial.

I also observed in the survey I conducted about *Retraite dans la ville* in 2006–2007 how the forum on the website rapidly became a community in which moments of profound emotion could be expressed (Jonveaux, 2007). Participants of the forum took the initiative on themselves – independent of the authority of the Dominicans – to pray an Our Father for a whole year at 7pm in order to maintain a communion of prayer after Lent. Digital media can, therefore, procure a community for people who do not have access to an offline community.

### *c. Online religious experiences*

A last motivation to use digital media for religious life is the possibility to live spiritual experiences online. It would be naturally a reason not to

disconnect in significant moments of religious life. It deals here with what we can call online lived religion as a combination of the concepts of Meredith McGuire and Christopher Helland. According to McGuire (2008, p. 3), "lived religion" is "religion as expressed and experienced in the lives of individuals". Unfortunately, I do not have interviews with people to know how they live this "online lived religion". But I can refer to some answers from both questionnaires.

In the questionnaire about Franciscan services, I asked whether people concretely changed anything in their religious behaviour after having heard a sermon online or watching a video. The answer was positive for 56%. A 25-year-old woman explained that she found more motivation to pray; a 77-year-old woman said she could experience more joy with God. Some people also affirmed they follow religious services online, such as one 44-year-old woman from Salzburg who said: "The monstrance appears, and I worship". Adoration in the Catholic religion allows experiencing the real presence of God. In this sense, it would mean here that this woman experiences this real presence through her computer. At this point, qualitative interviews would be important to get a deeper understanding of online religious experiences.

Batibonak and Batibonak (2018, p. 99) highlighted how New-Pentecostal believers in Cameroon follow online rituals and even experience online miracles. One says for instance: "It is as if we would live the real worship" (ibid: 99). Also, in relation to Cameroon, Mouthé speaks about the emergence of a "chrétienté virtuelle" (online Christianity) of people who are practising their religion mostly online. One says he works on Sunday and does not have time to go to the Church, so he watches the Mass on the Internet. Another says he prefers to watch the religious service on the Internet because it is quieter than in the Church, and he can pray better (Mouthé, 2015, p. 15).

## 3 Case study on Catholic monasteries

Finally, I will present a case study about Catholic monasteries and their use of the Internet. Monasteries are often referred to as laboratories (Hervieu-Léger, 2014) because they enable the observation of different social phenomena. This also applies in the case of use – or non-use – of the Internet with religious purposes.

### *a. How to integrate the Internet in monastic life?*

Although Max Weber describes monasteries as "out-of-the-world" (1988, p. 259), this does not mean that there is a complete lack of contact between the monastic community and the outside world. In most Catholic monasteries all over the world, digital media usage has become a common feature. Monks often have an Internet connection, sometimes a personal smartphone

and a social media page. Monastic communities do not refuse Internet access; moreover, they create networks and develop pastoral care through this media.

We can build a typology of four kinds of attitudes towards digital media and the Internet in particular in monastic life. The first would be the total avoidance of them in order to preserve the coherent system of monastic life. This may be the case in some small and old female communities, but field inquiries show that almost all communities have access to the Internet today. Yet, individual monks and nuns seem to avoid accessing it through smartphones.

The second consists of keeping a distance to preserve monastic life. This does not mean that the Internet is totally avoided, but its use is limited to some monks or nuns who manage Internet communication for the whole community. For instance, in the monastery at Parakou in Benin, where I conducted a field inquiry in March 2019, one nun sends the emails for the others when they request it, and, apart from the abbess and the cellarer, only this sister has access to a computer. In a female Benedictine monastery in Argentina (Inquiry 2015), one nun prints the emails and delivers them to the sisters concerned or sticks them up in the common room when they concern the whole community.

The third configuration is when the use of digital media has too great a role and hence produces an alteration of monastic life. This arises, for instance, in the case of monks who are watching videos late in the night, or monks who have 5,000 friends on Facebook and who need social recognition on the online social networks (Jonveaux, 2013).

Finally, the last point of this typology is the integration of digital media into monastic life with a specific monastic use so that it does not alter the quality of religious life. In other words, the monastic discipline of asceticism is also applied to digital media usage. We will see now what that concretely means.

### *b. Monastic asceticism regarding the Internet*

The Internet in monastic life places a question mark over the idea of the monastic enclosure. It brings the possibility of having access to the whole world from the cloister and sometimes from the individual cell. At the same time, it abolishes categories of space and time and simply overrides the terms of the enclosure. Consequently, to maintain the fundamental characteristics of monastic life, monks and nuns have to find a way to protect their enclosure while they use the Internet. For this reason, almost all French monastic communities do not permit Internet access in the cells. This does not mean that monks and nuns do not have Internet access at all. Usually, these communities have an information technology room equipped with computers. This can also lead to peer control between monks regarding the surfing time duration or use of websites inappropriate for monastic life. In some French monasteries – for instance, La Pierre-qui-Vire, Tamié, Solesmes or Ligugé – the abbot cuts off the connection after the last office of the day and restores

it after the first office of the morning. This way, monks can observe the so-called "great silence of the night", as Saint Benedict expresses it in his rule. In a community of Poor Clare Sisters in France (Inquiry 2019), sisters can use the Internet ten minutes each day in an open room with two computers. In Austrian monasteries such strict discipline does not exist, and almost all monks have Internet access in their cells. However, they often say that they are not sure if that is a good idea. For example, those who do not have a separate office need the Internet in their cells, especially if it comes to school or parish work. Nevertheless, we can see a kind of personal discipline which the monks try to establish for themselves. For instance, the novice master of Kremsmünster in Austria chooses not to have a computer in his cell and aims not to go into his office after Compline. A young monk in the Cistercian Heiligenkreuz monastery also avoids using the Internet longer than 30 minutes a day. Moreover, for him, the days of meat abstinence in the community correspond with Facebook "fasting": namely, Monday, Wednesday and Friday: the traditional fasting of meat in monastic life is reinterpreted as a media fast.

The challenge is also to learn to use digital media in a monastic way. This concerns the monastic formation in particular. For instance, a Benedictine sister in Kenya explains:

> Even when you give them the phone to call the family, if there is someone that maybe takes too long, you will ask them: "What was it and whom did you call?". We try really to instil the value of using it well. (2014)

In most of the monastic communities, novices do not have a personal mobile phone, computer or Internet access during the first years of their monastic formation. When I asked the sister who is responsible for the postulants in this monastery what the most difficult thing for young women when they enter monastic life today is, she answered: to give up their cellphone.

## Conclusion

Studying the Internet and religion in relation to the practice of individuals does not only mean studying the way people are using it for their religious life but also how they are integrating it, even in the renouncements it can suppose. Oscillations between online practice and renouncement of the Internet for religious purposes show a growing "appropriation" of digital media and a greater integration in spiritual life. According to Latzko-Toth and Proulx (2015, p. 25),

> the individual appropriation of technology is a process in which the user integrates it in his daily life, adapting it to his personality and his needs. A complete appropriation supposes: a) a learning which allows him to get a minimal technic and cognitive command (skills in the use); b) the

integration of the technology in his routines and lifestyle (integration of the object in daily life, banalization); c) creative uses (innovation towards instructions for use). These criteria can be considered as conditions of realization of an ideal type in the appropriation path.[2]

The avoidance of digital media during specific religious periods attests to a greater appropriation because the actor feels free to use it or not according to their needs and spiritual values. We could therefore complete the definition of Latzko-Toth and Proulx, to say that full appropriation also supposes the capacity of voluntary renouncement.

## Notes

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2 Our translation.

## References

Batibonak, S., & Batibonak, A. (2018). "Modernité néo-pentecôtiste" au travers de pratiques virtuelles camerounaises. *Émulations*, *24*, 87–103.

Čejka, M. (2009). Making the internet Kosher: Orthodox (Haredi) Jews and their approach to the World Wide Web. *Masaryk University Journal of Law and Technology*, 1–13.

Cohen, Y. (2013). Awkward encounters: Orthodox Jewry and the Internet. In T. Ahlbäck (Ed.), *Digital religion* (pp. 42–54). Turku: Donner Institute for Research.

Douyère, D. (2015). Accompagner et susciter la prière à distance: les prières méditatives en diaporamas de l'abbaye bénédictine Sainte-Marie des Deux-Montagnes. In F. Duteil-Ogata, I. Jonveaux, L. Kuczynski, & S. Nizard (Eds.), *Le Religieux sur Internet* (pp. 217–230). Paris: AFSR, L'Harmattan.

Feiner, V. (2010). Gottesdienste per Mausklick. Perspektiven für die Feier von Liturgie im Internet. In C. Wessely & O. Alexander (Eds.), *Religion und Mediengesellschaft. Beiträge zu einem Paradoxon* (pp. 253–275). Innsbruck: Tyrolia.

Foucault, M. (1984). *Histoire de la sexualité III. Le souci de soi*. Paris: Gallimard.

Foucault, M. (1990). *The use of pleasure: Volume 2 of the history of sexuality* (R. Hurley, Trans.). New York: Vintage Books.

Fourquet-Courbet, M.-P., & Courbet, D. (2017). Anxiété, dépression et addiction liées à la communication numérique. Quand Internet, smartphone et réseaux sociaux font un malheur. *Revue Française des Sciences de l'Information et de la Communication*. Retrieved September 25, 2017, from http://rfsic.revues.org/2910

Heelas, P., & Woodhead, L. (2005). *The spiritual revolution: Why religion is giving way to spirituality?* Oxford: Blackwell.

Helland, C. (2005). Online religion as lived religion: Methodological issues in the study of religious participation on the Internet. *Online – Heidelberg Journal of Religions on the Internet*, *1.1*.

Hervieu-Léger, D. (2014). Virtuosity, "folklorisation" and cultural protest: Monasticism as a laboratory of the confrontation between Christianity and modernity. In I. Jonveaux, E. Pace, & S. Palmisano (Eds.), *Annual review of the sociology of religion:*

*Sociology and monasticism, between innovation and tradition* (pp. 21–33). Paris: Brill.

Jonveaux, I. (2007). Une retraite de carême sur Internet. *Archives de Sciences Sociales des Religions*, *139*, 157–176.

Jonveaux, I. (2013). *Dieu en ligne. Expériences et pratiques religieuses sur Internet*. Paris: Bayard.

Kellner, C., Massou, L., & Morelli, P. (2010). (Re)penser le non-usage des tic. *Questions de communication*, *18*, 7–20.

Latzko-Toth, G., & Proulx, S. (2015). Appropriation des technologies. In J. Prud' Homme, P. Doray, & F. Bouchard (Eds.), *Sciences, technologies et sociétés de A à Z* (pp. 24–26). Montréal: Presses de l'Université de Montréal.

Le Guen-Formenti, L. (2015). De la mise en scène pudique comme expression d'une morale musulmane sur Youtube. *Tic&Société*, *9*(1–2). Retrieved March 30, 2019, from https://journals.openedition.org/ticetsociete/1872

McGuire, M. B. (2008). *Lived religion: Faith and practice in everyday life*. Oxford: Oxford University Press.

Montanari, M. (1988). *Alimentazione e cultura nel Medioevo*. Rome: Quadrante Laterza.

Mouthé, G. (2015). Catholicisme et usages religieux de l'internet au Cameroun. *Tic& Société*, *9*(1–2). Retrieved March 30, 2019, from https://journals.openedition.org/ticetsociete/1872

Régamey, R. (1963). *Wiederentdeckung des Fastens*. Vienna: Verlag Herold.

Turner, V. (1969). Liminality and communitas. In V. Turner, R. Abrahams, A. Harris (Eds.), *The ritual process: Structure and anti-structure* (pp. 94–113). Chicago: Aldine Publishing.

Weber, M. (1988). *Gesammelte Aufsätze zur Religionssoziologie I*. Tübingen: Mohr Siebeck UTB.

Wyatt, S., Thomas, G., & Terranova, T. (2002). They came, they surfed, they went back to the beach: Conceptualizing use and non-use of the Internet. In S. Woolgar (Ed.), *Virtual society? Technology, cyberpole and reality* (pp. 23–40). Oxford: Oxford University Press.

# 6 Networked individuals

## The virtual reality of the sabbath in twenty-first century American Judaism

*Andrea Lieber*

### Introduction

Studies of "digital" Judaism have focused disproportionately on the experiences of Orthodox and Ultra-Orthodox communities, those religious Jewish populations whose lifestyles outwardly appear to represent the most marked contrast with modernity (e.g., Deutsch, 2009; Lieber, 2010; Campbell, 2010; Campbell & Golan, 2012; Cohen, 2012; Golan & Stadler, 2016; Blondheim & Katz, 2016). In order to understand how Internet and mobile technologies are impacting the lived experiences of Jews and Jewish communities more broadly, it is necessary to widen this scope. According to research conducted by the Pew Research Center for Religion & Public Life, only 10% of American Jews identify as Orthodox, while 90% align with progressive or non-denominational movements (Pew Research Center, 2013, 2016). How is technology shaping the religious practices of this more representative segment of the Jewish population? This chapter considers the Jewish sabbath as a locus for exploring the way Jews in religiously progressive communities in the United States negotiate tradition and technology. Employing a lens of "networked individualism" to consider the two diverging trends of "digital detoxing" alongside the incorporation of live-streaming synagogue worship services on the sabbath, I demonstrate that digital technology is a mechanism for asserting the centrality of personal choice in the non-Orthodox expression of Jewish practice.

While the negotiation of technology and sabbath practices is an area of research that illuminates our understanding of Jewish practice in particular, the insights derived from this study may be contextualized within broader themes in the study of digital religion and point to areas of future research. Digital technologies in general, and live-streaming technologies in particular, complicate such binaries as local vs. global, public vs. private, and individual vs. communal. As such, religious engagement with these media challenge the place-based structures of institutional authority that frame American Jewish life. This tension is certainly not unique to Judaism. Wider scholarship in the field of digital religion studies has long raised questions about how engagement with technology complicates the nature of membership and

community in religious institutions across a variety of traditions (Campbell, 2005, 2012, 2013, 2015; Cheong, 2012, 2018; Cheong, Huang, & Poon, 2011), and these questions are only becoming more complex as mobile devices and interactive platforms like Facebook Live become interfaces for the creation of hybrid social spaces (de Souza e Silva, 2007).

The research presented here is based on two main sources of data. To understand the diverging trends towards increased engagement and disengagement with technology on the sabbath, I analyzed readily available material in a variety of online media, such as journalistic discussions, educational websites published by religiously progressive Jewish organizations and activity on social media networks, particularly Facebook and Instagram. My discussion of user experiences related to live-streaming practices is informed by qualitative data gathered through in-depth individual interviews conducted between April and December 2019. Using Facebook social networks to solicit participation in my study, I interviewed 12 individuals, ranging in age from 25–55, who reported using live-streaming technology regularly to participate in Shabbat worship services.[1] In what follows, I cite information gathered in three of these interviews to inform my discussion of user experience in order to raise questions that will be explored further in depth in future research.

## The sabbath as virtual: two diverging trends

In 1951 Rabbi Abraham Joshua Heschel, a prominent theologian and social activist, published *The Sabbath*, a slim but highly influential volume that explored the Jewish sabbath as an ancient practice with profound relevance for the modern condition. Heschel's essay championed *shabbat*, traditionally defined as a day of rest from mundane labour, as a powerful antidote to the unique ills of technological modernity. Heschel viewed the ritual of honouring the seventh day as an art: the weekly creation of an imagined "palace in time" that could mitigate the draw of mid-century materialism, just as American Jewish communities were migrating from urban centres to suburban neighbourhoods. Heschel saw the sabbath as a day to refrain from using the "instruments that have so easily been turned into weapons of destruction . . . a day on which we stop worshipping the idols of technical civilization" (Heschel, 1996, p. 28). If the six days of the work week are concerned with material pursuits, the sabbath is an opportunity to become attuned to "holiness in time" by constructing a virtual sanctuary in which the goal is "not to have more, but to be more". Emphasizing the sabbath as a temporal framework – and Judaism as a tradition that privileges sacred time over sacred spaces – Heschel described a notion of Jewish community that is not, and perhaps had never been, reliant on physical places, making it an interesting analogue for thinking about digital community.

Although Heschel's understanding of "technical civilization" in the mid-twentieth century certainly did not include digital technologies like the

Internet, his writing is frequently referenced by twenty-first century thinkers seeking to navigate the increasingly complex role of the Internet and wireless technologies in human life (Shlain, 2019; Nevins, 2012; Heller, 2020; Reisner, 2001). Having lost much of his family to the Holocaust and writing at the start of the Cold War during the very fraught years of the nuclear arms race, Heschel had good reason to be concerned about technological progress and its potential to shape human societies for better or for worse. *The Sabbath* described shabbat as a Jewish practice with universal promise; in his utopian vision, he wrote, "the solution to mankind's most vexing problems will not be found in renouncing technical civilization, but in attaining some degree of independence of it" (Heschel, 1996, p. 28). *Shabbat* is an imagined space in which to step back and assess the true costs and benefits of technological progress. As a religious and cultural tradition that developed in the context of a transnational diaspora, Judaism's technologies of tradition and communication have evolved and transformed both in response to and as a result of changing social and historical circumstances (Boyarin & Boyarin, 2002). Indeed, Heschel's vision of sabbath observance enacts the very process Jose van Dijck has described as the "mutually constitutive" relationship between media and society, in which technologies co-evolve with the public that uses them (van Dijck, 2013, pp. 5–6).

Since the advent of electricity, communities observant of classical Jewish Law (*halakha*) have wrestled with questions about how advances in technology are governed by the principles that define labours prohibited on *shabbat* (Dundes, 2002). For traditionally observant Jews whose daily lives are shaped by *halakha*, there is little ambiguity about the prohibition against using electronic media on *shabbat*. Abstaining from the use of electronic devices on Shabbat is associated with categories of prohibited labour defined by rabbinic law and is an ancient custom that has shaped Jewish practice for centuries. In fact, abstention from media like television, radio and the Internet along with driving a car or engaging in commerce are key strategies for establishing the virtual framework of *shabbat* in that they represent key markers of the mundane world of the work week. The tensions experienced by orthodox Jews around digital media have been well studied in recent years in part because of the way *halakhic* debates raise explicit value conflicts between convenience and tradition. By contrast, for liberal forms of Judaism, such tensions are less clear cut. Very little scholarly attention has been dedicated to studying the ways this discussion is unfolding within non-orthodox and religiously progressive Jewish denominations whose lives are generally not governed by Jewish law in the same way or to the same extent, but who are nonetheless engaged in a process of negotiation between technology and tradition that shapes their Jewish experiences (Shandler, 2009; Abrams, 2015).

Despite Heschel's assertion that Judaism is a "religion of time" rather than space, earlier generations of Jewish community have been largely place-based, with physical institutions like synagogues, community centres and schools serving as primary communal anchors. By contrast, today's networked

communities are more fluid, more flexible and driven by the desire of individuals (as opposed to groups) to pursue connections based on their specific needs and interests. As Rainie and Wellman have argued, the reality of our "always on/always on us" relationship to mobile devices, the widespread accessibility of broadband Internet and the emergence of social networks as a medium for connectivity have transformed the way communities are created and maintained, both online and in physical spaces, presenting both challenges and opportunities for traditional Jewish institutions (2012).

As our homes, bodies and wallets become more deeply intertwined and interconnected with technology, digital devices are finding creative use both in and outside of synagogue communities as a means of plugging in to *shabbat* and Jewish community. At the same time, a trend towards digital minimalism, a view of Shabbat defined as a mandate to "unplug", has also emerged as a powerful means of connecting to tradition. In what follows, I explore the increased use of digital technology, such as the live-streaming of religious services on sabbaths and holidays alongside efforts to moderate the use of technology as an expression of sabbath observance, in the non-orthodox Jewish community. In exploring these diverging phenomena, I consider the complex and paradoxical strategies used among progressive Jewish communities in their efforts to navigate the relationship between ancient and modern media.

Much of the scholarship examining the intersection of technologies and Jewish practice has focused on the technologies themselves and strategies that fall under the "religious social shaping of technology", the nature of online community and communal experiences, or concerns about how technology threatens communal boundaries of highly circumscribed Orthodox groups (Campbell, 2010; Blondheim & Katz, 2016). This chapter represents a different approach, focusing specifically on user experiences and how engaging with technology (or refraining from it) facilitates a uniquely twenty-first century means of connecting to traditional religious modalities among non-Orthodox Jewish communities. Building on the theory of "networked individualism", I suggest that digital technologies are enabling new and unanticipated ways of being in Jewish community that are simultaneously traditional and innovative.

## *Trending towards digital engagement: live-streaming shabbat and user flexibility*

Motivated by the reality of dwindling attendance and by a desire to reach those unable to attend religious services due to physical limitations, many American synagogues have embraced live-streaming technology as a means of increasing accessibility and participation. For individuals who are homebound or living at a distance from their synagogue community, live-streaming creates opportunities for connection and ongoing engagement between the synagogue and the broader congregation. For Conservative congregations

for whom *halakhic* concerns are a factor in shaping synagogue policies, the mandate to exercise compassion for the home-bound takes priority over legal concerns about whether aspects of the technology are a violation of sabbath laws (Jacobs, 2018; Heller, 2020). To accommodate the demands of Jewish law, these more traditional (yet not Orthodox) congregations typically employ a single, stationary camera that functions by an automated system linked to a digital calendar. Other legal debates within the Conservative community concern the question of whether the live-streaming cameras are simply for broadcast purposes or may serve to create digital recordings for archival purposes. This creation of a "durable record" is viewed by some authorities within this movement as violating the prohibition against writing on the sabbath (Nevins, 2012). In response to the COVID-19 global pandemic, the movement's Committee on Jewish Law and Standards issued new guidelines to assist congregations in navigating the reality of having to close synagogues and cancel worship services with the need to maintain community (Heller, 2020; Dorff & Barmash, 2020). This has led to an exponential increase in the number of conservative congregations offering live-stream broadcasts of services both during the week and on Shabbat, a trend that is reflected across the denominational spectrum.

In more progressive communities, such as Reform, Reconstructionist and non-denominational congregations, Jewish law is a starting point for discussions about policy and implementation, but *halakhic* matters take a back seat to the desire for communal inclusivity. Operating without the restrictions of Jewish law, many such congregations employ multiple cameras filming from different vantage points with an eye towards greater production quality as well as attention to the viewer experience. Where *halakhic* concerns are not at issue, congregations might stream their broadcast using platforms like Facebook Live or Instagram Live, creating opportunities for interactivity during the live-stream where viewers can share public comments or ask questions using the chat function.

It is difficult to estimate just how many congregations have implemented live-streaming on Shabbat, but it is clearly part of a wider trend in the broader landscape of American religious life. Vimeo, a popular platform for live-stream services, estimates that in 2016 nearly 3,000 congregations representing a variety of religious traditions broadcast worship services across 59 countries (Duerring, 2018; Golum, 2016). The Union for Reform Judaism maintains a list of 147 congregations that currently provide live-streaming opportunities on shabbat and holidays (ReformJudaism.org), and the practice is growing among Conservative and non-denominational congregations where anecdotal evidence suggests that dozens of communities have adopted this practice (Jacobs, 2018; Merwin, 2017; Schechter, 2019). The culture of social distancing necessitated by the COVID-19 epidemic has inspired many congregations to create community online through live-streaming, and we are currently seeing an explosion of opportunities to engage in worship this way. Congregations that had been leaders in live-stream worship were well positioned to move to online worship during this crisis.

The widespread availability of and easy access to live-streamed services is drawing audiences from a wider demographic than the intended population of those with barriers to in-person participation. Web surfers curious to learn about Judaism and Jewish practices, prospective members checking out the community before they join, out-of-town family who can't make it to a *bar mitzvah* ceremony, parents who want their special needs children to have a connection to Jewish traditions (Carter, 2019) or able-bodied adults who crave community at the same time they crave the privacy and comforts of home – there are many situations where the flexibility of live-streamed worship services provides an accessible entry point to a tradition that can feel intimidating with its rich history, foreign language (traditional prayers are conducted in Hebrew) and extensive rituals. Live-streaming enables viewers to participate in Jewish community on their own terms. Although my interviewees each acknowledged that the experience of participating via live-stream is not the same as "being there", there are certain advantages of not being physically present that make streaming a compelling choice at a variety of life stages.

In a recent episode of the *Unorthodox* podcast (citation), co-host Stephanie Butnick discussed her choice to participate in synagogue services via live-stream, even though she lives in very close proximity to a wide variety of synagogue communities:

> As listeners know, I live stream . . . I toggle between Central Synagogue, and . . . then if it's too "organy" [referring to the use of an organ as instrumental accompaniment], I'll switch to Labshul with [Rabbi] Amichai Lau Lavie . . . and then when that gets too much, I go back to Central where I love [Rabbi] Angela Buchdahl . . . . It's kind of like 'choose your own adventure'. I heard like 17 Yom Kippur [fundraising] appeals, but I did give. I do give.

When challenged by her co-hosts, who describe her practice as "*Yom Kippur* and chill" (a reference to Internet slang "Netflix and chill" that can have an implied sexual connotation), Butnick defends her decision not to buy tickets and attend in person, suggesting that as a public figure in the Jewish community, she sees Yom Kippur in some respects as her "day off". She distinguished the day as holy by avoiding her phone, social media and text messaging, and just enjoying the solitude of the experience, and the freedom to see what was going on at several of the most exciting synagogue communities in Manhattan. Acknowledging that there are limitations to the kind of experience one has via live-stream, she says

> it's different when you stand in a synagogue and you are there, you are hungry and are . . . taken to this other place by just the fact of your fasting and your being among all these people . . . yes, you lose that. . . . It's like a Peloton vs. a Soul Cycle class. You're doing it on your own. It's a very different spiritual experience.

Butnick's description of her participation in live-stream services bears all the hallmarks of "networked individualism". Networked individualism is a concept coined by sociologists Lee, Rainie and Barry Wellman to describe the fundamental changes in the way people connect to social institutions as a result of the increased accessibility of networked technologies (Rainie and Wellman, 2012; Zhang & Hjorth, 2019; Wang, Zhang, & Wellman, 2018). While some social theorists have seen the proliferation of digital modes of communication as ultimately isolating and thus contributing to the breakdown of social institutions, networked individualism instead redefines communal belonging by focusing on the way technologies enable people to forge social connections to groups on their own terms in ways that meet their own needs.

Butnick clearly reveals her loose ties to multiple communities over her allegiance to a single synagogue community. This multiplicity of connections generates a kind of fragmented attention that leads her to jump from one congregation to another according to her own mood or preferences. Her experience of the holiday services is not bounded by place – she can be in several places at once, and be at home, thus collapsing the distinction between public and private experiences. The sentiments expressed by Butnick are paralleled among the experiences of individuals interviewed for the present study. Let us consider the cases of Mark, Jane and Eric.

### *Mark*

It had been a difficult week. Fighting stage-four cancer, his chemotherapy treatment left him feeling weak and defeated just as Rosh HaShanah, the Jewish New Year's festival, arrived. While his wife, children and extended family celebrated in synagogue, sitting in the traditional seats they had occupied annually for generations, Mark stayed home on the couch, getting the rest he needed. But, thanks to a recent gift to his congregation to establish live-streaming technology, Mark was able to join his family in synagogue. With the camera positioned directly on the *bimah*, or pulpit, Jack didn't miss a thing. He heard the Rabbi's sermon and saw his friends and family come forward for honours at the Torah, just as if he were sitting in his traditional seat. Because Mark belongs to a large congregation that draws upwards of 2,000 people on Rosh HaShanah, there are two services that take place simultaneously. Congregants in the building must choose between the two services, but Mark got to attend both. Because each service has its own streaming camera, Mark could toggle between the two services, getting to hear both rabbis' sermons. In a way, live-streaming enabled Mark to be more present than he would be if he were physically inside the synagogue building.

### *Jane*

It's Yom Kippur, the Jewish day of atonement – the holiest day in the Jewish calendar. Jane's husband and children had already left for synagogue,

while she stayed behind to get ready. Running late, she tuned in to the congregation's live-stream to see where they were in the service. She could hear the cantorial music while she got ready, and this put her in the mindset of the holiday, simultaneously solemn and festive. Jane found herself singing along and enjoying the experience so much that when it was time to get in the car, she pulled the live-stream up on her phone to maintain the spiritual atmosphere. During the 15-minute drive to synagogue the rabbi began to share his sermon – in many communities the most significant public teaching of the year. Arriving at the synagogue and finding a convenient parking space, Jane hesitated to turn off the live-stream, even though she had arrived at the building and was sure her family was awaiting her presence, wondering how she could be missing this climactic moment. But the live-streamed sermon was so compelling; if she took the few minutes to walk in and find a seat, she would be distracted and miss a good portion of the rabbi's words. Instead, Jane remained in the car, with the synagogue's entrance in her field of vision, to finish listening to the sermon online. When she eventually made her way inside to join family and friends, she felt like she hadn't missed a thing, even though she arrived less than an hour before the services concluded.

*Eric*

For most of his adult life, Eric has enjoyed participating in broadcast Shabbat services. In the past, he would come home from work and listen to the live radio broadcast from Temple Emmanuel in New York City. He found the choral music uplifting and found it a relaxing end to a busy week. Nowadays, he tunes into services at Central Synagogue, which are broadcast live on a local TV channel. If he wants to attend services at his local synagogue, he will tune in to the live-stream. While he does not perform any rituals while participating, he does wear a yarmulke (traditional head covering) and often sings along, especially if he is alone. Although his wife is not Jewish, she really enjoys hearing the rabbi and often watches with him.

This brief synopsis of a small sample of user experiences raises many interesting questions that invite future research. A common theme that emerges is the way synagogue live-streaming creates a hybrid experience that paradoxically enables private participation in a public ritual. In this respect, the streaming platform collapses the distinction between individual and communal experiences and breaks down physical distance in a way that allows local events to be experienced globally. It is in this regard that the theory of networked individualism is useful as a lens for interpreting this phenomenon. Networked individualism is a theory of social organization in which individual choice more than attachment to established groups drives the creation of community. As Rainie and Wellman argue, the "hallmark of networked individualism is that people function more as connected individuals and less as embedded group members. . . This means that networked

individuals can have a variety of social ties to count on but are less likely to have one sure-fire 'home' community" (2012, p. 12).

Live-stream users are attracted to an experience of Jewish community that matches the kind of autonomy facilitated by a culture of networked individualism. This is consistent with a progressive understanding of American Judaism which also privileges individual choice over commitment to traditional obligations or divine command. This vision of Judaism as a networked experience reflects the reality of the twenty-first century technologies we use to build community: "Like most computer operating systems and all mobile systems, the social network operating system is personal – the individual is at the autonomous centre just as she is reaching out from her computer" (Rainie & Wellman, 2012, p. 7). Further, the idea that "networked individuals have partial membership in multiple networks and rely less on permanent memberships in settled groups" (Rainie & Wellman, 2012, p. 7) also accords with the idea that live-stream users value the opportunity to engage with multiple congregational experiences, or that they might "multitask" by engaging in other activities as they view the live-stream. This idea also supports the concern among many Jewish clergy that the accessibility of live-stream worship will adversely impact membership in traditional synagogues.

### *Trending towards digital disengagement: the digital detox*

As live-streaming *shabbat* services has gained popularity as a means of connecting to Jewish community, it is also interesting to note a counter-trend among non-orthodox Jews towards embracing digital minimalism as form of sabbath observance. The "technology Shabbat" or "digital detox", is a movement that has grown in the past decade as an adaptation of the traditional Jewish practice. In *24/6: The Power of Unplugging One Day a Week*, Tiffany Shlain shares her vision of a lifestyle practice designed to alleviate the stresses of our 24/7 digitally connected realities. Inspired by Heschel's take on the sabbath, Shlain advocates for what she calls a "technology Shabbat", taking a break from all screens one day each week in order to be more present in the world outside our devices. Redefining the conception of work that is central to understanding sabbath rest, Shlain's vision draws on Jewish tradition but its application is not limited to Jews. Picking up on Heschel's utopianism, she writes,

> living 24/6 is a ticket to a richer life that coexists with technology in a more balanced way. The practices I suggest are for people of all backgrounds, and they don't follow the traditional rules of the Jewish sabbath, like refraining from driving or using electricity. I should mention that I'm a cultural Jew. . . I value the traditions . . . without necessarily believing in God.
>
> (Shlain, 2019)

Even as technologies evolve beyond the screen, becoming more embedded in our bodies and our homes, the message that underlies the practice of 24/6 is "the need to turn off the online world for a full day each week and enter a different kind of space and time that allows for inner reflection, longer-term thinking and more focused connection with your friends and family" (Shlain, 2019).

Shlain's recent work builds on earlier efforts to interpret Shabbat as a secularized practice of "digital detoxification". *The Sabbath Manifesto* was developed in 2010 as a "creative project designed to slow down lives in an increasingly hectic world". An initiative of the progressive Jewish think tank, Reboot, *The Sabbath Manifesto* articulated ten principles that position the sabbath as an antidote to elements of modern life: avoid technology; connect with loved ones; nurture your health; get outside; avoid commerce; light candles; drink wine; eat bread; find silence; give back. Reboot is also the architect of the "National Day of Unplugging", an effort to build community around the idea of unplugging for a 25-hour period, modelled after the temporal parameters of the Jewish sabbath.

*Thrive Global*, a web-based project of Arianna Huffington intended to combat global burnout, is host to dozens of articles by thought leaders from a variety of religious and cultural perspective, promoting the idea of a sabbath defined as a "digital detox". In the words of Rabbi Julie Schonfeld, "When observers of a sabbath set limits and boundaries on what work is or is not permitted, what tools one might or might not use, they do so from a deep conviction that beautiful things are built within boundaries" (Schonfeld, 2019). In her blog piece on this same platform, Ellen Hershkin defines the sabbath as a respite from technological connection in language that echoes Heschel's:

> Maybe what was written 3,000 years before Apple was a gleam in Steve Jobs' eye . . . was a message meant just for us: Stop and recharge your battery. Six days a week, we can interact with people on six continents, using every available means of communication. On the seventh day . . . local and real take precedence over global and virtual.
>
> (Hershkin, 2019)

In these various articulations of "digital detoxing", the entirety of the sabbath is framed by abstention from technologies that take us online. While this expression of *shabbat* observance represents an embrace of traditional practice that aligns with the tenets of orthodoxy, it is simultaneously innovative in asserting its universal appeal. While seemingly "traditional" in that the practice hearkens back to the *halachically*-driven notion of prohibited labors, the digital detox movement is intentionally separated out from the other practices that define traditional shabbat observance. The concept of a digital detox affirms nostalgia for a time when we were free of technological devices, suggesting that it is possible to truly unplug, but not in the ways

that traditionally orthodox Jews might (Rosenberg, 2019). The goal of a tech *shabbat* is to eliminate screens and distractions that pull individuals into their own experiences, in order to have a communal experience that is unmediated. In this respect, a technology *shabbat* seeks to actively resist the basic tenets of networked individualism and return to a form of community that de-centres the individual and places emphasis on the group connection. This pull towards digital disengagement was heighted in the wake of the COVID-19 pandemic. As our reliance on technology for all forms of social interaction increased, communal leaders affirmed the need for a technology Shabbat more fervently as a measure of self-care. However, the emphasis on the personal struggle for equanimity and the notion that taking a technology *shabbat* is a personal choice that is not mandated by divine command or connected to the larger body of sabbath practices is consistent with the sense of autonomy that drives the platform of networked individualism.

## Conclusion

Caroline is a young professional in her thirties, married to a Reconstructionist Rabbi and a first- time mother to a newborn. She posts on Facebook as *Rebbetzinreimagined*, playing with the title "rebbitzen" that refers to "the rabbi's wife" in more traditional orthodox communities. Reflecting on her Shabbat practice in the early weeks of her daughter's life, she shared the following:


*Figure 6.1* Caroline's family shabbat experience posted on Facebook

> *This is what Shabbat often looks like in our house since our Lila arrived in June. There hasn't been time to make challah or try out new recipes, but we have new traditions. When Friday evening comes around, we still make an effort to pause and bless our new daughter, even if we're having take-out for dinner, and even if it's over the monitor after she's gone to sleep. This feels like such a privilege, and truly a necessity in the early weeks of her life when we were in survival mode and each night I simply prayed that our baby would be awake in the morning (those newborns are so fragile and scary!). At nearly 11 weeks old, Lila feels much less fragile, and my emotions feel much more in control, but I will be forever grateful for this ritual of blessing and the peace and pause of Shabbat when I've most needed it. Shabbat Shalom!*

Caroline's post demonstrates the integration of technology as a means of enhancing her family's *shabbat* experience. She prioritizes the practice of *shabbat* as a time to pause and reflect, and the image in her post shows that technology helps to establish meaning in the moment of lighting the traditional candles on Friday evening by allowing her husband and child to be virtually present.

The theory of networked individualism argues that there has been a fundamental shift in the way people form community. When we look specifically at how people use synagogue live-stream broadcasts, we can see that the technology is facilitating a new kind of communal experience – one that is flexible, malleable and adaptable, and gives the user control over her prayer experience, or shabbat experience (Bakardijeva, 2003). At the same time, the trend towards defining shabbat as a time to unplug from digital technologies of communication is creating a non-traditional shabbat experience that seeks to moderate the realities of networked individualism's operating system. These innovations are an important expression of Jewish practice that are shaping Jewish experiences among non-Orthodox Jews, for whom the traditional mandate to refrain from using electronics is lifted or practised in a way that conforms to progressive interpretations of Jewish law.

## Note

1 It should be noted that this relatively small sample represents qualitative data gathered during the preliminary stages of my research on live-streaming practices in non-Orthodox Jewish communities. The dramatic increase in live-stream users due to the COVID-19 pandemic has significantly widened the potential pool of participants, and I continue to perform in-depth interviews, gathering data to serve as the basis for future study.

## References

Abrams, N. (2015). Appropriation and innovation Facebook, grassroots Jews and offline post-denominational Judaism. In H. Campbell (Ed.), *Digital Judaism* (pp. 40–56). London: Routledge.

Bakardjieva, M. (2003, May). Virtual togetherness: An everyday-life perspective. *Media, Culture & Society*, *25*(3), 291–313.

Blondheim, M., & Katz, E. (2016). Religion, communications, and Judaism: The case of digital Chabad. *Media, Culture & Society*, *38*(1), 89–95.

Boyarin, J., & Boyarin, D. (2002). *Powers of diaspora: Two essays on the relevance of Jewish culture*. Minneapolis, MN: University of Minnesota Press.

Campbell, H. (2005). *Exploring religious community online: We are one in the network*. New York: Peter Lang.

Campbell, H. (2010). Studying the religious shaping of new media: The case of the Kosher cell phone. In *When religion meets new media* (pp. 170–186). London: Routledge.

Campbell, H. (2012). Understanding the relationship between religion online and offline in a networked society. *Journal of the American Academy of Religion*, *80*(1), 64–93.

Campbell, H. (2013). *Digital religion: Understanding religious practice in new media worlds*. London: Routledge.

Campbell, H. (2015). *Digital Judaism: Jewish negotiations with digital media and culture*. London: Routledge.

Campbell, H., & Golan, O. (2012). Creating digital enclaves: Negotiation of the internet among bounded religious communities. *Media, Culture & Society*, *33*(5), 709–724.

Carter, L. K. (2019, August 16). Nurturing an Autistic son's spiritual life. *The New York Times*.

Cheong, P. H. (2012). Twitter of faith: Understanding social media networking and microblogging rituals as religious practices. In P. H. Cheong, P. Fischer-Nielsen, S. Gelfgren, & C. Ess (Eds.), *Digital religion, social media and culture: Perspectives, practices, futures* (pp. 191–206). New York: Peter Lang Publishing Group.

Cheong, P. H. (2018). Religion and the Internet. In B. Warf (Ed.), *The SAGE encyclopedia of the Internet* (pp. 725–729). Thousand Oaks, CA: SAGE Publications, Inc.

Cheong, P. H., Huang, S., & Poon, J. (2011, October). Religious communication and epistemic authority of leaders in wired faith organizations. *Journal of Communication, 61*(5), 938–958. doi:10.1111/j.1460-2466.2011.01579.x

Cohen, Y. (2012). *God, Jews and the media: Religion and Israel's media*. London: Routledge.

de Souza e Silva, A. (2007). From cyber to hybrid: Mobile technologies as interfaces of hybrid spaces. In D. Bell & B. M. Kennedy (Eds.), *The cybercultures reader* (2nd ed.). London: Routledge.

Deutsch, N. (2009, April 1). The forbidden fork, the cell phone Holocaust, and other Haredi encounters with technology. *Contemporary Jewry*, *29*(1), 3–19.

Dorff, E., & Barmash, P. (2020, March 12). CJLS guidelines for remote Minyanim in a time of COVID-19. *Rabbincalssembly.org*. Retrieved March 23, 2020, from www.rabbinicalassembly.org/story/cjls-guidance-remote-minyanim-time-covid-19

Duerring, L. (2018, September). High holy day streams beyond the numbers. *The Stream Spot Blog*. Retrieved from https://blog.streamspot.com/blog/high-holy-day-beyond

Dundes, A. (2002). *The shabbat elevator and other sabbath subterfuges: An unorthodox essay on circumventing custom and Jewish character*. Lanham, MD: Rowman & Littlefield.

Golan, O., & Stadler, N. (2016). Building the sacred community online: The dual use of the Internet by Chabad. *Media, Culture & Society*, *38*(1), 71–88.

Golum, C. (2016). *8 must-know statistics about live streaming for houses of worship*. Retrieved from https://livestream.com/blog/livestreaming-houses-worship-statistics

Heller, J. (2020). *Streaming services on Shabbat and Yom Tov*. New York: Rabbinical Assembly [OH 340:3.2020a].

Hershkin, E. (2019, January 10). Hitting pause: Shabbat is an idea whose time has come. *Thrive Global*.

Heschel, A. J. (1996). *The sabbath: Its meaning for modern man*. New York: Noonday Press.

Jacobs, P. (2018, February 18). *Attending synagogue without leaving home*. Retrieved from www.tabletmag.com/jewish-life-and-religion/255496/attending-synagogue-without-leaving-home

Lieber, A. (2010, July). A virtual Veibershul: Blogging and the blurring of public and private among orthodox Jewish women. *College English*, *72*(6), 621–637.

Merwin, T. (2017, August 22). To stream or not to stream, on shabbat that is. *The New York Jewish Week*. Retrieved from https://jewishweek.timesofisrael.com/stream-of-jewish-consciousness/

Nevins, D. (2012). *The use of electrical and electronic devices on shabbat*. New York: Committee on Jewish Law and Standards.

Pew Research Center. (2013). A portrait of Jewish Americans. Pew Research Center, Washington, DC. Retrieved from www.pewforum.org/2013/10/01/jewish-american-beliefs-attitudes-culture-survey/

Pew Research Center. (2016). American and Israeli Jews: Twin portraits from Pew Research Center surveys. Pew Research Center, Washington, DC. Retrieved from www.pewforum.org/essay/american-and-israeli-jews-twin-portraits-from-pew-research-center-surveys/

Rainie, L., & Wellman, B. (2012). *Networked: The new social operating system*. Cambridge: MIT Press. Retrieved from https://reformjudaism.org/attend-shabbat-services-online

Reisner, A. I. (2001). *Wired to the Kaddosh Barukh Hu: Minyan via Internet*. New York: Rabbinical Assembly [OH 55:15].

Rosenberg, H. (2019, January). The "flashpacker" and the "unplugger": Cell phone (dis)connection and the backpacking experience. *Mobile Media & Communication*, *7*(1), 111–130.

Schechter, D. (2019, August 21). *Modern day services, in person or online*. Retrieved from https://atlantajewishtimes.timesofisrael.com/modern-day-services-in-person-or-online/

Schonfeld, J. (2019, September 24). Move slow and fix things. *Thrive Global*. Retrieved from https://thriveglobal.com/stories/move-slow-and-fix-things-shabbat-well-being/

Shandler, J. (2009). *Jews, god, and videotape religion and media in America*. New York: New York University Press.

Shlain, T. (2019). *24/6: The power of unplugging one day a week*. New York: Gallery Books.

Van Dijck, J. (2013). *The culture of connectivity: A critical history of social media*. New York: Oxford University Press.

Wang, H., Zhang, R., & Wellman, B. (2018, February 6). Are older adults networked individuals? Insights from East Yorkers' network structure, relational autonomy, and digital media use. *Information, Communication & Society*, *21*(5), 681–696.

Zhang, G., & Hjorth, L. (2019, December). Live-streaming, games and politics of gender performance: The case of Nüzhubo in China. *Convergence*, *25*(5–6), 807–825.

# 7 Robots, religion and communication

## Rethinking piety, practices and pedagogy in the era of artificial intelligence

*Pauline Hope Cheong*

Vibrant developments in the landscape of digital media and communication beget a profound consideration of new opportunities and challenges for the study of the fruitful intersections between technology and religion. Throbbing within the new electronic skin of linked devices, the Internet in recent years has evolved from growing broadband and wireless access to encompass increased connectivity via an ecosystem of digital, voice-activated and remote controlled applications, assistants, sensors and actuators (Rainie & Anderson, 2017). This changing landscape of what has been called the Internet of Things (IOT) highlights growing datafication as well as the integration of sapient technology in day-to-day operations (Cheong, in press), including robotics and artificially intelligent (AI) agents (Simoens, Dragone, & Saffiotti, 2018).

To account for the expanding role of IOT and AI into significant life domains and open up new lines of inquiry in the religious ken, this chapter discusses the communicative implications of social robotics for spiritual growth and engagement. Social robots refer to autonomous and physically embodied agents that communicate with multiple modalities and relate to humans on an emotional level, and, as such, they require multidisciplinary understanding and systematic collaboration between engineers and social scientists (Campa, 2016). The focus here is on social humanoid robots with human-like body shapes that have been designed recently for religious purposes, while it is acknowledged that a range of intricate mechanisms or automata have coexisted and informed religious thinkers and congregants throughout the ages (Trovato et al., 2019). I propose that emerging robotic technologies not only function as mediators to facilitate religious practices in multiple contexts, robots also function as religious communicative agents. As examples provided in this chapter will illustrate, humanoid robots have served as mobile, multilingual and multimodal ecclesiastical messengers sometimes occupying roles formerly held by human communicators and religious leaders. As such, this discussion on AI agents in religious settings will raise new questions for our understanding of religious practices and pedagogy.

Accordingly, I will first discuss how emerging robotics challenge prevailing notions of mediated religious communication, beyond conceptualizations of new and social media that are understood primarily as platforms or mediums through which spiritual persons interact. Subsequently, I will identify and describe ways in which social robots interact in varied religious settings, in order to provide examples of new religious communication practices enabled by AI. Finally, I will conclude this chapter by proposing areas of future research to enrich the trajectory of studies in the digitalization of religion and human interaction.

## Understanding robots as religious communicative agents

New robots are often celebrated as fascinating novelties or perceived as sudden disruptive intrusions into our everyday social and natural world. Historically news coverage has hyped robotic operations as revolutionary breakthroughs or raised the spectre of human conflict, diminishment and decline, though recent narratives have also framed AI agents as collaborative and productive for humanity (Bory, 2019). But beyond viewing robots merely as mechanical implements, robots can be understood as embodied communicative agents and digital media objects embedded within intricate social and material landscapes (Berriman & Mascheroni, 2018). This recognition takes inspiration from the confluence of interdisciplinary research studies that have established how computerized agents are recognized as sociable and relational entities (Turkle, 2011). When computers interact with humans using social cues, humans can perceive and treat computers as social actors (Reeves & Nass, 1996). Consequently, ontological challenges to popularly held notions of medium and media in communication research have become germane with the growing sophistication of AI and dynamism in the construction of social robots (Gunkel, 2012; Zhao, 2006). As Peter and Kühne (2018) point out, robots "do not just function as mere transmission channels", "[r]ather social robots transcend the role of a medium because they can be both senders and receivers and acquire the status of social actors" (p. 74). Hence, in line with recent attention to the growing field of human-machine communication (and newly approved interest group in the International Communication Association as of May 2019), research focus should be attuned to "AI devices designed as communicators – machine subjects *with* which people make meaning instead of *through* which people make meaning" (Guzman & Lewis, 2019).

Accordingly, in the domain of digital religion, attention should be cast at robots not merely as automated tools; they can be designed and perceived as social and religious entities and even serve as sacred beings (Trovato et al. 2019). This view that robots can act as communicative agents extends extant understandings of new media and digitalization. It challenges prior notions of new media in studies whereby digital media have been predominantly characterized as a channel or the latest platform for spiritual interaction,

for instance in facilitating virtual rituals, cyber-churches or transnational religious exchanges. Specifically, religious robots can be conceived as communicative partners, with research attending to the "meaning-making that occurs within a communication context" (Guzman & Lewis, 2019) in which at least one of the spiritual interactants is a machine. As robots operate in diverse spiritual settings, interests in human-machine interaction is well justified given how religious elites and communities have strategically constructed and regulated the latest mediated innovations to advance moral and digital technological growth over the years (Cheong & Ess, 2012). As such, attention to the emerging field of social robotics necessitates a richer understanding of how AI agents can act as celestial interlocutors as they are constructed and employed in the religious sphere.

At this time, the digital imaginary of the work accomplished by social robots in the sphere of religion has been proposed, for instance through scenarios which have been created to illustrate the potential of hypothetical religious robots. According to Young (2019), Christian clergy work consisting of preaching and pastoral care are plausible contexts in which work by a religious leader could be replaced, systematically and eventually by AI agents and automation. For instance, he states that akin to the functions of a computer program called Debater,

> [a] machine-learning, sermon writing AI with access to a similarly extensive corpus of existing sermons, theological resources, concordances and scriptural exegeses could mine them for anecdotes, scriptural references, and theological arguments. It is not hard to imagine a system that could generate a sermon on any biblical text from any theological standpoint. (p. 492)

This descriptive account and other fertile representations of AI in the spiritual sphere raise broader queries concerning the varied ways in which robots can presently communicate in their service as religious messengers. Indeed, the roboticization of religious work with AI is already underway. The next section provides a discussion of religious communicative practices enacted by the recent emergence of a global class of humanoid robots that have been assembled to interact in the religious milieu. As illustrated in the following paragraphs, robots may not only outclass the interactive and mobile characteristics of previous digital media, they may also enact multilingual and multimodal capabilities as they move, gesture and talk in sacred and public spaces.

## Ecclesiastical messengers: robotics, religious education and seeker outreach

Although religious instruction have been mediated in multiple ways like the broadcasting of sermons by clergy and their avatars in virtual worlds

(Hutchings, 2011), and the application of chatbots to interact on spiritual topics and give answers from sacred texts (Shawar & Atwell, 2014), humanoid robots can also serve as ecclesiastical messengers as they transmit and share spiritual instruction. In addition, robots can extend spiritual instruction in various aspects as their work broadens the access and appeal of religious pedagogy.

For example, Mindar is a humanoid robot that communicates spiritual instruction and moral teachings. Mindar delivered a sermon from one of Buddhism's holiest texts, the Heart Sutra, while music was played, with English and Chinese subtitles of the sermon projected on temple walls in its debut in Spring 2019 (The Japan Times, 2019). An android deity modelled after the Bodhisattva Kannon also known as the Goddess of Mercy, Mindar was operant in the Kodaiji Temple in Kyoto, Japan from March 8 to May 6, 2019. Mindar has a primarily aluminum body exterior, and is about 195 centimetres tall, with its face and hands constructed from silicone. Mindar also has a camera installed in its left eye and can move its head, arms and torso with its see-through mechanical parts. Thus, besides verbal proclamation of scripture, Mindar can use hand gestures and eye contact to communicate with interested parties. According to Associate Professor of Intelligent Robotics at the University of Osaka who worked on the inception of Mindar, the "Kannon android can convey very complicated messages to visitors, which makes it easier for them to listen to the [Heart sutra] message" (Siripala, 2019).

Another example of a robot serving as a spiritual messenger is Xian'er the robot monk, who made its first public appearance in October 2015 at Longquan temple in Beijing, China (Whittaker, 2015). Xian means virtuous and Er means dumb but Er also functions as a term of endearment. Xian'er is a two feet tall miniature monk encased in saffron coloured robes, with a "cute" appearance comprising of a big round, shaved head, wide eyes, a slight smile and a puzzled look on his face (Lu & Robertson, 2016). Xian'er is voiced by a nine-year-old boy and this robot can explain basic tenets of faith and answer spiritual inquiries drawing upon a database of questions built from Buddhist books, and questions and answers on the blog of Longquan's temple ex-Abbot Master Xuecheng which was maintained over ten years. Xian'er is also represented online as a chatbot, which allows interactants 24/7 access to its priestly teachings and guidance for meditation (Tatlow, 2016).

By providing responses to peoples' questions via voice or a touchscreen assisted search, Xian'er serves as a messenger of spiritual content with real time and embodied engagement among temple visitors. Interactants can voice spontaneous questions to Xian'er or they can refer to an evolving list of five questions featured on a touchscreen tablet on its tummy. Xian'er can also move and gesture, as it has wheeled mobile navigation, range sensing ability and vision sensors that enable it to respond to visitors by moving in various directions, shaking its head and body and lighting its eyes. This robot also shares spiritual aphorisms before certain actions like moving forward.

It is important here to highlight how both the previously mentioned robots were designed as spiritual agents to communicate sacred scriptures in a manner that is perceived to be appealing to contemporary and digitally connected audiences. In the case of Mindar, it was the Kodaiji temple that approached Hiroshi Ishiguro, Professor of intelligent robotics at Osaka University and his team to develop an android that can preach Buddhist teachings (Omura, 2019). Temple officials have expressed their hope that Mindar will spark interest among religious seekers to think about spirituality, visit the temple and connect with Buddhism. According to Tensho Goto, the chief steward of the temple in Kyoto's Higashiyama Ward in a video interview,

> various Buddhist statues have been made but they were all just Buddhist images depicting figures standing or sitting. But this time, we wanted a Buddhist stature that can speak, make eye contact and answer questions in order to help people make a better connection. In the future, I think robots will be able to think and become more capable than we monks when it comes to giving sermons and doing various tasks.
>
> (The South China Morning Post, 2019)

Strikingly, the latter comment aptly illustrates how religious robots have been perceived as compelling and influential social actors, possibly surpassing traditional religious clergy in providing religious instruction in the future.

In the case of Xian'er, the robot was created by temple monk Master Xianfan, the head of the comic and animation centre at Longquan Temple. He was inspired by a character of a novice monk he created in a cartoon series, and fashioned Xian'er in hopes of attracting non-Buddhists to the faith and preaching the Dharma in a creative way, as an "innovative Buddhist spirit" (Sherwood, 2016). Posing as the character of a young novice monk interacting with an erudite master monk, Xian'er was used to explain intricate Buddhist concepts on its Chinese social media Weibo feed through illustrations created first in paints, calligraphy and then in clay and computer animations. The robot monk XE was eventually developed by temple staff and volunteers in partnership with AI experts in Chinese universities and a technology company (Ke, 2016).

Temple officials have stressed that Xian'er represents their effort to address spiritual problems through the application of the latest technology and various versions of the robot has been created with multiple ongoing upgrades, including the addition of English vocabulary to its Chinese repertoire (Xinhua, 2018). According to Venerable Master Xuecheng, the ex-chief abbot of Longquan temple who oversaw Xian'er's development, the robot was developed in accordance with their beliefs of humanistic Buddhism. This strand of Buddhism advocates harmony between scientific knowledge and rationality with faith beliefs to advance Buddhism wisdom for the secular world to "guide the upcoming era of artificial intelligence onto a healthy road that leads to spiritual insight" (Voice of Longquan, 2017). In this way,

Xian' Er serves as an illustrative example of how robots have been designed and treated as communicative agents to attract and inform spiritual seekers and provide religious instruction.

## Ritual agents: robotic services and rites

Besides engaging in religious pedagogy, robots can function as religious communicators as they perform tasks in religious rites that help structure social order and social cohesion (Operto, 2018). Pepper, a white humanoid robot with a chest-based tablet developed by Softbank robotics, Japan, with 10,000 models in use, has recently been programed to serve as a priest in Buddhist funerals (Martin, 2017). Pepper can move, bow and strike a meditation bowl with a mallet while performing funeral chants with sutras from four major Japanese Buddhist sects, enabling it to serve in multiple denominational services. This robot can also deliver sermons and live-stream the funeral proceedings to those who are not in physical attendance (Martin, 2017).

Here, it is pertinent to note how Pepper has been intentionally constructed as a ritual communicator and priestly agent in multiple ways. As part of the operations of Nissei Eco, the parent company with more than a decade of history in managing memorial services, Pepper was designed to fill a growing need amidst the scarcity of priests and high costs of funerals in Japan as it can be contracted to perform last rites for a fraction of cash offerings typically made to human priests (Ackerman, 2017). According to Nissei Eco's Osamu Funaki, interviewed in a video story by the Japan Times, the company had to adapt its robotic design and "change Pepper's bright voice to speak in more appropriate tones for [funeral] ceremonies" (The Japan Times, 2017).

In another example of religious human-machine communication, a robot has been created to minister blessings in Wittenburg, Germany. BlessU-2 is a humanoid robot that can communicate verbally and non-verbally with a head and movable features like a digital mouth, eyeballs, eyebrows, a nose that can light up with colours, as well as movable arms (Miller, 2017). This robot has a body of a ticket machine with a tactile screen chest for users to interact and indicate which language they would like to interact (out of multiple choices including German, English, French and Spanish) and which voice they would like to hear from the robot (male or female). After saying a warm welcome, this robot can pronounce blessings from four categories including traditional, companionship, encouragement and renewal, and recite one of ten Bible verses in each category with its arms raised, beaming lights from its palms and subtitled words on its screen. After the pronouncement, BlessU-2 offers a printout of its blessing, thanks for the visit, and says goodbye "God bless and protect you" (Sherwood, 2017).

Initially conceived as an experimental art installation by a church, BlessU-2 pronounced more than 10,000 blessings to visitors during its tenure at an

exhibition commemorating the 500th anniversary of the Protestant Reformation; the latter an event characterized by a time of social and technical change. In so doing, this robot raises timely and interesting questions concerning mediated religious communication, including the ways AI agents can be designed to automate blessings and impart invocations as part of the rites and prayers designated for ministers (Löffler, Hurtienne, & Nord, 2019). According to Stephan Krebs of the Protestant church in Hesse and Nassau, which is behind the initiative, BlessU-2 was meant to stir debate and discussion about the role of technology for the Church in an era of artificial intelligence (Sherwood, 2017). In this way, besides functioning as a religious communicator, BlessU-2 was purposed to spark further conversations in the nexus of faith and technology among religious believers and seekers.

## Future research and challenges in religious robotics and human-machine communication

In light of growing debate and concerns on AI growth, recent development of robotics designed to fulfil spiritual goals can help provide an alternative, possibly uplifting vision of global realities. Developments in non-Western contexts have historically provided an alternative vision for how robots can serve as compelling guides for a harmonious destiny (Geraci, 2008; Tamatea, 2010), as observed in Japan for example, where robots have been viewed with affection and welcomed into daily work and personal routines (Geraci, 2013). This chapter proposed that social robots can act as religious agents, communicating sacred texts and facilitating religious rites as a way of practising and experiencing faith in an era of growing datafication and artificial intelligence. Since developments in the nexus of religion and robotics is fairly nascent but swift, empirical research is lagging on religious human-machine communication (Cheong, in press; Löffler et al., 2019). Thus, this chapter will conclude by discussing future areas of research to spur additional lines of research inquiry.

First, as humanoid robots permeate every day and religious domains, their work invites an extended probe into ways in which they augment, supplement or substitute the work of clergy and other religious workers. To date, some commentators have projected an eventual replacement of Christian clergy by AI agents to conduct various tasks like preaching and pastoral care (Young, 2019) and the use of humanoid robots as caregivers to impart moral teachings and religious instruction for young children (McBride, 2017). With refinements in their language, visual and motor capabilities, social robots may present new communication possibilities that "exceed the boundaries of human communication" such that humans have to reckon with their "advanced and even perhaps unique skills" that may transcend current understandings of social interaction (Peter & Kühne, 2018, p. 74). Yet the relationships between religious authority and technological adoption are profound and are underpinned by multiple logics of disjuncture

and displacement as well as continuity and complementarity in a digital age (Cheong, 2013). While religious authority has been characterized as having a contentious relationship with the development of newer robotic technologies, authority can be redressed and constituted by new communication practices across platforms (Cheong, 2017), including plausible ways in which the programming of robots to serve as agents is strategically managed to restore relational bonds and clergy credibility. Therefore, further research is needed to clarify the ways in which AI agents are applied to fulfil religious duties and expectations, as well as lay believers' perceptions of the legitimacy of robotic agents to serve as religious personnel, particularly in conditions where customary criteria exists and barriers for admission into the clerical profession are high. Deepened inquiry would augment our understanding of the conditions and communities where bots function and are managed, in order to enlighten the implications of their work for traditional religious leaders and supplicants.

Second, a closer inspection of the perceptions and practices of robot-human communication will shed light on the evolving nature of religious identity and pious practices where AI is appropriated. Concerns over the ethical and moral implications of AI agents have been voiced (e.g., Gunkel, 2012; Taddeo & Floridi, 2018), with personal religiosity and theological considerations factored as key variables influencing the acceptance and adoption of robotic systems (e.g., Katz & Halpern, 2014; McBride, 2017). The Southern evangelical seminary and Bible college became the first seminary in the United States to purchase the humanoid robot Nao (and renamed it D.A.V.I.D.; digitally advanced virtual intelligence device) with the intention of engaging seminary students and local church groups to ethical dilemmas posed by social robots (Schulson, 2014). While theological discussion debate the suitability and uptake of AI, further empirical and interpretative research studies will help pinpoint other social and cultural factors at play in religious robot-human communication. For instance, besides faith values, beliefs and normative structures, religious followers and seekers may be enabled and constrained by digital divides, including differences in their general attitudes towards AI, as well as their digital literacies and skills with IOT and connected devices (van Deursen & Mossberger, 2018). Further investigation of user emotions and perceptions of robots in discursive exchanges and experimental settings will clarify meaning-making processes in religious interactions to help develop design guidelines for different user preferences and contexts (Löffler et al., 2019). Furthermore, it is important to consider how concerns around data privacy and security could influence the use of humanoid robots in confidential settings involving pastoral care, counselling and intercessory prayer. Although social robots have been used to provide care work to children and the elderly, ground-up investigation is needed to verify the levels of trust and costs that religious individuals and communities are willing to invest in housing and refining AI systems, in the short and long term. Longitudinal observations of peoples' interaction with robotics will

shed light on user acceptance and adaptation over time, including changes in interaction and retention patterns to domesticity (Sung, Grinter, & Christensen, 2010) in spiritual homes and houses of worship.

Third and certainly not least, future research examination should be vigilant to international innovations and cross-cultural similarities and differences in bot design and deployment in religious campuses and public spaces worldwide. According to Geraci's review of the field of robotics and religion (2013), while research in this area began in the Christian West, Japan was the only non-Christian country where AI religion has received research attention. Yet as outlined in this chapter, recent developments in religious robotics highlight how polyglot robots have functioned with multilingual and multimodal capabilities in different countries. Considering the global competition to cultivate AI technologies in recent years, timely research remains to be done to provide a comprehensive grasp of the interrelationships between spirituality and robotics, and account for the social and spiritual diversity in AI development. In light of the intriguing forays in religious robotics in different parts of the world, future research on the capabilities of social robotics to spur pious thought and action can serve to support human moral flourishing towards mutually thriving global futures.

## References

Ackerman, E. (2017, August 22). Pepper now available at funerals as a more affordable alternative to human priests. *IEEE Spectrum*. Retrieved from https://spectrum.ieee.org/automaton/robotics/humanoids/pepper-now-available-at-funerals-as-a-more-affordable-alternative-to-human-priests

Berriman, L., & Mascheroni, G. (2018). Exploring the affordances of smart toys and connected play in practice. *New Media & Society*, *21*(4), 797–814.

Bory, P. (2019). Deep new: The shifting narratives of artificial intelligence from Deep Blue to AlphaGo. *Convergence*. https://doi.org/10.1177/1354856519829679

Campa, R. (2016). The rise of social robots: A review of the recent literature. *Journal of Evolution and Technology*, *26*(1), 106–113.

Cheong, P. H. (in press). Religious datafication: Platforms, practices and power. In K. Radde-Antweiler & X. Zeiler (Eds.), *The Routledge handbook of religion and journalism*. London, UK: Routledge.

Cheong, P. H. (2013). Authority. In H. Campbell (Ed.), *Digital religion: Understanding religious practice in new media worlds* (pp. 72–87). New York, NY: Routledge.

Cheong, P. H. (2017). The vitality of new media and religion: Communicative perspectives, practices and authority in spiritual organization. *New Media & Society*, *19*(1), 25–33. doi:10.1177/1461444816649913

Cheong, P. H., & Ess, C. (2012). Religion 2.0? Relational and hybridizing pathways in religion, social media and culture. In P. H. Cheong, P. Fischer-Nielsen, S. Gelfgren, & C. Ess. (Eds.), *Digital religion, social media and culture: Perspectives, practices, futures* (pp. 1–24). New York, NY: Peter Lang.

Geraci, R. M. (2008). Apocalyptic AI: Religion and the promise of artificial intelligence. *Journal of the American Academy of Religion*, *76*(1), 138–166.

Geraci, R. M. (2013). Robotics and religion. In *Encyclopedia of sciences and religions* (pp. 2067–2072). Dordrecht: Springer.

Gunkel, D. J. (2012). *The machine question: Critical perspectives on AI, robots, and ethics*. Cambridge, MA: MIT Press.

Guzman, A. L., & Lewis, S. C. (2019). Artificial intelligence and communication: A human-machine communication research agenda. *New Media & Society*. https://doi.org/10.1177/1461444819858691

Hutchings, T. (2011). Contemporary religious community and the online church. *Information, Communication & Society*, *14*(8), 1118–1135.

The Japan Times. (2017, August 24). Pepper the robot performs Buddhist funeral rites. Retrieved from www.youtube.com/watch?v=Ce5cPawxFUs

The Japan Times. (2019). Kannon Bodhisattva robot unveiled at Kyoto temple to share Buddha's religious teachings. Retrieved from www.japantimes.co.jp/news/2019/02/23/business/tech/robotic-kannon-unveiled-kyoto-temple/#.XTJfX-hKiyI

Katz, J. E., & Halpern, D. (2014). Attitudes towards robots suitability for various jobs as affected robot appearance. *Behaviour & Information Technology*, *33*(9), 941–953.

Ke, Y. (2016). Finding robot monk Xian'er: Understanding Buddhism in Longquan animation. *Journal of Visual and Media Anthropology*, *2*(1), 7–24.

Löffler, D., Hurtienne, J., & Nord, I. (2019). Blessing robot BlessU2: A discursive design study to understand the implications of social robots in religious contexts. *International Journal of Social Robotics*, 1–18.

Lu, S., & Robertson, J. (2016, May 30). Temple's chatty robot monk dispenses Buddhist wisdom. *CNN*. Retrieved from www.cnn.com/travel/article/china-buddhism-robot-monk/index.html

Martin, A. (2017, August 16). Pepper the robot to don Buddhist robe for its new funeral services role. *The Japan Times*. Retrieved from www.japantimes.co.jp/news/2017/08/16/business/pepper-the-robot-to-don-buddhist-robe-for-its-new-funeral-services-role/#.XSkEYehKiyI

McBride, J. (2017). Robotic bodies and the Kairos of humanoid theologies. *Sophia*, 1–14.

Miller, E. (2017, October 6). Blessing robots: Is a technological reformation coming? *Religious News Service*. Retrieved from https://religionnews.com/2017/10/11/blessing-robots-is-a-technological-reformation-coming/

Omura, J. (2019, February 24). Kyoto temple enlists android Buddhist deity to help people. *The Asahi Shimbun*. Retrieved from www.asahi.com/ajw/articles/AJ201902240022.html

Operto, S. (2018). Human, not too human: Technology, rites, and identity. *Open Information Science*, *2*(1), 189–202.

Peter, J., & Kühne, R. (2018). The new frontier in communication research: Why we should study social robots. *Media and Communication*, *6*(3), 73–76.

Rainie, L., & Anderson, J. (2017). The internet of things connectivity Binge: What are the implications? *Pew Research Center*. Retrieved from www.pewinternet.org/2017/06/06/the-internet-of-things-connectivity-binge-what-are-the-implications/

Reeves, B., & Nass, C. I. (1996). *The media equation: How people treat computers, television, and new media like real people and places*. New York, NY: Cambridge University Press.

Schulson, M. (2014, September 1). What robot theology can tell us about ourselves. *Religion Dispatches*. Retrieved from http://religiondispatches.org/automata/

Shawar, A., & Atwell, E. S. (2004). An Arabic chatbot giving answers from the Qur'an. In *Proceedings of TALN04: XI Conference sur le Traitement Automatique des Langues Naturelles* (Vol. 2, pp. 197–202). Fez, Morocco: ATALA.

Sherwood, H. (2016, April 26). Robot monk to spread Buddhist wisdom to the digital generation. *The Guardian*. Retrieved from www.theguardian.com/world/2016/apr/26/robot-monk-to-spread-buddhist-wisdom-to-the-digital-generation

Sherwood, H. (2017, May 30). Robot priest unveiled in Germany to mark 500 years since reformation. *The Guardian*. Retrieved from www.theguardian.com/technology/2017/may/30/robot-priest-blessu-2-germany-reformation-exhibition

Simoens, P., Dragone, M., & Saffiotti, A. (2018). The internet of robotic things: A review of concept, added value and applications. *International Journal of Advanced Robotic Systems*, *15*(1), 1–11. doi:10.1177/1729881418759424

Siripala, T. (2019, March 5). *An ancient Japanese shrine debuts a Buddhist robot*. Retrieved from https://thediplomat.com/2019/03/an-ancient-japanese-shrine-debuts-a-buddhist-robot/

The South China Morning Post. (2019). Japanese robot provides Buddhist teachings and chants at Kyoto temple. Retrieved from www.scmp.com/video/asia/3001645/japanese-robot-provides-buddhist-teachings-and-chants-kyoto-temple

Sung, J., Grinter, R. E., & Christensen, H. I. (2010). Domestic robot ecology. *International Journal of Social Robotics*, *2*(4), 417–429.

Taddeo, M., & Floridi, L. (2018). How AI can be a force for good. *Science*, *361*(6404), 751–752.

Tamatea, L. (2010). Online Buddhist and Christian responses to artificial intelligence. *Zygon*, *45*(4), 979–1002.

Tatlow, D. K. (2016, April 27). A robot monk captivates China, mixing spirituality with artificial intelligence. *The New York Times*. Retrieved from www.nytimes.com/2016/04/28/world/asia/china-robot-monk-temple.html

Trovato, G., De Saint Chamas, L., Nishimura, M., Paredes, R., Lucho, C., Huerta-Mercado, A., & Cuellar, F. (2019). Religion and robots: Towards the synthesis of two extremes. *International Journal of Social Robotics*, 1–18. https://doi.org/10.1007/s12369-019-00553-8

Turkle, S. (2011/2017). *Alone together: Why we expect more from technology and less from each other*. New York: Basic Books.

van Deursen, A. J., & Mossberger, K. (2018). Any thing for anyone? A new digital divide in internet-of-things skills. *Policy & Internet*, *10*(2), 122–140.

Voice of Longquan. (2017). *The current state of Chinese Buddhism*. Retrieved from http://eng.longquanzs.org/xuecheng/writings/77389.htm

Whittaker, K. (2015, October 9). Longquan temple develops robo-monk to interact with visitors. *The Beijinger*. Retrieved from www.thebeijinger.com/blog/2015/10/09/longquan-temple-develops-robo-monk-interact-visitors

Xinhua. (2018, May 12). *Robot monk updated by Chinese tech firms*. Retrieved from www.china.org.cn/business/2018-05/12/content_51243619.htm

Young, W. (2019). Reverend robot: Automation and clergy. *Zygon*, *54*(2), 479–500.

Zhao, S. (2006). Humanoid social robots as a medium of communication. *New Media & Society*, *8*(3), 401–419.

# 8 Technology: the new God?

## Techno-metaphysics and homo deus: contemporary attempts towards a radical perspective on the digital change of religion

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### Introduction

What is "religion in the age of digitalization"? Is it, as both humanist and post-humanist thinkers of the twentieth century announced for the twenty-first century, the understanding that technology is in the process of becoming the new metaphysics of the hyper-technological age: an informal force of meta-human impact, *vulgo* the "new god" of globalized (post-)modern civilization? This assumption has been based on an apparently growing independence of increasingly "intelligent" technology from human decision-making – which according to the growing global technophile community could soon let technology become self-reliant, perhaps even self-sufficient. If combined with an emerging "superintelligence" which according to some contemporary scientists and thinkers could become a reality around the middle of the century, would the result be the emergence of a more or less literal "god (of) technology"? What would be its ethical implications? And what is its impact on traditional religion as we know it?

Or does the technological future of religion lie, in turn and perhaps even complementary to such expectations, in the transformation of the human being into a "Homo Deus", i.e., into a god-like entity by technological "enhancement" and "radical" human-technology convergence?

Despite their at first glance speculative and perhaps even business- and interest-driven rhetoric which sometimes crosses the lines of rational discourse, both trajectories are taken increasingly seriously by a number of scholars, opinion makers and decision-takers at the international stage. Both perspectives signal that "religion in the age of digitalization", driven by the rise of artificial intelligence and unprecedented new options of body and mind modification via technological extension, is undergoing a profound technological challenge. Anthropology-wise, this challenge could go beyond being restrained to "digital religion", i.e., to the prevailing multi-dimensional concept coined by scholars such as Heidy Campbell which holds that

> in the last several decades we have seen significant changes take place in the ways communication technology is influencing how people practice

> religion. Take for example the birth and evolution of cyber-churches, from broadcast-style web forums to virtual interactive worship environments. . . . The term "Digital religion" . . . does not simply refer to religion as it is performed and articulated online, but points to how digital media and spaces are shaping and being shaped by religious practice. . . . In other words, digital religion is religion that is constituted in new ways through digital media and cultures. [This] may lead to a new understanding of religion, one that is rooted in unique understandings and experiences of mediation of meaning via digital technology.
>
> (Campbell, 2013, pp. 1–3)

Based on such considerations, Campbell deduces that

> the term "digital religion" describes the technological and cultural space that is evoked when we talk about how online and offline religious spheres have been blended and integrated. We can think of digital religion as a bridge that connects and extends online religious practices and spaces into offline religious contexts, and vice versa.
>
> (Ibid.: 3–4)

Yet as relevant these assertions and the related research directions are: could it be that the future holds even more "daring", if not adventurous perspectives on the further "technological evolution" of religion (if religion is about evolution at all)? For example, in the direction of making the human being itself a "digitized" entity?

## *1 A turning point towards a "new human being" at the interface between techno-religion and super-humanity? Symptomatologies of a new tone in the debate about the future of religion*

In addressing these – admittedly still widely speculative and thus research-wise empirically to date poorly addressed – questions, an ideological turning point seems to be in reach within the coming years, at least if we want to believe those who propagate the idea of an increasing ability of the human being to become her- and himself a *new god* via technological enhancement. Or more precisely: through the substantial *merger* of man and technology which could (and in the view of its propagators should) become the new civilizational standard. Such a trajectory is pursued by various strands by contemporary thought which present both ideological and pre-ideological, i.e., seemingly only pragmatic, arguments. After three decades of incubation with "post-partisan", "post-left-right" or "third-way" ideologies since the start of the current phase of globalization in the 1990s, a variety of approaches multiply which see the human being and its relation to technology as a new origin of metaphysics the "post-traditional" way. Among them are particularly two lines of attack:

- On the one hand, we note the – conscious and unconscious – rise of an *ideology* that propagates a self-exceedance of humans in the direction of an anthropo-technological hybrid being.
- On the other, we observe rapidly multiplying developments in the – seemingly purely practical and pragmatic – *industrial sector* that specifically want to push such a self-exceedance of humans by asserting that they will be able to create such a hybrid within a relatively short timeframe in order to make it a global lead business.

One main contemporary merger of ideological and pragmatic aspirations towards a "new human being" or "neo-humanity" is the world view of "transhumanism" (Giesen, 2018).[1] At its core, the transhumanist ideology – promoted by some prominent opinion leaders in the world (McKie, 2018) – assumes that humans have reached a dead end in their evolution. The existent human being, in this view, thus has few other options but to transgress into a hybrid entity in which it merges its body and mind directly with technology. The direct connection of contemporary humans with technology, such as in the form of brain implants, i.e., direct interconnections of human thought with machines via (both physical and wireless) Brain-Machine Interfaces (BMI's), Brain-Computer-Interfaces (BCI's) and Brain-Brain-Interfaces (BBI's) (Benedikter, 2019), seems – for the first time in history – to allow the overcoming of the classical *conditio humana* as we know it. This would coincide with the creation of a new "superhuman" being that could become a new "human god" at the hands of anthropo-hyper-technology, so the hope goes.

Transhumanists, such as the US presidential candidate 2015–16 and 2018 California Governor candidate of the "Transhumanist Party USA", Zoltan Istvan (Benedikter, Siepmann, & Macintosh, 2015) assumes that traditional human cultures, centred around the major religions of the world, have been nothing but an overarching "culture of deathism" (Istvan, 2015). In their opinion, humans have used religion and culture as sublimations to cope with the inevitability of their death. Transhumanists hold that this era comes to an end with today's new technological possibilities. In order to use these to the fullest, in Istvan's view civilization must have a clear break from traditional religion in order to be able to radically progress beyond "deathism". This is why many libertarian transhumanists consider themselves as atheists, while at the same time claiming they are the "real", i.e., contemporary "meta-humanists" who must bring the humanistic project to its natural next level. According to Istvan, "to ensure a future of transhumanism, atheists should confront the deathist culture religion has sown" (Istvan, 2016). That is to say that with the previously-mentioned new body – and mind – "penetrative" technologies humans have the opportunity to go beyond their present condition – and perhaps even conquer death for the first time in history, if they get rid of the religious interpretation of death and the related notions of humanism and the "bio-conservative" human being we are used to so far.

Indeed, books, such as that of Israeli historian and sociologist Yuval Harari titled *Homo Deus* (2016), explain that now, for the very first time, humans have the chance to become the masters of their own lifespan and destiny. As speculative as it may sound, the advocates of this – in their view epochal – "transhumanistic turn" assume that in the near future, due to the massive increase in life-prolonging technologies and possibly even the approximation to human immortality, the basics of the human condition could change, including their fundamental relationship to the meaning of life, and thus religion. In this view, a rising *Homo deus* is the new anthropo-technological god by its own hands. She/he is the result of "body and mind digitalization" as "material metaphysics" – leading to the abolition of traditional religion and the rise of a technophile anthropo-religion of new traits, which some call techno-religion or techno-metaphysics.

According to this line of thought, any potential "transhumanist" development would mean that technology would almost necessarily take on the role of religion, because if technology would enable a much longer life or even the immortality of the physical body, technology would become the main promise of salvation and replace previous patterns of religious thinking. This could be accompanied by social pressure, for example by insurance companies, socio-economic welfare processes and world views, including mainstream ideology, that are disseminated through the media.

On the other hand, there are some (in retrospect most probably historically symptomatic) even more explicit writings from the transhumanist corner. For example from Anders Sandberg (2015), a senior researcher of the (to date) only "Future of Humanity Institute" (FHI) of Oxford University. He predicts that in the future religion, in the narrower traditional sense, will be more directly connected with technology. In his view religion, where it may increasingly turn into a scientific-empirical endeavour, will mainly be conceived as an experience of the human brain that humans not only technologically may be able to store and reproduce at will but also to induce artificially, such as by means of magnetic and electro-chemical stimulation. This would mean that if in the future humans could artificially self-induce religious experiences via brain-computer and brain-machine interfaces at their will, religion could become a part of the "experiential" entertainment and wellness economy, similar to today's businesses that induce feelings at the crossroads between psyche and body through 3D movies or holography – just not any longer from outside of the body, but from the inside.

Such a potential (perhaps just only partial) *replacement of religion by technology*, as well as the simultaneous *rise of technology towards a new religion* was predicted by many experimental thinkers in the twentieth century. For example, German philosopher Martin Heidegger, in his "spiritual testament" of 1966, published posthumously in 1976, stated that technology was becoming the "new metaphysics" of secularized European and Western modernity. In his view, in the twenty-first century a merger of the human being with technology could indeed become a kind of new "god", i.e., a

meta-human force that may progress by itself so that no one, no government and no ethics could ultimately affect or change its path. Heidegger said that only "a God" would be "still able to save us" from such a universal metaphysics of technology (Heidegger, 1976) that would take the twenty-first century in its hands, removing our previous self-understanding of humanity and thus inevitably moving beyond humans into a technological *Übermensch*, who we do not yet know will still be "human" at all. Not to speak of humanism whose demise, according to Heidegger, started already in the first half of the twentieth century with the – technologically informed – totalitarianisms of various ideological inclination.

Summing up, such predictions found loosely throughout the contemporary media sphere coincide more or less with the proactive self-definition of "transhumanism" in our days, although not always willingly, purposely and actively. Transhumanism in the strict sense can be defined as "a class of philosophies of life that seek the continuation and acceleration of the evolution of intelligent life beyond its currently human form and human limitations by means of science and technology, guided by life-promoting principles and values" (More, 1990). This is not just a "progressive" (in the politically neutral term) ideology anymore but is exactly what some representatives of today's globalized technology business seem to be endeavouring. One such example is Elon Musk,[2] the star investor and multiple company founder. In the first half of 2017, he founded the company *Neuralink*, which promotes his vision to provide as many people as possible with small electrodes to be implanted in their brains to increase process and memory capability, and, above all, to increase, in a near future, their ability to interact wirelessly via thoughts with machines and computers, perhaps in a more distant future also connecting their mental processes directly with each other and with artificial intelligence (Markoff, 2019). Given the industrial, economic-psychological and media reputation power of Musk and the noticeable investments attracted, this plan has to be considered an evolving reality, not a mere science fiction dream anymore.

## 2 *Two complementary – and perhaps converging – trajectories towards an alleged new "techno-human singularity":* cyborgization of humans *and* humanization of intelligent machines

Overall, what we note in the general contemporary picture is an approach that, still being far from mainstream, is nevertheless getting broader in advancing civilization both ideologically and commercially towards an overarching transhumanist trajectory – i.e., to an ideology which thinks it is normal to enhance one's self, and pushing for the self-transcendence of man into a new dimension that, according to its proponents, even carries the proto-spiritual traits of self-conquest, which in the history of humanity have not existed in such a form thus far. The combination of ideology and economy to reach the goal of the new techno-human god in particular is a powerful one.

It aims to replace contemporary religions through technological metaphysics and to shape a new techno-anthropological self-transcendence.

If this development points towards an emerging reality, as the international debate suggests, then we have to observe *two* dimensions in which this development is concretely moving forward. *First* is the *mechanization or industrialization of the human being*, known as *cyborgization*. This consists of merging the human body and mind with advanced "intrusive" technology, urging the public to view humans as half-machine, or as a half-technological being, and hoping that through such a procedure there will be a "new humanity" that goes beyond known existence. Complementary to this is a *second* movement: the *humanization of intelligent machines*. Multi-billion investments are being made in the field of robotics and in its merger with artificial intelligence, trying to make machines both appear and behave not only more intelligently but also more human-like. When these two strands come closer together, a powerful civilizing movement could emerge.

As a consequence, these two dimensions will be important to discuss more in detail in the years ahead, as their expected convergence may be directly relevant for the understanding of religiosity and spirituality in the future. Since the trend seems to be that religion "transfers into humans" and thus, if the transhumanist dreams become true, increasingly into human-like machines, a technological anthropologization of religion could take place. It could consist in a conception of humans where *individuals themselves become their own religion*: where instead of god personal life is conceived as the new ultimate dimension and absolute value on which most of the cognitive and performative energy of a life is invested in the perspective of "enhance and upgrade" through technology.

In brief, to start an in-depth debate about this trend an option is, for the space remaining here, to concentrate on two crucial, exemplary milestones which exemplify the overall trajectory. In so doing, the *phenomenology* must be closely observed because we already have annual, almost semi-annual milestones on the way to a future "transhuman society" – yet in many cases still without sufficient media or critical-philosophical coverage.

### *3 Two exemplary milestones – both heavily disputed*

A *first* milestone in recent years was in the direction of *human cyborgization*, i.e., towards the *human machine* or machine-human. On October 8, 2016, the first official Cyborg Olympics, or *Cybathlon*, took place – not in Silicon Valley, as one might expect, but in the Swiss Arena in Kloten, Switzerland, organized by one of the leading technical universities in the world, the ETH Zürich. It was the first such event where existing cyborgs or, in the more proper definition, machine-humans were admitted according to strict criteria. The competition took place in six disciplines, which were described by the organizers as follows:

1 *Brain-Computer Interface (BCI) Race*. In the BCI race, pilots with quadriplegia use brain-computer interfaces to control avatars in a computer game. The aim of this technology is to control devices such as wheelchairs for people with limited ability to move.
2 *Functional Electrical Stimulation (FES) Bike Race*. The FES race is for pilots with paraplegia. Functional electrical stimulation enables them to perform a pedalling movement on a recumbent bicycle.
3 *Powered Arm Prosthesis Race*. In this race, pilots using an arm prosthesis on one or both sides can compete. The prosthesis has to include the wrist and can be navigated with any kind of control.
4 *Powered Leg Prosthesis Race*. In this race, pilots using a leg prosthesis on one or both sides, including a knee joint, have to perform various movements. They can use any kind of active or passive prosthetic device.
5 *Powered Exoskeleton Race*. In this race, pilots with complete thoracic or lumbar spinal cord injury can compete using an exoskeleton. This wearable, powered support enables them to walk and master other everyday tasks.
6 *Powered Wheelchair Race*. In this race, pilots with severe walking disability using a powered wheelchair can compete. The wheelchairs feature novel technologies to overcome obstacles such as stairs or doors.[3]

The organizers of the first *Cybathlon* concede to pursue such "sporty" competition in both a humanistic and commercial way, holding that the future of the human-technology relationship will occur at the interface between medical benefits and commercial use. To this purpose, a new imaginary about the *techno-anthropos* is currently being generated, which presumably was also the main goal of the *Cybathlon*. The idea was that it should become normal for the postmodern (and to some extent perhaps already unconsciously post-human) (Thomson, 2017) public to conceive themselves as bio-machine hybrid beings.

Yet critics have questioned this line of reasoning. They point out that by publicizing the merger of man and machine through the staging of medical improvements for disabled persons, an all-inclusive promotion of technologization occurs on the back of those in need by sidelining potential negative effects and tending to economize the human body by the means of spreading a rather one-sided techno-positivism and techno-optimism. In the critics' view, the subconscious message of the *Cybathlon* was that technology (alone) solves "every" problem – which may be an exaggerated and even socially dangerous signal that needs to be debated more in order to make it democratically acceptable, including drawing ethical limits for some of the related trajectories.

The *second* trend currently in play is, as mentioned, the *humanization of machines*. This trend has received too little attention but is also of significant

importance since it is contributing (presumably at least sub-consciously) to changes in the self-perception of humans. The respective milestone in recent years was the *first official conferral of citizenship by a UN member state to a robot*. About one year after the first *Cybathlon*, on October 25, 2017, *Saudi-Arabia* awarded its official citizenship to a technical device, the allegedly AI-equipped (but in reality, probably just contextually pre-programmed) robot "Sophia", built by the private firm *Hanson Robotics* in Hong Kong (Griffin, 2017). The name "Sophia" was chosen deliberately to recall the notion of highest wisdom, which in previous times was reserved for sacred purposes to name a *human thought process* inspired by the knowledge of god. Without previous announcement, debate or agreement the mono-lateral citizenship award set a precedent for other member states due to the principle of reciprocity which prescribes, in principle, that a citizen of one member state is also recognized as a citizen by all other members states (Hart, 2018). Soon thereafter, a question emerged for the international community: Has such an award of citizenship in principle (perhaps indirectly) also conferred personal rights and/or even human rights to the machine – including the right to vote for a machine (Weaver, 2017)? And if so, what would this mean for the future of the human-technology relationship? Although these implications are still legally disputed since Saudi-Arabia did not sign the International Covenant on Civil and Political Rights,[4] they will have to be addressed (Weaver, 2017). Critics point out that robot "Sophia" after the conferral of citizenship has *de facto* more rights in Saudi-Arabia than most of its human citizens (Griffin, 2017).

This points to a basic problem inbuilt in the politics of the current techno-human interface. The problem is that milestones are launched and undertaken by non-democratic nations. While most authoritarian nations such as China and the Islamic world, including the conferring nation Saudi-Arabia itself, simply ignore questions about human rights and legal reciprocity and carry on in their uncompromising – and increasingly often unethical – effort to invest in alleged "leap technologies" to outperform the West, the "legal power" European Union is taking the legal and social challenge all too seriously in order to stick to its own standards as a society based on democracy, transparency and the rule of law, as well to its humanistic values, which in the eyes of many lawmakers and intellectuals seem to be endangered by their imminent extension to non-humans (Abbass, 2017).[5] Since the beginning of 2017 there has been a discussion with *two petitions* in the EU parliament on whether the EU should give human rights, personal rights or citizenship rights to present or future artificial intelligence robots (Benedikter, 2018) The *first* petition – led by Luxembourg EU parliamentarian Mady Delvaux – was in favour of it, because according to estimates, a substantial number of humanoid robots may be living among humans by the end of the century. According to Delvaux the issue is about liability once such intelligent machines will be able to take semi-autonomous decisions: someone has to be held accountable. In a *second* petition, led by French representative Jean-Yves

Le Daut, the opposition claimed the opposite: the conferral of a so-called e-personality to the most advanced robots (Burri, 2018) would undermine the humanist foundation of Western society and thus the very basics it was built upon, including the previous secular agreements with religion (Delcker, 2018). In a letter to the European Commission in 2018, 156 experts from 14 countries warned against adopting an eventual EU parliament proposal on so-called e-personality rights (Ibid.).

Other proponents consider both EU petitions unimportant with regard to values or religion since in their view in the future, religious feelings may be mapped through avant-garde imaging techniques through which it can be seen exactly what the brain looks like when humans "feel religious" – and thus religion may be commercialized anyway and inevitably as an "inner experience business". This field, the digitization of emotions, which exists already today, is also becoming a billion-dollar investment sector. Scientists like Rosalind Picard at the MIT and Jonathan Gratch at the University of Southern California are trying to make feelings and perceptions representable and reproducible, which in the medium and long term could lead to efforts to give human-like machines something like a religion of emotional experiences by technological means (Benedikter, 2018a). Such efforts are not undisputed and have been criticized under humanistic viewpoints (Ibid.).

In the end, *Robotess Sophia* may be just one example of the recently broadening global trend towards the *feminization of technological devices* due to alleged better acceptance (Benedikter & Gruber, 2019). Both the robot and its maker David Hanson, a professed transhumanist, complained in the past that the robot could not start a family, make art, send her children to school or be like a normal person because "Sophia" did not have a formal rights status. Now that she has attained this status through the citizenship of Saudi Arabia, the question is how the global community is to handle the new reality. To the present day, *Citizen Sophia* (Benedikter, 2018b) does not say that "she" wants to be religious. However, some transhumanists are demanding exactly this, because they think that without religion or spirituality, "one" is not human. Others more bluntly pointed to the fact that in 2017, in order to get Saudi citizenship by law one had to officially convert to Islam. That implies that the fact "she" has obtained Saudi citizenship makes Sophia a Muslim (woman), strictly speaking (Steinberg, 2017). Is it not an irony of history that the allegedly most human-like advanced "female" robot is a member of one of the most traditional Abrahamic religions which in most cases does not accept gender equality?

### *4 A third milestone towards techno-anthropological radicalization: a meta-religious and post-human global techno-manifesto – with potential long-term shockwaves*

To conclude, a third, more philosophic-theoretical milestone in the direction of the future *convergence* between the two trends of the *mechanization*

*of humans* and the *humanization of machines* was set already as early as on March 11, 2013. It was issued by the so-called *Global Future Congress 2045*, an association of influential opinion-makers, entrepreneurs, scientists and religious figures. Together they wrote an open letter to the then UN Secretary-General Ban Ki-Moon in which they outlined an – in their view – much requested revolution towards shifting the centre of gravity of humanity towards technology in basically all sectors and across civilizations, to save the human evolution project. As the letter goes,

> Mr. Secretary-General, we, scientists, public figures and business leaders from Russia, the USA, the UK, and Canada as well as participants of the Second International Global Future 2045 Congress (15–16 June 2013, New York) would like to bring your attention to a number of serious issues. The world stands on the threshold of global change. Ecological, political, anthropological, economic and other crises are intensifying. Wars are waged, resources wasted senselessly, and the planet is being polluted. Society is experiencing a crisis of goals and values, while science and technology are providing unprecedented opportunity for advancement. . . . Humanity essentially faces this choice: slide into the abyss of global degradation, or find and realize a new model of development, a model capable of changing human consciousness and giving new meaning to life. We believe that to move to a new stage of human evolution, mankind vitally needs a scientific revolution coupled with significant spiritual changes, inseparably linked, supplementing and supporting each other. The vector of future development provided by technological advancement should assist the evolution of the consciousness of humanity, the individual and society, and be the transition to neo-humanity.[6]

In order to master such a transition, the signees proposed a variety of radical measures at the human-technology interface for immediate implementation:

1 The construction of anthropomorphic avatar robots – artificial bodies.
2 The creation of telepresence robotic systems for long-distance control of avatars.
3 The development of brain – computer interfaces for direct mental control of an avatar.
  Applications:

  - rehabilitation of the disabled;
  - replacement of people working in hazardous conditions, or those tasked with cleaning up during peacekeeping missions etc.;
  - telepresence technologies for personal and business communications, as well as tourism.

  The successful further development of the previous three studies is expected to lead to further breakthroughs, including:

4 Development of life-extension technologies involving life-support systems for the human brain integrated with an artificial avatar body.
(*Note: Per the* Global Trends 2030 *forecast of the US National Intelligence Council, using replacement limb technology advances, people may choose to enhance their physical selves as they do with cosmetic surgery today*.)
Application: the significant extension of the lives of individuals whose biological bodies have exhausted their resources.
5 A study of the main principles of the functioning of the human brain, and the creation of a functional model.
6 Development of prostheses for parts of the human brain.
7 Creation of a fully artificial equivalent of the human brain.
8 A study of human consciousness and the possibilities for its future embodiment in a non-biological substrate.
Applications:

- treatment of degenerative diseases and traumas of the brain;
- exploration of regions of outer space hostile to biological human life;
- radical extension of human life to the point of immortality (Ibid.).

In conclusion, the signees envisaged a "near future" where

> the UN General Assembly will gather not to regulate military conflicts, but to recommend that heads of state and leaders of national and transnational organizations take it upon themselves to realize the [techno-anthropological] strategy for the transition to neo-humanity.
> (Ibid.)

The letter was signed by forerunners of transhumanism on an international scale, such as Dmitry Itskov, founder of the 2045 Initiative, Ray Kurzweil, Director of Engineering of one of the world's most valuable enterprises, Google, Dr. James Martin, the largest individual benefactor to the University of Oxford in its 900-year history, Dr. Theodore Berger, USC professor; Peter H. Diamandis, co-founder of Singularity University, an university dedicated to prepare students for the emergence of a first self-consciousness of machines; Dr. David Hanson, the "father" of robot "Sophia", Dr. Anders Sandberg of the Future of Humanity Institute of Oxford University and Lazar Puhalo, Archbishop (ret.) of Ottawa of the Orthodox Church in America (Ibid.). Also other religious scholars and "spiritual leaders" joined in signing, among them Dr. Robert Thurman, Professor of Indo-Tibetan Buddhist studies at Columbia University, Dr. William Bushell, MIT-affiliated religious anthropologist, Swami Vishnudevananda Giri Ji Maharaj, Russian yoga master, philosopher, futurologist and Rabbi Dr. Alan Brill, Cooperman/Ross Endowed Professor in Honour of Sister Rose Thering at Seton Hall University.

The overall message of the joint letter of such a unique assembly of techno-enthusiasts and religious-spiritual personalities was clear and simple. In their view, humanity must develop a techno-religion. This is because, in recent years, instead of making progress humans have been fighting more wars than before, are destroying the environment and traditional religions have become rather a means of terrorism than peace and seem to be more divided rather than unified. The traditional notion of god doesn't seem to help much in all this since most things go in the wrong direction. Thus humanity, in such a view, needs something that goes beyond what we have as metaphysics and belief systems so far. And this "something" is technology – and can only be technology as an allegedly meta-political and trans-value driver of development. Therefore, all nations and humanity as a whole should push all the means they dispose of into the technology field, including taking the resources they have for religion, culture and education – and moving them, in one way or another, into the technology field. This will solve the most problems, and ultimately make humanity become both moral and "immortal". So, at least, goes the dream of the signees.

## *5 Conclusion and outlook: between techno-anthropological radicalization and realism*

According to this – equally supported as criticized – letter, the *convergence* of the *mechanization of humans* and the *humanization of machines* is unavoidable and could be a step towards a *neo-human global society*, i.e., towards the "neo-humanity" that is explicitly demanded by some current trends towards "re-globalization" (Benedikter & Kofler 2020). In essence, the letter asked not only to free humans from any overarching non-technological belief system such as traditional religion but to become, in their bodies and minds, their own religion. This contains the implicit argument that the religion of the future will not be the religion that we practise today, but, rather, that technology will be the new religion, because humans will evolve to become a sort of titans by means of technology. Or, even if that did not turn out to be the case, the time for traditional religions is up anyway, because they were just a means of artificially coping with the limited world for humans who lived imperfectly. But now humans are on the way to technological self-perfection, allowing them eventually to transcend religion as we know it.

Critics have argued that the aspirations stipulated in this letter were and will remain unrealistic, since the respective technological means are still more a fantasy than a reality; and that the intention of the letter was mostly to launch a propagandistic hype by those who want to instigate investment into the sector of life-prolonging and anti-aging technologies.

Given these phenomena, what is the outlook?

It is mixed. The aspiration to create something like a "digitised religion" by various, in most cases, well-respected groups in science, research, the

economy and politics, remains as open as disputed. It includes emerging non-Western governments which do not avail of self-critical traditions in their histories of ideas to appropriately deal with the pluri-fold ethical implications currently opening up at the human-machine intersection. Similarly, up to the present day, the full anthropological implications of the term "digitalized religion" remain ambiguous and all too "flexible" to be properly judged, as it includes too many options for too many purposes and interests to denote a rationally debatable consensual trajectory. Thus, if we ask the question: "What is religion in the age of digitalization?" under techno-anthropological viewpoints, a clear answer is impossible for the time being. For now, it seems to be more important to clarify the increasingly "transhumanist" background of the term, the involved interests and the often contradictory aspirations in play both at the geopolitical and power politics levels.

The endeavour of making the human-technology-merger "a", or even "the" "new human god" has attracted diverse groups who pursue very different, sometimes opposed and often not fully transparent goals and interests. In September 2019, *The New Yorker* wrote about "the dark side of techno-utopianism". It rightly stated that "big technological shifts have always empowered reformers. They have also empowered bigots, hucksters, and propagandists" (Marantz, 2019).[7] This may also be accurate for the current "techno-religious revolution", if there is such a thing, propagated by opinion-makers and business representatives who want to evolve the human body and mind to become the "business of life(s)" by elevating both body and mind to "god-like" status through their enhancement by advanced "penetrative" technology – and of course by *selling* this promise quite efficiently.

Presently, nobody knows to what extent the ideas towards an upcoming "digitalized religion" will hold true. It is unclear in which direction it will go or what particular segments will flourish. Sure is that we have to find a balance between radicalization and realism for the human-technology interface. The outcome of the allegedly "titanic", but most often "all too human" transhumanist endeavour of our time remains open. Which of the groups in play will gain the upper hand? In what timeframe? Who will join next? These questions remain unanswered (for further reading about potential trajectories cf. Benedikter 2018/2018a/2018b/2019 and Benedikter and Siepmann 2015). Some "transhumanist" trends connected with the concept "religion in the age of digitalization" may indeed be rather wishful thinking than imminent reality – as other trajectories at the current interface between religion, spirituality and technology (Benedikter, 2011).

## Notes

1 Cf. Porter (2017).
2 Tesla Corporation: Elon Musk, www.tesla.com/elon-musk.
3 ETH Zürich: Cybathlon 2016: Races and Disciplines, https://cybathlon.ethz.ch/races-and-disciplines.html.

4 United Nations Office of the High Commissioner on Human Rights: International Covenant on Civil and Political Rights (1966), March 23, 1976. www.ohchr.org/EN/ProfessionalInterest/Pages/CCPR.aspx.
5 Cf. Benedikter (2018b).
6 Global Future 2045 Congress GF2045 / Strategic Social Initiative 2045: Open letter to UN Secretary-General Ban Ki-moon, March 11, 2013. http://2045.com/articles/31277.html.
7 Cf. Benedikter, Giordano & Fitzgerald (2010).

## References

Abbass, H. (2017). Three concerns about granting citizenship to robot Sophia. *Robohub* (November 2). Retrieved from https://robohub.org/three-concerns-about-granting-citizenship-to-robot-sophia/

Benedikter, R., & Giordano, J., & Fitzgerald, K. (2010). The Future of the (Self-) Image of the Human Being in the Age of Transhumanism, Neurotechnology and Global Transition. *Futures. The Journal for Policy, Planning and Futures Studies*, 42(10), 1102–1109.

Benedikter, R. (2011). Return of the "perennial philosophy" in the 21st century: Fact or wishful thinking? *Journal for the Study of Spirituality (JSS): The Journal of the British Association for the Study of Spirituality*, *1*(1), 129–133.

Benedikter, R. (2018). Robot rights: A gradual way forward. *Cato Unbound: The Online Journal of the Cato Institute Washington D.C.* (April 20). Retrieved from www.cato-unbound.org/node/2347

Benedikter, R. (2018a). Digitalisierung der Gefühle? *Telepolis. Zeitschrift für Neue Medien, Netzkultur und Politik/Journal of Media, Technology, Art and Society* (April 2). Retrieved from www.heise.de/tp/features/Digitalisierung-der-Gefuehle-4000478.html

Benedikter, R. (2018b). Citizen robot: Rights in a post-human world. *Cato Unbound: The Online Journal of the Cato Institute Washington D.C.* (April 9). Retrieved from www.cato-unbound.org/node/2342

Benedikter, R. (2019). Künstliche Intelligenz und Neurowissenschaften. Futuristische Entwicklungen: Brain-Brain-Interfaces. Berlin: Konrad Adenauer Stiftung Reihe: Analysen und Argumente: Digitale Gesellschaft, Nr. 378 / Dezember 2019, St. Augustin und Berlin 2019. Retrieved from www.kas.de/web/auslandsinformationen/analysen-und-argumente/detail/-/content/kuenstliche-intelligenz-und-neurowissenschaften and www.kas.de/documents/252038/4521287/K%C3%BCnstliche+Intelligenz+und+Neurowissenschaften.pdf/63fcf974-2757-565f-dd48-8273fcced23c?version=1.0&t=1575898258780

Benedikter, R., & Gruber, M. (2019). The technological retro-revolution of gender: In a rising post-human and post-Western world, it is time to rediscuss the politics of the female body. In *Feminist Philosophy of Technology* (pp. 187–205). Stuttgart: JB Metzler.

Benedikter, R., & Kofler, I. (Eds.). (2020). Re-globalization: Topical series. *Global-e*. Retrieved from www.21global.ucsb.edu/global-e/global-e-series/re-globalization

Benedikter, R., Siepmann, K., & Macintosh, A. (2015). Zoltan Istvan's "teleological egocentric functionalism": A libertarian philosophical basis for "transhumanist" politics: A viable approach towards a sustainable political agenda? In D. W. Wood & A. J. Karran (Eds.), *Envisioning politics 2.0: How AIs, cyborgs, and transhumanism*

*can enhance democracy and improve society* (pp. 16–36). Hartfort, CT: Institute for Ethics and Emerging Technologies (IEET) and Trinity College Hartfort. Retrieved from http://transpolitica.org/publications/envisioning-politics-2-0/

Burri, T. (2018). The EU is right to refuse legal personality for Artificial Intelligence. *Euractiv* (May 31). Retrieved from www.euractiv.com/section/digital/opinion/the-eu-is-right-to-refuse-legal-personality-for-artificial-intelligence/

Campbell, H. A. (2013). Introduction: The rise of the study of digital religion. In H. A. Campbell (Ed.), *Digital religion: Understanding religious practice in new media worlds* (pp. 1–21). London, UK: Routledge.

Delcker, J. (2018). Europe divided over robot "personhood". *Politico* (April 13). Retrieved from www.politico.eu/article/europe-divided-over-robot-ai-artificial-intelligence-personhood/

Giesen, K. G. (2018). Transhumanism as the dominant ideology of the fourth industrial revolution. *Journal International de Bioethique et d'Ethique de Sciences*, *29*(3), 189–203. doi:10.3917/jibes.293.0189. Retrieved from www.ncbi.nlm.nih.gov/pubmed/30767456

Griffin, A. (2017, October 26). Saudi Arabia grants citizenship to a robot for the first time ever. *The Independent*. Retrieved from www.independent.co.uk/life-style/gadgets-and-tech/news/saudi-arabia-robot-sophia-citizenship-android-riyadh-citizen-passport-future-a8021601.html

Harari, Y. N. (2016). *Homo Deus: A brief history of tomorrow*. London, UK: Harvill Secker Publishers.

Hart, R. D. (2018, February 14). Saudi Arabia's robot citizen is eroding human rights. *Quartz*. Retrieved from https://qz.com/1205017/saudi-arabias-robot-citizen-is-eroding-human-rights/

Heidegger, M. (1976, May 31). "Only a god can still save us". Interview with Rudolf Augstein, September 23, 1966. *Der Spiegel*. English transcript a.o. in. Retrieved from https://lacan.com/heidespie.html

Istvan, Z. (2015, May 26). Can transhumanism overcome a widespread deathist culture? *Huffington Post*. Retrieved from www.huffpost.com/entry/can-trans humanism-overcom_b_7433108

Istvan, Z. (2016, February 24). To ensure a future of transhumanism, atheists should confront the deathist culture religion has sown. *Huffington Post*. Retrieved from www.huffpost.com/entry/should-atheists-confront-_b_9303396?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAANnrvoqDmse874pISUqycOp86abQXKO8lvh4UsTGitjIN62x4JcH2g4uHrq5vmzNM6r6vX5kK0yOOr9H5smVwQtljhgtWWnD_qmibtNvYdELxDR0a5t34rPVjagJKrih5UB7H_O_whhoW-BvF9n5r8bpL1y2QUsKm6NY22HbxUWZ

Marantz, A. (2019, September 23). The dark side of techno-Utopianism. *The New Yorker*. Retrieved from www.newyorker.com/magazine/2019/09/30/the-dark-side-of-techno-utopianism

Markoff, J. (2019, July 16). Elon Musk's Neuralink wants "sewing machine-like" robots to wire brains to the Internet. *The New York Times*. Retrieved from www.nytimes.com/2019/07/16/technology/neuralink-elon-musk.html

McKie, R. (2018, May 6). No death and an enhanced life: Is the future transhuman? *The Guardian*. Retrieved from www.theguardian.com/technology/2018/may/06/no-death-and-an-enhanced-life-is-the-future-transhuman

More, M. (1990). Transhumanism: Towards a futurist philosophy. *Extropy*, *6*(6), 11. Retrieved from http://fennetic.net/irc/extropy/ext6.pdf

Porter, A. (2017). Bioethics and transhumanism. *Journal of Medicine and Philosophy*, *42*(3), 237–260. doi:10.1093/jmp/jhx001. Retrieved from www.ncbi.nlm.nih.gov/pubmed/28499043

Sandberg, A. (2015). Transhumanism and the meaning of life. In C. Mercer & T. Trothen (Eds.), *Religion and transhumanism: The unknown future of human enhancement*. Westport, CT: Praeger Publishers.

Steinberg, A. (2017, November 13). Can a robot join the faith? *The New Yorker*. Retrieved from www.newyorker.com/tech/annals-of-technology/can-a-robot-join-the-faith

Thomson, D. (2017, February 20). The post-human world. *The Atlantic*. Retrieved from www.theatlantic.com/business/archive/2017/02/the-post-human-world/517206/

Weaver, J. F. (2017, November 6). What exactly does it mean to give a robot citizenship? It's complicated. *Slate*. Retrieved from https://slate.com/technology/2017/11/what-rights-does-a-robot-get-with-citizenship.html

# 9 Religion and digitalization

## A discussion between *Ivo Muser* and *Harald Pechlaner*

PARTICIPANTS: Ivo Muser, Bishop Diocese Bolzano/Bozen-Bressanone/Brixen and Harald Pechlaner, Head of the Center for Advanced Studies at Eurac Research, Italy.

Soon after Roland Benedikter's presentation "Technology: The New God?" at the international conference "Digital Religion", held at Eurac Research in 2018, a discussion between Ivo Muser, Harald Walach and Harald Pechlaner took place. While Benedikter's and Walach's positions have been published as independent papers within this volume, the editors included here some excerpts of the conversation with the Bishop, which help shedding some light on possible moral and theological ramifications for traditional religions in relation to the newest technological developments and the transhumanism discourse.

PECHLANER: In the wake of Roland Benedikter's words on transhumanism and religion, we cannot deny we have very interesting developments heading towards us. The church is becoming a global reflection surface for networked societies. The thought of 'using technology to build one church' constitutes an amalgam of different religious and church connections. How would you assess the current situation and how important is the idea of experience that Harald Walach brings into play [*Editor's Note: please refer to the chapter "Experience and information. Thoughts on spirituality in a time of information flooding", included in this volume*]. Will the digitalization and the internet be able to provide the kind of experience needed to experience spirituality?

MUSER: First of all, I simply have to get rid of what Professor Benedikter has triggered in me: I listened very carefully, and everything I heard stirred up a rebellion inside of me. It is true, this is the end of religion. I asked myself why everything in me was rebelling. It could simply be because it means I am losing power. Religion, and I am a representative of a religion, is losing power. It seems to have become obsolete. However, I think the real reason why something rebelled in me is that it is about people. What happens along the way to what is dear and indispensable for me: dignity, freedom, responsibility, transcendence, but also the possibility of shaping the world? Of course, it addresses the question that

keeps all religions alive: the question of death. But my inner rebellion also stems from the fact that, for the sake of humankind, I do not want this immortality, in no way. I ask myself: How is it with this human robot, with the capacity to think, to feel, with everything that distinguishes us as human beings? What about the question of suffering or illness? It is true, and this will remain, as I believe, a central question for religions as long as they continue to exist: Have you really made this world a better place? This forces us all to adopt the same attitude of reflection and self-criticism. No, for the sake of mankind I do not want this overcoming of death. But, of course, such a conception relies on an attitude that is fundamental for religion. I honestly admit that the ability and the need of humans to connect is crucial for the emergence of religions. I also admit that fear plays a role here, ultimately the fear of death, from which none of us can escape, at least for now. But religion reckons with a counterpart, in Christian terms, a personal counterpart, this is fundamental. Back to the topic of experience: Religion has, and I am speaking of course primarily as a Christian, something to do with a formative historical experience which people engage with, move towards, place their hope in – in other words, with which they try to live and also die. And hardly has it ever become clear to me, as in these highly interesting yet disturbing remarks, I never would have thought that I could formulate it like this: I want to die, I do not want to live at this price. How does Sophia live, whom does she love? No, for humanity's sake, I would almost say for selfish reasons, not this way!

PECHLANER: You spoke of power, Heidi Campbell of "authority". What can a church do and accomplish in order to maintain this authority, or to restore it against the background of forces that want to overcome death – that, so to speak, elevate self-exaltation, as Roland Benedikter called it, the immortality one strives for, to the highest goal?

MUSER: The issue of power and authority in the Church is a very sensitive one. We must be honest when looking into the history of the Church; there has been abuse of power, and perhaps one of its worst forms: the abuse of spiritual power. It is connected once again with the question of fear, with very existential questions. Ultimately, in the language of the religions, it is all about being or not being, about the salvation of man. And the real tension, I would say, of dealing with power in the Church, but perhaps also in all other religions, is that yes, it also requires some spiritual power and authority, in order for man not to be left at the mercy of man. I would almost say that the Church needs power, understood correctly. It needs authority, in order to be able to stand up for what is indispensable for being human.

It is also important to address the partings of minds. This is something I perceive strongly today in the digital world: We are made to believe that everything is equally right, equally important, equally helpful and equally good – which is not true. This is a crucial debate that

must take place within and between religions: the struggle for the image of God. We must admit that there are also false images of God, that there are also images of God that humiliate people. In the name of God, people have legitimised, and still try to legitimise, everything, including their own claims to power.

PECHLANER: Your colleague, the newly appointed colleague in Hildesheim, Heiner Wilmer, said in an Interview with "Die Zeit": "Many people think that because we have moved so close together in the digital world, we no longer need to get to know each other, but quick contact cannot substitute the road one needs to walk in order to get there". I believe that many conflicts, including those related to integration, arise today because we don't take the time to get to know each other. We are talking about digital detox, about holidays from our smartphones: Does the Church have to proclaim offline as a new luxury?

MUSER: I have another rebellion, which I often feel. When friendship is offered to you over the Internet, I always ask myself, how is such a thing possible? How can such an intimate term become so trivial? You are one of my friends now. How is that possible? Part of being a friend is that I look him into his eyes, that I see how he reacts, how he laughs, how he cries, how he gets angry, how he shows empathy, how he hugs me, how he forgives me. And there is no real friendship without forgiveness.

I think it's terrible what is going on in the Internet. No face and no name. For me, this is the death of humanity, but also the death of democracy. We all profess freedom of opinion, public and personal, but with face and name, and I don't have the impression here that serious efforts are being made. Here, in the truest sense of the word, borders are constantly being crossed, borders which our humanity would simply prevent us from overstepping in the final analysis, or at least a large proportion of the people. We all know it, we humans can unfortunately also degenerate into beasts. An experience that we have alas perhaps all experienced directly when visiting a concentration camp. It boils down to this question, what is happening here, what dams have broken here, that people could behave this way towards their own kind. But in the Internet, that is my limited perception, we are well on the way to achieving this. This is the death of humanity and the death of democracy. And here I would repeat that this is also an important task for religions, but I would not only say of the religions, but of reasonable people, all those who work to ensure that we remain a human society. Here we would need an outspoken solidarity. I would say between democrats, between humanists, between people for whom a religious confession is sacred, and here I am again talking in my view of fundamental concepts, or not just concepts but attitudes, dimensions of dignity, of responsibility and of freedom. And I would also say here that this dimension, anyone who treats people in this way, as will also be found in every religion, will have to take responsibility for it some day.

PECHLANER: Romano Guardini, "The End of the Modern World". If I understand that correctly, then he also says the end of the modern world is imminent, because people no longer believe in technology. They have doubts. Because they no longer believe. The absolute belief in everything that has to do with infinite development, so to speak, is the origin of our doubts, socially speaking. He talks about cultural pessimism and says: "as always happens in times of upheaval, the deep layers of the human psyche are aroused, the primal instincts awaken more powerfully, fear, violence, the will to possess, the rebellion against order. Words and deeds take on something elementary, unsettling, etc." Ivonne Hofstetter wrote a very provocative book, "Artificial Intelligence – The End of Democracy". You also rightly said earlier that anonymity is the biggest problem for humanity and also for democracy. Could it be that digitalization could mean the end of churches as we know them today?

MUSER: Much of what we presently perceive of the Church can change, may change, perhaps even must change. It is not that which frightens me. I am firmly convinced, especially after these remarks that religion has a future, I am convinced that this program cannot abolish religion. And that it is part of the essence of religion and, of course, of the Church, and so I am talking primarily about the Catholic Church, change can take place, indeed sometimes something has to change in order to preserve the substance, etc. There is no doubt about that, but the big questions remain, and the big issues are not called into question by this development – that is my conviction. I encounter many forms of "wellness religions". That a lot of people approach religion, spirituality with the question: What is in it for me? What does it give me? What do I get out of it? There is one essential question we must not forget: I have responsibility for others. Using biblical language, I would say that this is like a golden thread. I have responsibility for the poor, for the weak, for the strangers within my own city walls, for the widows – these are the biblical categories that we must expand to no end. And that is an essential dimension of religion, that it does not limit itself to being a "wellness religion" – I use this term provocatively – but religion always also has to have a social mission. And I say this with great conviction, in no religion – is the relationship between God and man as intense and indissoluble as in Christianity. God in man and man in God. That is Christianity. And I am firmly convinced, even after this tremendously shattering presentation, that this is a real alternative and I consider this alternative to be unrivalled.

PECHLANER: This has been taken up and religion has been defined in a broader context, as a social task and responsibility for others, as an essential element and therefore, if we see it from a purely technical point of view, we will fail at the so called "connectivity". We need a substructure, spirituality, values, with all its aspects, but we need "something", because otherwise we will fail.

# 10 Is transhumanism a religion?

*Boris Rähme*

Transhumanism has been variously described as a "movement" (Bostrom, 2005a, p. 3), an "idea" (Fukuyama, 2004, p. 42), an "ideology" and a "belief system" (Hopkins, 2005, p. 26), a "stance" (Ranisch & Sorgner, 2014, p. 7), a "fin de siècle fad" (Winner, 2005, p. 410), a "religion" (Smith, 2018, p. 17), a "secularist faith" (Tirosh-Samuelson, 2012, p. 710) and a "new religious movement" (Geraci, 2010, p. 13; Tirosh-Samuelson, 2014, p. 59).

Whatever one's preferred epithet, transhumanism has become an influential voice in debates over the possible futures of humanity. Due to its close association with technoscientific research and innovation in, for instance, artificial intelligence, robotics, neuroscience, nanotechnology, biomedicine and human-machine interfaces, transhumanism is often regarded as an inherently naturalistic, non- (or even anti-) religious paradigm. The ideas of human enhancement and human-machine convergence, which play centre stage in transhumanism, would seem to draw exclusively upon human ingenuity, creativity and engineering capabilities, thus leaving no space for any kind of strict (supernatural) transcendence – that is, for any kind of transcendence that could not in principle be achieved by (collective) human intelligence and technological capacities alone (Blackford, 2013, p. 421). At the same time, however, scholars of religion point out that transhumanist discourses and narratives often use vocabularies and imageries that have their historical roots in religious traditions (e.g., Geraci, 2010), and some have taken this observation to constitute evidence for the claim that transhumanism is a (new) religion (e.g., Tirosh-Samuelson, 2012).

This chapter reviews some elements of the controversial debate over whether transhumanism should be considered a religion. It addresses the question of whether the fact that transhumanist narratives use expressions and appeal to ideas which have their roots in various religious and/or spiritual traditions can lend argumentative support to the claim that transhumanism – the self-understanding of many of its supporters as non-religious or religiously indifferent notwithstanding (Hughes, 2008) – actually *is* some kind of religion.

In Section 1 I set out the central tenets of transhumanism and briefly discuss the relation between trans- and posthumanism. Section 2 distinguishes

three possible *motivations* for calling transhumanism a religion: a polemic, a descriptive and a theoretical one. Moreover, substantive and functional definitions of religion are taken into consideration with the aim of providing a sketch of what it might *mean* to say that transhumanism is a religion. Section 3 discusses Hava Tirosh-Samuelson's line of argument to the conclusion that transhumanism is a secularist (but still religious) faith and a new religious movement. I focus on Tirosh-Samuelson's work because it presents, to my knowledge, the most articulate and sustained attempt at establishing an intrinsic and inevitable religiosity of transhumanism (Tirosh-Samuelson, 2012, 2014, 2017). Section 4 draws some conclusions, contextualizing the preceding discussion within the broader debate on secularization and taking a critical look at a series of theoretical constructs that have been used in the sociology of religion to critique the classical secularization thesis.

## 1 A spectrum of transhumanisms

There is neither a generally accepted definition nor a canonical formulation of transhumanism. Moreover, several variants of transhumanism have by now been developed which differ in significant ways from one another (Ferrando, 2013, 2019). Nevertheless, there are core tenets accepted by all who plausibly characterize themselves as transhumanists.[1]

Let me begin with Russell Blackford's (2011, p. 176) useful, but ultimately too broad, characterization of the "essential idea of Transhumanism": "within certain limits that require investigation, it is desirable to use emerging technologies to enhance human physical and cognitive capacities, and to make other beneficial alterations to human traits". Blackford's proposed characterization is too broad because it reduces transhumanism to a qualified endorsement of human enhancement.[2] Arguably, one cannot be a transhumanist without endorsing the idea of human enhancement. But one can certainly commit to the claim that human enhancement is desirable under certain conditions and within certain limits without embedding this commitment in a transhumanist conceptual framework.

What must at least be added to arrive at what I will call a *moderate* transhumanist position is a long-term perspective concerning the goals of technology-driven human enhancement.[3] Transhumanists often frame this long-term perspective in terms of human agency in evolution: evolution can (and should) today be approached as a human project (see, e.g., Sorgner, Javanovic, & Grimm, 2013; Bostrom, 2005a, p. 4); human-made evolution is (or will be) facilitated by scientific progress and innovations in the converging fields of nano-, bio-, information-technologies and cognitive neuroscience (NBIC); a systematic effort should be made to stretch (or even overcome) the biological limitations of human existence through enhancement technologies. Moderate transhumanism appeals to the state of the art in contemporary science and technology. While claiming that extant NBIC technologies already have the potential of transforming human life forms in

substantial and desirable ways at the physiological *cum* cognitive level, for moderate transhumanists the envisaged outcome of the transition alluded to by the prefix 'trans' in 'transhumanism' may very well be another recognisably human life form.

From this outline of a moderate transhumanist position we get to a full-fledged transhumanism if we add an interpretation of the idea of human-made evolution in terms of the goal of reaching a *post*human condition: "Transhumanists hope that by responsible use of science, technology, and other rational means we shall eventually manage to become posthuman, beings with vastly greater capacities than present human beings have" (Bostrom, 2005a, p. 4). It is in fleshing out transhumanist ideas of the *post-human* that such notorious ideas as radical life extension up to biological or digital immortality, and science fiction *topoi* such as mind uploading, strong and general artificial superintelligence or the technological singularity enter the stage. This leads to profuse forms of transhumanism which have a very slim basis in extant science and technology and sometimes even hazard (*a fortiori* non-scientific) predictions as to when the transition from humanity to posthumanity is to be expected.

At this point, a brief note on the conceptual relationships between transhumanism and posthumanism is in order. While there are overlaps and intersections between the two currents of thought, there are also significant differences which call for a solid distinction. In the present context, the most important difference regards trans- and posthumanism's respective interpretations of the idea of the posthuman. As Ranisch and Sorgner (2014, pp. 8–9) usefully put it, both

> approaches consider the question of human coevolution with technology, and both . . . sometimes employ the motif of the 'posthuman'. However, in posthumanism the concept serves as a label for a new narrative, which may replace that of 'the human', rather than one for a radically enhanced human being. Transhumanism, on the other hand, is characterized by a straightforward affirmation of technological augmentations and visions of an enhanced posthumanity.

One way to understand the relation between full-fledged transhumanism and posthumanism is to think of the former in terms of a particular interpretation of the idea of the posthuman, one that focuses exclusively on technology and its possible impacts on the evolution of the human species. As opposed to this, posthumanism – in its critical, cultural and philosophical forms – grows out of a deconstructionist critique of anthropocentrism and various traditional dualisms, such as body-mind, human-nonhuman, nature-culture, male-female, etc. For posthumanists, then, the posthuman is entangled with but not exhausted by technology. Transhumanism, from this vantage point, "runs the risk of techno-reductionism" (Ferrando, 2013, p. 28; see also Ferrando, 2019, p. 39).

A survey of different variants of transhumanism is beyond the scope of this chapter. For what follows, it is enough to note that transhumanism comes in a spectrum and that this fact will render generic and sweeping statements about transhumanism – whatever initial plausibility they may possess – problematic as soon as one tries to spell them out in any useful detail. At one end of the spectrum we find what I have called moderate transhumanist positions, which combine a positive assessment of the potentials of extant human enhancement technologies with endorsement of further relevant techno-scientific innovation and a long-term perspective of human-made evolution. At the opposite end of the spectrum we find what I have called profuse transhumanism, characterized by speculations about hypothetical technologies and their hypothetical impacts on hypothetical individuals and societies.

## 2 Calling transhumanism a religion

When an author claims that some world view, practice, outlook, theory or combination thereof – let me use '*x*' as a placeholder here – is a religion, her intention may be a critical, polemic or even pejorative one. 'Unreasonable', 'naïve', 'irrational', 'credulous', 'dogmatic' and 'unjustified' are some of the adjectives that capture the intended connotations in this case. At other times, the claim that *x* is a religion may also be devoid of evaluative intentions. It may be meant as a purely descriptive or factual statement. Brought forward in this sense, '*x* is a religion' amounts to saying that *x* satisfies the necessary and jointly sufficient conditions for being a religion – or an adequate number of conditions which, in varying combinations, are sufficient for being a religion – and thus falls in the extension of the general term 'religion'.[4] Obviously, the plausibility of this descriptive claim depends on the meaning assigned to the term 'religion'. Finally, and relatedly, the motivation for characterizing *x* as a religion may be a theoretical one – in particular when the claim in question is made by religious studies scholars or researchers in the sociology, anthropology and psychology of religion. The goal might be to establish the claim in order to use it to support some other, more general, theoretical commitment.

To explain this last point, I have to say a few words about a piece of theorizing characteristic of the mainstream of today's research in the social sciences of religion: the critique of what is commonly referred to as the classical secularization thesis. Roughly, the thesis (formulated in different versions by Max Weber and Emile Durkheim, among others) states that advancing modernization and rationalization processes lead to a decline in the social significance of religion and may ultimately, result in the complete societal insignificance of religion. One strand in the critique of the classical secularization thesis aims to show that even in societies which display high degrees of modernization *and* clear patterns of decline in affiliation with traditional religions, religion and religiosity are not disappearing but rather

changing their shapes and forms of manifestation. The notions of spirituality and implicit religion play an important role in this regard, and in Section 4 I will come back to them. Here, let me just point out that one theoretical motivation for the claim that transhumanism is a religion might be the prospect of broadening the inductive basis on which the classical secularization thesis can be criticized as empirically inadequate.

There is a dialectical twist to any attempt at showing transhumanism to be a religion. As mentioned earlier, many transhumanists describe themselves as non-religious, i.e., as atheist, agnostic or religiously indifferent (Hughes, 2008). A successful attempt at establishing the claim that transhumanism is a religion would thus reveal a fundamental self-misunderstanding of many transhumanists: despite their self-assessment as non-religious or religiously indifferent, and presumably unbeknownst to them, transhumanists are what they explicitly profess not to be – religious believers. This dialectical twist adds to the often distractingly polemic character of the debate.[5]

So much for the possible motivations and dialectical goals of calling *x* a religion. What, then, does it *mean* to say that *x* is a religion? Consider the statement that transhumanism is a religion. As already mentioned, the content of this statement clearly depends on two things, the meaning assigned to 'transhumanism' and the meaning assigned to 'religion'. In the preceding section I have outlined an account of transhumanism as a spectrum of views ranging from the moderate to the profuse endorsement of human-made evolution. What about religion, then?

Researchers in the social sciences of religion today usually understand their object of investigation as a complex social phenomenon that comprises at least the following components: habitual practices, community bonds, vocabularies, descriptive and normative beliefs as well as other cognitive (including emotive) attitudes, precepts, narratives handed down through either oral traditions or texts, and (where relevant) institutions. Notice that this list of components is at most a preliminary delineation as it gets nowhere near a definition of religion. It cannot count as a definition because there are elements of the social world which are clearly *non*-religious but still exemplify the general characteristics included in the previous list. The question of whether and, if so, how to delineate the phenomenon of religion any further is moot among social scientists of religion. As to the 'whether'-question, however, it is obvious that, when claims of the form '*x* is a religion' are at issue, any attempt at reaching a justified verdict is pointless unless the meaning assigned to the word 'religion' is made sufficiently precise to allow for sincere debate. As for the 'how'-question, then, it is established practice to distinguish between substantive and functional definitions of religion (Berger, 1974; Bruce, 2011a).

Functional approaches define religion in terms of the "purposes it serves or the needs it meets" (Bruce, 2011b, p. 1), i.e., with reference to the functional roles that religion can fulfil in the lives of individuals and/or in the organization of social groups. They can be further distinguished into sociological

and psychological variants, depending on whether they emphasize social or individual functions of religion. The following are among the functions that have been suggested as (partially) definitory of religion: establishing cohesion in social groups, shaping personal and/or collective identities, providing moral and ethical guidance, offering responses to existential questions of sense and meaning, responding to desires for transcendence. Functional definitions of religion rest on a problematic presupposition. They presuppose that the functions which are respectively claimed to be definitory of religion can *only* be fulfilled by religion. In other words, they presuppose that religion is unique in being able to discharge the relevant functions.[6] Arguably, for any social of psychological function *f* that religion can fulfil, one can find some non-religious form of human thought and practice that can fulfil *f* as well (a functional equivalent for religion). Purely functional definitions of religion thus tend to commit their proponents to implausible claims regarding human practices and belief-systems which, though maybe similar to religion in some respects, are clearly not religious per se (Berger, 1974, p. 128).

So, functional definitions include too much. A standard criticism of substantive approaches, which define religion with reference to belief contents and practices that are deemed to be constitutive of religion, is that they include too little (or exclude too much). But contemporary proponents of substantive definitions usually take great care to formulate their accounts in ways that pre-empt this objection. Steve Bruce, for instance, suggests a substantive account of religion

> as beliefs, actions, and institutions based on the [assumed, B.R.] existence of supernatural entities with powers of agency (that is, Gods) or impersonal processes possessed of moral purpose (the Hindu and Buddhist notion of karma, for example) that set the conditions of, or intervene in, human affairs.
>
> (Bruce, 2011a, p. 1; see also Bruce, 2011b, p. 112)

What makes this a substantive definition is its reference to supernatural entities or impersonal processes possessed of moral purpose.[7] A direct consequence of Bruce's definition is that a given human practice or belief-system does *not* qualify as a religion unless it involves, on the part of its practitioners or adherents, a commitment to the existence of supernatural entities or impersonal processes possessed of moral purpose.

Without pursuing the discussion of definitions of religion any further, let me return to the question of what it might mean to say that transhumanism is a religion. The distinction between substantive and functional definitions now permits the following answers. If it is based on a purely functionalist view, the claim that transhumanism is a religion amounts to saying that transhumanism fulfils certain psychological and/or social functions that only religion can fulfil. If it is based on a purely substantive approach, the

claim amounts to saying that, whether they like it or not, transhumanists are committed to the existence of supernatural entities or forces. And if it is based on a hybrid approach, which combines substantive and functional elements, the claim amounts to saying that transhumanism involves a commitment to the existence of supernatural beings or forces *and* fulfils certain psychological and/or social functions. In this case, no presupposition to the effect that only religion can fulfil the relevant functions is involved since the required exclusion of functional equivalents of religion is already taken care of by the substantive condition.

## 3 Tirosh-Samuelson on transhumanism as religion

In a series of articles, Hava Tirosh-Samuelson (2011, 2012, 2014, 2017) has developed a nuanced argument to the conclusion that "transhumanism should be understood as a peculiar hybrid of religious and secular motifs, a secular faith that fits the contemporary postsecular moment" (2012, p. 718).[8] Tirosh-Samuelson moves liberally between characterizing transhumanism as a secular faith, a religion and a new religious movement. For the purposes of the following discussion I will mostly follow her lead and ignore the semantic differences between the three concepts. Before discussing what I take to be Tirosh-Samuelson's main arguments, it is maybe worth noticing that she turns her diagnosis into a piece of advice for transhumanists. Since transhumanism is a religion, she argues, transhumanists should for their own sake embrace this fact: "Given the place of religion in the public sphere today, it may even be beneficial for transhumanism to define itself as a religion and to openly compete in the market of religious ideas" (2014, pp. 67–68).

The central and also the strongest argument that Tirosh-Samuelson advances for her claim that transhumanism is a religion starts from the premise that many transhumanist narratives contain an eschatology, complete with speculative visions of technologically facilitated immortality and cryonic imageries of the resurrection of the dead (2012, p. 729, 2017, p. 272). Some adherents of profuse transhumanism indeed commit to the prediction that "[t]hrough technology humans will . . . be able to achieve what traditional religions have sought for millennia: immortality" (2012, p. 715). But to get from the acknowledgement of this fact to the conclusion that transhumanism is a religion, an extra premise is needed to the effect that eschatological ideas are somehow intrinsically religious, that one cannot reason, fantasize about or even just consider such ideas without entering the realm of religion. It is fair to say that this suppressed premise of Tirosh-Samuelson's argument begs the question against all those transhumanists who claim to understand their views on eschatological issues like immortality in non-religious terms.[9]

If, as Tirosh-Samuelson concedes (2017, p. 279), transhumanism *secularizes* traditional religious eschatologies, teachings about transcendence and

themes like immortality by reframing them in a way that no longer appeals to ideas of strong supernatural transcendence – why should the result be considered another religion? Transhumanism can precisely be understood as an effort to *de*-religionize, as it were, those themes and to argue that, today, the advances in science and technology permit us to conceptualize certain *topoi*, which traditionally have been the exclusive domain of religion, in *non*-religious terms. Maybe the claim should rather be that transhumanism tries to secularize eschatology but fails in its attempt, that it wants to reframe traditionally religious ideas such as immortality without appeal to the supernatural but falls short of doing so. Notice, however, that this thesis is different from the conclusion which Tirosh-Samuelson wants to establish (and that it would also require different arguments to back it up): transhumanism does succeed in secularizing eschatology but still remains a religion.

The claim that transhumanism should be regarded as a secularist form of religious faith tallies well with functionalist definitions of religion in terms of the role of religious practices and beliefs in the psychology of individuals and in the organization of social groups. Even though Tirosh-Samuelson does not make her understanding of religion explicit, it is plausible to assume that she indeed subscribes to a functional account (at least for the purposes of her discussion of transhumanism). She argues persuasively that contemporary transhumanism tends to theorize "about the human species in ultimate terms", articulates a conception of "transcendence", "has authoritative doctrines, texts, and leaders, as well as normative beliefs and values", is based on an "eschatological vision" and "offers an ethical vision". She adds that "eventually it will develop its own rituals" (2012, pp. 728–729). Based on these observations, Tirosh-Samuelson goes on to assert that "[b]y all measures . . . transhumanism *functions* as a religion, albeit a secularized one, that offers meaning and seeks to recruit new adherents" (2012, p. 729, emphasis added).

However, even if Tirosh-Samuelson were right in claiming that transhumanism fulfils all, or most, or a considerable number of the psychological and social functions of religion it would not follow that transhumanism *is* a religion – unless, that is, a suitable functional *definition* of religion is added to the set of premises. But, as pointed out in the preceding section, the shortcomings of functionalist definitions, be they of the psychological or the sociological or a mixed variety, are long known. Their principal shortcoming is that they are overly inclusive. Perhaps this is not obvious and I should illustrate the point with an example. Consider the ecological movement Fridays for Future, which is currently attracting a lot of attention in Europe.[10] It has rituals and leaders, is based on a shared ethical vision, offers meaning and seeks to recruit new adherents. Is the Fridays for Future movement therefore similar to religion in these respects? At this very general level of description, yes, certainly. It is similar to religion to more or less the same extent that, say, the European Union is similar to religion. Do these similarities justify the claim that Fridays for Future or the EU are religions or new

religious movements? No, they do not. Choosing a sufficiently general level of description, every social (including political and economic) phenomenon is similar to religion in some respects, but not every social phenomenon is an instance of religion. No doubt, some members of Fridays for Future, and some people who are convinced that the EU is, after all, a good idea justify their membership and their convictions on (partly) religious grounds. But again, this does not turn Fridays for Future or the EU into religious phenomena. Analogously for transhumanism.

In a second argument in support of her thesis that transhumanism should be understood as a secularist (but still religious) faith, Tirosh-Samuelson points out that there are, by now, distinctively religious transhumanist groups such as the Mormon Transhumanist Association[11] (2012, p. 727, 2014, pp. 66–67). Moreover (2012, pp. 722–724, 2014, pp. 61–63), she emphasizes that there are transhumanists who explicitly argue for religious interpretations of transhumanism (e.g., Hughes, 2007; LaTorra, 2005; Jordan, 2006). To what extent can these observations lend support to the claim that transhumanism is a religion?

To answer this question, let me begin with an interesting argument recently put forward by Roberto Manzocco (2019, p. 7). Manzocco argues that "[t]ranshumanism is compatible with any ideology, religion or philosophy that is willing to accept, or at least not oppose" the "opportunity and desirability of self-directed human evolution, that is, the opportunity for our species to take human evolution in our own hands". According to Manzocco, then, it is this compatibility which explains "why we can find blends of Transhumanism with Liberalism, Anarchism, Socialism, Communism, Fascism, Atheism, Christianity, Mormonism", and "with any philosophical view of reality, for example, with materialistic reductionism, naïve realism, [and] post-humanism" (Manzocco, 2019, p. 7). From a social science perspective on religion this is almost, but not quite, right. It is less the actual compatibility of transhumanism with various ideologies, religious beliefs or philosophical theories (the absence of logical contradictions between the propositional contents of transhumanism and those of various ideologies, religions and philosophical theories) that is relevant in explaining the appropriation of transhumanism by people with otherwise very diverse, and sometimes incompatible, views. What counts, rather, is that adherents of diverse ideologies, religions and philosophical theories *take* transhumanism to be compatible with their respective views – whether or not they are right in doing so.[12] Returning to Tirosh-Samuelson's argument, then, the fact that there are religious transhumanist associations and supporters of religious interpretations of transhumanism gives little, if any, argumentative support to the claim that transhumanism itself is a religion. All that the existence of religious transhumanist associations can sensibly be taken to be evidence for is the following: some religious believers take transhumanism to be compatible with their respective religious faiths, and they take this assessment, in turn, to justify the foundation (or joining) of associations that have both the

name of their faith and the name of the thing that they take to be compatible with their faith, transhumanism, in their respective titles.[13] In the same vein, the existence of authors who suggest that transhumanism is compatible with various religions is evidence for neither more nor less than the claim that some people think that transhumanism allows of religious interpretations and take this assessment to be worthy of publication.

Another argument that Tirosh-Samuelson advances in support of her claim that transhumanism is a secularist faith and/or a new religious movement starts from the observation that the author who apparently introduced the term 'transhumanism' into the literature, Julian Huxley, characterized transhumanism as a "religion without revelation" (Huxley, 1927). Tirosh-Samuelson thus points out that "[a]s human-controlled evolution, transhumanism was articulated by a person who understood his mission and vision in religious terms" (2014, p. 58; see also 2012, pp. 719–720). This observation is probably correct, even though – as Tirosh-Samuelson notes – it was only 30 years after the publication of his "Religion without Revelation" (Huxley, 1927) that Huxley introduced the term 'transhumanism' in his 1957 book "New Bottles for New Wine" (Huxley, 1957). For the sake of argument, let me grant that what Huxley referred to with the expression 'religion without revelation' in 1927 was identical to the complex of ideas he then developed under the title 'transhumanism' in his 1957 book (Huxley, 1957, pp. 13–17). It is unclear how this point could lend significant argumentative support to the assertion that transhumanism is a new religious movement. As Lorne L. Dawson (2006, p. 374) notes, new religious movements "are almost always centered on a charismatic leader and face disintegration when the leader dies or is discredited". It is safe to say that many transhumanists today are unacquainted with Julian Huxley's writings and thus simply unaware of the fact that the person who introduced the term 'transhumanism' into the debate intended it to refer to a new religion. Even though some transhumanists acknowledge Julian Huxley's contributions to transhumanist debates – usually when they write about the intellectual history of transhumanism (Bostrom, 2005b; Ranisch & Sorgner, 2014) – it would be far-fetched to elevate his role to anything akin to a charismatic leader of transhumanism. In the same way, it is unconvincing when Tirosh-Samuelson characterizes Julian Huxley as "the 'prophet' of transhumanism" (2011, pp. 56, 70). The use of scare quotes seems to indicate that Tirosh-Samuelson herself does not intend this to be more than figurative speech or rhetorical hyperbole.

I do not deny that there are personalities who might play the role of charismatic leaders for some transhumanists, in particular for those who subscribe to one of the profuse and futurological variants of transhumanism (Amarasingam, 2008). What I do deny, however, is that this can count as evidence for the claim that the recognition of 'charismatic leaders' or 'prophets' is any way a central element of transhumanism in general, including the moderate transhumanist positions outlined previously – an element, that is, whose centrality could be seriously likened to that of the recognition of prophets

in the Abrahamic religions, say. For many transhumanists, ideas, arguments, scientific theories and technological innovations are important quite independently of who brings them forward. Arguably, this marks an important dissimilarity between transhumanism on the one hand, traditional religions and new religious movements on the other.

Tirosh-Samuelson is right in pointing out that transhumanism contains several ideas, elements and aspirations that are similar to religion and thus lend themselves to an interpretation in terms of traditional religious vocabulary. However, she overestimates the evidential role that this observation can play in justifying the claim that transhumanism is a religion or a new religious movement.

## 4. Why does it matter?

Tirosh-Samuelson locates her discussion of transhumanism within the broader debate on secularization, the postsecular and "the dialectic of enchantment":

> as a child of Enlightenment rationalism, transhumanism seems to privilege secular rationalism over religious belief, thereby disenchanting the world, but by assigning salvific meaning to man-made technology, transhumanism 're-enchants' the secular.
>
> (2012, p. 731)

She chooses the theoretical construct 'secular faith' to connect her discussion to the critique of the classical secularization thesis: transhumanism as one more example of how religion, far from disappearing under the pressure of modernization, proves resilient and finds new forms of expression.

Other authors make different terminological choices for the same purpose. In recent decades, some sociologists of religion have emphasized what they perceived as a significant shift – even a revolution (Heelas & Woodhead, 2005) – in contemporary Western societies: a shift from religious thought and practice grounded in, regulated and legitimized by traditional religious institutions, to more personalized, individualistic and subjective forms of constructing narratives of the sacred and practices that invoke transcendent meaning and purpose. Although contested as a conceptual move, it has become common to describe the shift in question as one from religion towards spirituality (Giordan, 2016). The concept of spirituality has then become a central tool in a series of objections against the classical secularization paradigm. The gist of this line of critique is, as Steve Bruce succinctly puts it, to show "that the decline of shared institutional religion has been offset by the rise of individualized religion" (Bruce, 2011a, p. 104). Another notion that has been used for similar purposes is the notion of implicit religion (Bailey, 2011).

It goes without saying that there are important differences between the concepts of implicit religion, secular religion and spirituality, just as there

are between each of those concepts and functional definitions of religion. These concepts stem from different theoretical contexts and are based on different theoretical commitments. It is also evident, however, that they converge in certain respects and can be combined in a rather natural way. Each of them has proved useful in facilitating analogous thinking about, and re-descriptions of practices, belief systems and social groups in terms of religion. This has sometimes led to a gain in knowledge and depth of understanding of those practices and belief systems, at the same time producing important insights as to where and how the classical secularization paradigm goes wrong. However, as analogies go, they only take us so far. Precisely because they are analogies, they do usually not justify the inference from '*x* is analogous to religion in respects $r_1$-$r_n$' to '*x* is a religion' – unless good reasons emerge for thinking that what was initially assumed to be an analogy is really more, i.e., evidence for the claim that *x* is an instance of religion.

As argued in Section 2, the main weakness of (purely) functional definitions of religion is that they are overly accommodating. The theoretical constructs of spirituality, implicit religion and secular faith share this weakness. Just like (purely) functional definitions, they tend to draw any human activity that goes along with strong epistemic, normative or emotional commitments on the part its practitioners into the religious sphere. The tendency to characterize any sustained effort on the part of individuals and groups to make sense of, or give meaning to, their lives and practices as a form of spirituality, implicit religion or secular faith should be resisted. There are several good reasons for resisting it. Let me mention two. First, inflationary religion-spotting based on too broad accounts of religion runs the risk of depriving the category of religion of its theoretical interest and import. Notwithstanding the various ways in which so-called substantive definitions of religion can prove problematic, they can act as important checks in this regard. Second, many people who do have basic (call them ultimate, if you like) normative commitments as to what is individually and socially good, and who engage in practices that they deem to serve those commitments, frame and justify their commitments and practices in ways that do not appeal to any idea, conception or narrative of supernatural transcendence. This is also the case for many transhumanists.

Domains of thought and practice that have been characterized as instances of implicit religion, spirituality or secular religion include, among many more: science, sports, environmentalism, consumerism, neoliberalism, communism, love, capitalism and computer gaming. Considering this list, transhumanism does indeed not seem to be the most far-fetched place in which to expect elements of spirituality, implicit religion or secular faith. And of course, it is not. Given the pre-eminent role of religious thought and practice in human cultural history it is unsurprising that one can find in transhumanism concepts, ideas, themes, *topoi* and words which have their historical roots in religious traditions.

The arguments reviewed in the preceding section lend support to a claim that is related to, but much weaker than, the outright assertion that transhumanism is a religion: some variants of transhumanism, notably those which have been labelled 'profuse'previously, contain elements which are similar to paradigmatic elements of religion. To answer the title question directly, then: no, transhumanism is not a religion. It is not a religion because many transhumanists make no appeal to any form of supernatural transcendence whatsoever. Of course, transhumanism is not science either. Perhaps the word 'ideology' is, all things considered, the best choice here.

## Notes

1 One of the main platforms for transhumanist debates is the *Journal of Evolution and Technology* (JET), published by the Institute for Ethics and Emerging Technologies (https://ieet.org/, accessed on August 19, 2019). As stated by the publishers, JET is "a scholarly peer-reviewed journal, publishing academic-quality research, which welcomes submissions on subject matters that many mainstream journals shun as too speculative, radical, or interdisciplinary, on all issues relating to the future prospects of the human species and its descendants" (https://jetpress.org/history.html, accessed on August 19, 2019).
2 For the present discussion, human enhancement can be understood in terms of "*biomedical interventions that are used to improve human form or functioning beyond what is necessary to restore or sustain health*" (Juengst & Moseley, 2019).
3 Moderate transhumanism is moderate as compared to other, more exuberant, transhumanist positions. It is not per se a moderate position.
4 As Gabriel Rothblatt notes in a blog post for the Institute for Ethics and Emerging Technologies, when people call transhumanism a religion, "[i]t is rarely clear if this is meant as an insult, a compliment, or merely an observation" (Rothblatt, 2012).
5 See, for instance, Heidi Campbell's account of the conference "Transhumanism, Faith and Hope", held in August 2004 at Trinity College, University of Toronto (Campbell & Walker, 2005, p. iv).
6 Presumably, this is the objection that Bruce (2011b, p. 1) has in mind when he states that functional definitions "assume what ought to be demonstrated".
7 Notice the disjunctive form of this definition, which allows for augmentation with additional disjuncts in case a human practice $x$ should be found which is such that: $x$ is not covered by the definition and there are good reasons to count $x$ as an instance of religion. Disjunctive definitions are sometimes rejected precisely because they allow for the addition of further disjuncts and thus do not seem to get to the heart of the matter in the way definitions should. This objection has its merits in contexts where it is reasonable to demand complete precision. With regard to Bruce's substantive definition of the historically mutable phenomenon of religion it has little force.
8 In this section, years and page numbers without author name refer to the previously-cited articles by Tirosh-Samuelson.
9 This is not a defence of profuse transhumanism's fantasies about attaining personal immortality through mind uploading (which I find entertaining, at most), but a critique of the claim that such ideas and fantasies are inevitably religious.
10 See the website of the Fridays fo Future (2020) movement at https://fridaysforfuture.org/ [accessed on 8 June 2020]

11 See the website of the Mormon Transhumanist Association (2019) at https://transfigurism.org/ [accessed on 8 June 2020]
12 This is an application of a generalized version of the principle of methodological agnosticism – misleadingly called "methodological atheism" by Peter Berger (e.g., Berger, 1974, pp. 125–126, 133). Methodological agnosticism is a central tenet of most contemporary social science approaches to religion (Bruce, 2011b, p. 109). See Porpora (2006), for an interesting, albeit problematic, reformulation of methodological agnosticism that tries to leave room for direct appeal to "supernatural object[s] of religious experience" in sociological explanations.
13 In the case of the Mormon Transhumanist Association (MTA), things might appear to be more complex. Lincoln Cannon, a spokesperson and former president of the MTA, argues that Mormonism is not just compatible with, but indeed mandates, transhumanism (Cannon, 2017). Still, even if Mormonism mandated transhumanism, this would not be evidence for the claim that transhumanism is a religion, let alone Mormon. Of course, Cannon does not make any of these claims. What he wants to establish is that Mormons *qua* Mormons have good reasons to embrace transhumanism.

## References

Amarasingam, A. (2008). Transcending technology: Looking at futurology as a new religious movement. *Journal of Contemporary Religion*, *23*(1), 1–16.

Bailey, E. (2011). Implicit religion. In P. B. Clarke (Ed.), *The Oxford handbook of the sociology of religion* (pp. 801–816). Oxford: Oxford University Press.

Berger, P. (1974). Some second thoughts on substantive versus functional definitions of religion. *Journal for the Scientific Study of Religion*, *13*(2), 125–133.

Blackford, R. (2011). Trite truths about technology: A reply to Ted Peters. In G. R. Hansell (Ed.), *H+/-: Transhumanism and its critics* (pp. 176–188). Philadelphia, PA: Metanexus Institute.

Blackford, R. (2013). The great transition: Ideas and anxieties. In M. More & N. Vita-More (Eds.), *The transhumanist reader: Classical and contemporary essays on the science, technology, and philosophy of the human future* (pp. 421–429). Malden, MA: Wiley-Blackwell.

Bostrom, N. (2005a). Transhumanist values. *Journal for Philosophical Research*, *30*(supplement), 3–14.

Bostrom, N. (2005b). A history of transhumanist thought. *Journal of Evolution and Technology*, *14*(1), 1–25. Retrieved August 7, 2019, from http://jetpress.org/volume14/bostrom.html

Bruce, S. (2011a). *Secularization: In defence of an unfashionable theory*. Oxford: Oxford University Press.

Bruce, S. (2011b). Defining religion: A practical response. *International Review of Sociology: Revue Internationale de Sociologie*, *21*(1), 107–120.

Campbell, H., & Walker, M. (2005). Religion and transhumanism: Introducing a conversation. *Journal for Evolution and Technology*, *14*(2), i–xv. Retrieved August 8, 2019, from www.jetpress.org/volume14/specialissueintro.html

Cannon, L. (2017). Mormonism mandates transhumanism. In T. J. Trothen & C. Mercer (Eds.), *Religion and human enhancement: Death, values, and morality* (pp. 49–66). Cham: Palgrave Macmillan.

Dawson, L. L. (2006). New religious movements. In R. A. Segal (Ed.), *The blackwell companion to the study of religion* (pp. 369–384). Malden, MA: Blackwell.

Ferrando, F. (2013). Posthumanism, transhumanism, antihumanism, metahumanism, and new materialisms: Differences and relations. *Existenz*, *8*(2), 26–32.
Ferrando, F. (2019). *Philosophical posthumanism*. London: Bloomsbury.
Fridays for Future (2020). Retrieved June 8, 2020, from https://fridaysforfuture.org/.
Fukuyama, F. (2004). Transhumanism: The world's most dangerous idea. *Foreign Policy*, *144*, 42–43.
Geraci, R. M. (2010). *Apocalyptic AI: Visions of heaven in robotics, artificial intelligence, and virtual reality*. Oxford: Oxford University Press.
Giordan, G. (2016). Spirituality. In D. Yamane (Ed.), *Handbook of religion and society* (pp. 197–216). Cham, Heidelberg: Springer.
Heelas, P., & Woodhead, L. (2005). *The spiritual revolution: Why religion is giving way to spirituality*. Oxford: Blackwell.
Hopkins, P. D. (2005). Transcending the animal: How transhumanism and religion are and are not alike. *Journal of Evolution and Technology*, *14*(2), 13–28. Retrieved August 19, 2019, from www.jetpress.org/volume14/hopkins.html
Hughes, J. J. (2007). The compatibility of religious and transhumanist views of metaphysics, suffering, virtue and transcendence in an enhanced future. *The Global Spiral*, *8*(2). Retrieved August 20, 2019, from https://metanexus.net/compatibility-religious-and-transhumanist-views-metaphysics-suffering-virtue-and-transcendence/
Hughes, J. J. (2008). Report on the 2007 interests and beliefs survey of the members of the World Transhumanist Association. no longer available from the WTA website, archived version. Retrieved August 20, 2019, from https://web.archive.org/web/20080706034511/http://transhumanism.org/resources/WTASurvey2007.pdf
Huxley, J. (1927). *Religion without revelation*. London: E. Benn.
Huxley, J. (1957). *New bottles for new wine*. London: Chatto and Windus.
Jordan, G. (2006). Apologia for transhumanist religion. *Journal of Evolution and Technology*, *15*(1), 55–72.
Juengst, E., & Moseley, D. (2019). Human enhancement. In E. N. Zalta (Ed.), *The Stanford encyclopedia of philosophy* (Summer 2019 ed.). Retrieved August 10, 2019, from https://plato.stanford.edu/archives/sum2019/entries/enhancement/
LaTorra, M. (2005). Trans-spirit: Religion, spirituality and transhumanism. *Journal of Evolution and Technology*, *14*(2), 41–55.
Manzocco, R. (2019). *Transhumanism: Engineering the human condition: History, philosophy and current status*. Cham: Springer.
Mormon Transhumanist Association (2019). Retrieved June 8, 2020, from https://transfigurism.org/.
Porpora, D. V. (2006). Methodological atheism, methodological agnosticism and religious experience. *Journal for the Theory of Social Behaviour*, *36*(1), 57–75.
Ranisch, R., Sorgner, S. L. (2014). Introducing post- and transhumanism. In R. Ranisch & S. L. Sorgner (Eds.), *Post- and transhumanism: An introduction* (pp. 7–27). Frankfurt am Main: Peter Lang.
Rothblatt, G. (2012). Is transhumanism a religion? Institute for ethics and emerging technologies. Retrieved August 8, 2019, from https://ieet.org/index.php/IEET2/more/gabrielrothblatt20120607
Smith, W. J. (2018). Transhumanism: A religion for postmodern times. *Religion and Liberty*, *28*(4), 17–18.
Sorgner, S. L., Javanovic, B.-R., & Grimm, N. (Eds.). (2013). *Evolution and the future: Anthropology, ethics, religion*. Frankfurt am Main: Peter Lang.

Tirosh-Samuelson, H. (2011). Science and the betterment of humanity: Three British prophets of transhumanism. In H. Tirosh-Samuelson & K. L. Mossman (Eds.), *Building better humans? Refocusing the debate on transhumanism* (pp. 55–82). Frankfurt a.M.: Peter Lang.

Tirosh-Samuelson, H. (2012). Transhumanism as a secularist faith. *Zygon*, *47*(4), 710–734.

Tirosh-Samuelson, H. (2014). Religion. In R. Ranisch & S. L. Sorgner (Eds.), *Post- and transhumanism: An introduction* (pp. 49–71). Frankfurt am Main: Peter Lang.

Tirosh-Samuelson, H. (2017). Technologizing transcendence: A critique of transhumanism. In T. J. Trothen & C. Mercer (Eds.), *Religion and human enhancement: Death, values, and morality* (pp. 267–283). Cham: Palgrave Macmillan.

Winner, L. (2005). Resistance is futile: The posthuman condition and its advocates. In H. W. Baillie & T. Casey (Eds.), *Is human nature obsolete? Genetics, bioengineering, and the future of the human condition* (pp. 385–411). Cambridge, MA: MIT Press.

# 11 Are "spiritual machines" possible?

*Michael de Rachewiltz*

The inventor Ray Kurzweil has prominently claimed that one day spiritual machines will inhabit planet earth. In his book "The Singularity is Near" he raises the question: "Will future machines be capable of having emotional and spiritual experiences?" and answers the question affirmatively as follows:

> By the late 2020s we will have completed the reverse engineering of the human brain, which will enable us to create nonbiological systems that match and exceed the complexity and subtlety of humans, including our emotional intelligence.
>
> (Kurzweil, 2005, p. 277)

These machines will claim to be conscious and since, according to Kurzweil, a sensibility for religion and transcendence is an integral part of consciousness, they will be spiritual machines as well. This prediction includes the possibility of uploading the human brain to a non-biological system:

> the early 2030s is a reasonable time frame for the computational performance, memory, and brain-scanning prerequisites of uploading. Like any other technology, it will take some iterative refinement to perfect this capability, so the end of the 2030s is a conservative projection for successful uploading.
>
> (Kurzweil, 2005, p. 167)

Since many of Kurzweil's predictions have come true and since he is one of the most influential proponents of transhumanism, it seems wise to take a closer look at the arguments for such bold statements. According to his predictions, during the next few years artificial intelligence (AI) will pass the famous Turing test, we will have accurate simulations of the human brain, virtual reality will become indistinguishable from reality and in the next 10 years mind-uploading will become possible. But there are several other reasons why it might be important to take into consideration the creation of

conscious AI machines, including down to earth practical considerations as the philosopher Susan Schneider points out:

> If I were an AI director at Google or Facebook, thinking of future projects, I wouldn't want the ethical muddle of inadvertently designing a conscious system. Developing a system that turns out to be conscious could lead to accusations of AI slavery and other public-relations nightmares. It could even lead to a ban on the use of AI technology in certain sectors. I'll suggest that all this may lead AI companies to engage in consciousness engineering – a deliberate engineering effort to avoid building conscious AI for certain purposes, while designing conscious AIs for other situations, if appropriate.
>
> (Schneider, 2019, p. 4)

But Kurzweil's predictions force other questions upon us: first and foremost, what is a spiritual machine and is it metaphysically possible to conceive of such a machine? In order to answer these questions, we first have to define the terms "spirituality" and "machines". Furthermore with "possible" I intend the metaphysical possibility, i.e., in what kind of world would we have to live, in order for spiritual machines to exist.

Science fiction books and movies are full of robots or other machines that are represented as self-aware conscious beings. Sometimes the storyline explicitly mentions conscious robots, but more often we implicitly assume that these machines must be self-aware, or we are told that they "can't feel" but later it appears that they actually develop a certain empathy towards their human creators. Other stories talk about robots that behave like humans, but it is not always clear if they actually are self-aware and have feelings. The same is true for stories about mind-uploading. Instead of creating a new intelligent being, the goal here is to replicate human personalities including their memories (Steinhart, 2007). It is this prospect that makes the possibility so interesting to transhumanists who want to prolong our lives and overcome aging, disease and death:

> There's only so much you can do to make a human being better off, simply because of what it is to be human. But . . . if we could cease to be biological at all-these limitations could be overcome. . . . it would be a great benefit, transhumanist say, if we could make ourselves inorganic. They hope to achieve this by a process they call "uploading". The information in your brain is to be transferred to an electronic digital computer.
>
> (Olson, 2017, p. 35)

One obvious question this raises is: would this preserve personal identity? Intuitively, if there is some kind of continuation in the upload process, say we suddenly upload your mind to a computer, while your old bodily self is

destroyed, most would probably say that you have continued to live on, but through another medium. But what if instead we were to make a copy of your mind: would that copy be another you, who loves his family and owns a car, or would it become another person? One common distinction made in these discussions is between identity and continuity through time (Corabi & Schneider, 2014, p. 133): while numerical identity means an entity continues to exist through time but may go through some qualitative changes, continuity means, two different entities are somehow qualitatively connected, whereby we can talk of a predecessor and a successor. For someone who believes in psychological continuity as being essential for personal identity, i.e., your memories, etc., uploading somebody's mind to a computer which emulates it perfectly while simultaneously destroying his brain, we probably could talk of numerical identity: the person exists first in a brain and then in a computer. Problems arise, when the mind-upload does not entail the destruction of the original medium and we have the "original" person in the brain and a copy of the person in a computer. If the copy is only a computerized biography, a kind of diary of a person's life, there does not seem to be any problem with personal identity; the philosopher Eric Steinhart describes such a digital ghost, which could survive your death:

> Your diary is a temporal database that records facts about your life. We can conceptualize it as a big spreadsheet. . . . For example, your diary might have columns that record the position of your body (via GPS), photographs, audio, phone conversations, text messages, data files you receive, personal entries and notes to self, vital signs (blood pressure, heart rate, etc.). . . . A maximally fine-grained ghost records all the facts about all the cells in your body at the molecular level.
>
> (Steinhart, 2007, p. 262)

Steinhart imagines several different digital ghosts which vary in detail, but 50 years out he imagines a digital ghost which also simulates a model of your body: "Your ghost body is both conscious and self-conscious. It is conscious exactly as you were conscious and self-conscious exactly as you were self-conscious" (Steinhart, 2007, p. 270). The major difference between us and the digital ghost is that the latter is a copy of the history of somebody's life which lives on in a virtual reality after once death. But if this digital ghost is a perfect whole brain simulation – down to details such as aching muscles when your virtual body is jogging – and "you have a virtual afterlife with a virtual body in a virtual world" (Steinhart, 2007, p. 270) we could imagine that this digital ghost could even interact with the external world using sophisticated input and output devices. At this level "[a]lthough philosophers have wondered whether you are the same person as your digital ghost, questions about personal persistence may not be as interesting as questions about personal presence" (Steinhart, 2007, p. 271). Since this digital ghost is a conscious being on a different non-biological

substrate, we could say we have created an artificial general intelligence (AGI), a machine that thinks just like a human. The important point is, it would have to be a conscious machine and not just an unconscious zombie-AGI. This brings us back to the question if conscious machines are possible in the first place.

Being naturalistic inclined, Kurzweil and similar thinkers certainly like to draw an analogy between machines and living things, so that differences are only a matter of degree not of kind. The philosopher Daniel Dennett for examples argues prominently, that mind and consciousness are natural phenomena which, given the right chemical and physical conditions, will emerge from matter. For Dennett homo sapiens is a race of conscious robots. Life as it has evolved on earth is made of carbon-based cells, while robots in the colloquial sense are silicon-based machines, so how could Dennett claim that humans and robots are both machines? If it is not a matter of the stuff something is made of, it could be a matter of how it works, it's underlying mechanism:

> A mechanism is a structure performing a function in virtue of its component parts, component operations, and their organization. The orchestrated functioning of the mechanism is responsible for one or more phenomena.
> (Bechtel & Abrahamsen, 2005, p. 423)

Such a phenomenon for example could be the protein synthesis in cells. And in fact, for Dennett we are made of tiny robots, our cells, making up a bigger and conscious robot: us. We are evolved robots designed through natural selection (Dennett, 1987, pp. 295–298)

What does spirituality mean for Kurzweil? For him spirituality can be a real phenomenon in the physical world, as he tries to explain through the following examples:

> consider the intricate dance of spirals of DNA during mitosis. How about the loveliness of a tree as it bends in the wind and its leaves churn in a tangled dance? Or the bustling world we see in a microscope? There's transcendence everywhere.
> (Kurzweil, 2005, p. 284)

For Kurzweil transcendence does not imply a dualist view, whereas certain levels of reality are not of this world. Instead, as he explains, in his view we

> can "go beyond" the "ordinary" powers of the material world through the power of patterns. Although I have been called a materialist, I regard myself as a "patternist", it's through the emergent powers of the pattern that we transcend. Since the material stuff of which we are made turns over quickly, it is the transcendent power of our patterns that persists.
> (Kurzweil, 2005, p. 284)

Another connotation of spirituality is to contain spirit, to be conscious and a carrier of psychological aspects.[1] The question "Are spiritual machines possible?" could therefore be understood as asking "Are systems which go beyond what they are made of possible?" By Kurzweil's definition it is certain patterns that persist and make the difference, not the stuff a system is made of; in this sense these systems are certainly possible and at least our bodies might in fact be examples thereof. If, on the other hand, we define spiritualty as also meaning "being conscious" the question becomes: "Are conscious machines possible?" We can rephrase this question and turn it into two questions: First: Can robots or computers ever be conscious? And second: Are we machines and therefore conscious robots? Spirituality is assumed to be an essential aspect of human beings: if we consider ourselves to be machines then spiritual machines are certainly possible. But the two questions are interdependent: if conscious but not carbon-based machines are possible and we are in fact machines, mind-uploading to computers could actually create a conscious equivalent to a human being. While it certainly would be interesting to discover that we can build conscious robots, the hope of many transhumanists to prolong life by uploading the mind to computers would only be relevant if that mind-file would include consciousness: having an unconscious copy of your mind would not mean that you are prolonging your life, since we consider consciousness to be an essential property of being alive.

One way we could tackle the original question: "Are spiritual machines possible?" would be by rephrasing it to: "Are conscious minds possible independently of their underlying substrate"? This is a fundamental philosophical question regarding the ontological problem about what things really exist and what their essential nature is. In the case of mental states this boils down to the question: how does the mind or mental states relate to the body or physical properties more generally? One way to approach the problem is by starting from a few "philosophical facts", i.e., things most of us believe to be true: First: We have a mind and a body; these two usually seem to work together. Second: The body is physical, i.e., composed of matter and occupying space. It is also publicly observable. Third: The mind is private, and we somehow have a privileged access to the contents of our mental life. No one else can literally sense the smell of Earl Grey tea the way you do or feel your pain. And no one else can tell you, that you are actually not feeling something – your own testimony is the ultimate judge.

When thinking of mental phenomena, usually conscious qualitative states come to mind: the stream of consciousness in all its diversity, such as sounds, smells, tastes, pains, sights, desires, memories and thoughts. From a semantical point of view, we must ask where our terms for mental or psychological states get their meanings. One popular view states that common-sense terms for mental states are actually theoretical terms of folk psychology and their meaning is fixed by the set of laws and principles in which they figure. To give an example from physics, to understand the expression "electric field"

means one is familiar with the network of theoretical principles in which that expression is used. Theoretical terms therefore do not get their meanings from a single explicit definition, but by the entire network of principles or laws in which they figure. Similarly, our ability to explain human behaviour in terms of their beliefs, desires, hopes and fears might depend on a theoretical framework, which we could call "folk psychology" (Churchland, 2013, pp. 87–109). We all acquire this theoretical framework implicitly, like language, while growing up. Assuming this network theory of meaning is correct, it allows us to better understand what the relationship between mental states – as described by folk psychology – and brain states or other states amounts to and how the world must be like to fit our philosophical facts. The three main positions regarding the relationship between the mind and the physical world are dualism, the identity theory and functionalism. While dualism is not a very popular view in current philosophy, it is probably the most widely held view in many religions and in large parts of the general public. According to dualism the mind is a non-physical entity that is independent of the material world. Depending on the specific view, this either means that the mind and the brain/body are two separate substances which however can still causally interact or that mental states or mental events are just side effects of material phenomena and do not have any effect on the material world. One reason to think that the mind and the body are distinct, is actually our third philosophical fact – our experiences exhibit a feature that sets them apart from physical reality: while physical objects are public in the sense that they can be accessed directly via perception, experiences are directly only accessible to you via introspection. We all have a privileged access to our mind's contents, from the first-person point of view, so our mind just seems to be different from the brain and physical realm more generally (Feser, 2006, pp. 19–48). In general, many aspects of the mind at the moment just do not seem to be reducible to physical explanations, such as the subjective qualities of our sensations (qualia), the attachment of meaning to the content of our thoughts or many paranormal phenomena or psychic abilities such as telepathy, telekinesis, precognition, clairvoyance (knowledge about distant objects through some sort of extrasensory perception) but also out-of-body experiences, near-death and mystical experiences (Churchland, 2013, p. 22; Goller, 2015).

The question for dualists is: are mind and body really like apples and oranges? According to this view the mind is an entirely different realm that does not occupy space and obey physical laws, which would mean that nothing mental can cause anything physical and nothing physical can cause anything mental. But we know that the physical affects the mental and vice versa, so there seems to be something wrong with the dualist position. Gilbert Ryle referred to this view of the mind and the body as distinct entities as the "dogma of the Ghost in the Machine" (Ryle, 2002, p. 34). The dualist argument that inner observation reveals special internal qualitative properties, draws an ontological distinction between subjective knowledge and the kind

of objective knowledge such as scientific knowledge. It seems obvious that we can both know subjectively by interoception that my stomach is full and objectively by performing an ultrasound check. And even sensations such as pains, tastes, etc. can be both known subjectively and objectively: we can often observe when people around us are in pain or like or dislike some food they eat, so it does not seem to follow, that sensations form a special ontological domain. The question about a physical reduction of thought, sensations, etc. has some bite to it, but the difficulties of explaining these phenomena are the same for dualism: postulating some non-physical mind-stuff will not suffice. In summary the arguments against dualism appeal to the greater simplicity of other views and the explanatory weakness of the position itself, especially regarding the interaction of both the mental and physical realm.

Most of the alternative positions regarding the mind-body problem are forms of monism, specifically materialism, which claims that everything is physical, including the mental realm. Reductive materialism claims that all mental phenomena can be reduced to brain states, i.e., certain patterns in the brain. For the main kind of this identity theory, for every mental type we can find types of brain states (U.T. Place, 2002). If people have the same kind of sensation or belief, they would be in the same brain state. This seems implausible, since brains vary between person and person and encode beliefs or sensations differently. Also, if feeling pain is a certain brain state, it seems to exclude both machines and other non-carbon-based creatures from ever feeling pain, since they are presumably made up of different stuff and also work differently. On empirical grounds it just seems that mental states could be instantiated in different physical structures and different beings and that the mind possesses multiple realizability and therefore cannot be reduced to physical states. Functionalism tries to address this problem by claiming that mental states are functional states, a set of causal relations which link inputs to behavioural outputs and other mental states (Putnam, 2000). Any entity that is in a state that plays the functional role of pain, such as trauma, distress and wincing could be said, to be in pain – no matter what it is made of. Even though most functionalists are materialists, the position itself is not committed to physicalism or naturalism and is also consistent with other views such as dualism. But more importantly it seems to be the best candidate to allow for the creation of conscious machines, since it entails the idea that an appropriately functioning computer would possess mental states such as sensations and beliefs. Nevertheless, this approach does not seem to be able to explain the third of our "philosophical facts", i.e., that the mind is somehow private, and we have privileged access to its content, especially regarding qualia, the qualities of our sensations. Since it only seems to describe relational properties and not the qualitative aspects of our mental states, functionalists are required to accept qualia to be real and somehow incorporate them into their view.

One famous objection that points out the difficulties of functionalism is the inverted spectrum thought experiment: somebody's colour sensations

could be inverted to those I have, and we still seem functionally isomorphic. When I have a sensation-of-red when seeing a glass of red wine, the other person might have a sensation-of-green, but since we cannot compare our qualia, but we make all the same observations, by definition we are functionally identical. The idea of being able to instantiate the same mental state on different substrates, such as a brain or a computer, therefore seems less plausible then it originally might have seemed. While it is obvious that we are able to build very intelligent machines and these machines eventually might surpass human intelligence, it could be a very impersonal form of intelligence, without any inner conscious life. As Susan Schneider puts it: "For all we know, a computronium the size of the Milky Way Galaxy may not have the slightest glimmer of inner experience. Contrast that with the inner world of a purring cat or a dog running on the beach" (Schneider, 2019, p. 38).

Kurzweil's vision of a coming singularity is "that the pace of change of our human-created technology is accelerating and its powers are expanding at an exponential pace" (Kurzweil, 2005, p. 24). But this does not mean conscious machines are possible, since it might violate physical laws or we as humans might just not have the capacities for constructing such a being. The envisioned "coming singularity" of a superintelligent being might be a depressing one: that the most intelligent beings possess no consciousness at all. Nevertheless, while still trying to build ever more intelligent AI machines, we should keep in mind

> that consciousness could be central to how AI values us. Using its own subjective experience as a springboard, superintelligent AI could recognize in us the capacity for conscious experience. After all, to the extent we value the lives of nonhuman animals, we tend to value them because we feel an affinity of consciousness – thus most of us recoil from killing a chimp, but not from eating an orange. If superintelligent machines are not conscious, either because it's impossible or because they aren't designed to be, we could be in trouble.
>
> (Schneider, 2019, p. 5)

Should it not be possible to create consciousness in non-biological substrates, we might have to be careful not to be replaced by synthetic intelligence, by some kind of unconscious postbiological being.

## Note

1 According to the linguist Peter-Arnold Mumm the word psyché in the context of the legendary Greek author Homer did not mean the active, sentient soul, but the soul of the dead – the soul does not do anything, she just exists as a 'windy shade' of the dead. Psyché is not mentioned as a part of the living person, if anything continues to live after death, it is not the same as what is present in the vital functions of a living person. Today's common use of psyché or soul as a place where all feelings, sentiments and memories can be found and where we find the conscious

and moral self, but also as what – if one holds a certain kind of belief – survives death and continues to live in the afterlife did not exist in the Homeric psychology. In its Homeric sense the expression is a calque from the Akkadian language and meant blowing, chilling and only later it developed its classic meaning as an organ for sensations, but also as something which can be detached from the body (Mumm & Richter, 2008, pp. 33–108).

## References

Bechtel, W., & Abrahamsen, A. (2005). Explanation: A mechanistic alternative. *Studies in History and Philosophy of the Biological and Biomedical Sciences*, *36*, 421–441.

Churchland, P. M. (2013). *Matter and consciousness*. Cambridge, MA: MIT Press.

Corabi, J., & Schneider, S. (2014). If you upload, will you survive? In R. Blackford & D. Broderick (Eds.), *Intelligence unbound: The future of uploaded and machine minds*. Malden, MA: John Wiley & Sons Inc.

Dennett, D. (1987). *The intentional stance*. Cambridge, MA: MIT Press.

Feser, E. (2006). *Philosophy of mind*. Oxford: Oneworld Publications.

Goller, H. (2015). *Wohnt Gott im Gehirn? Warum die Neurowissenschaften die Religion nicht erklären*. Kevelaer: Butzon & Bercker GmbH.

Kurzweil, R. (2005). *The singularity is near: When humans transcend biology*. New York: Penguin Press.

Mumm, P.-A., & Richter, S. (2008). Die Etymologie von griechisch ψυχή. *International Journal of Diachronic Linguistics and Linguistic Reconstruction*, *5*, 33–108.

Olson, E. T. (2017). The central dogma of transhumanism. In B. Bercic (Ed.), *Perspectives on the self* (pp. 35–58). Rijeka: University of Rijeka.

Place, U. T. (2002). Is consciousness a brain process? In D. J. Chalmers (Ed.), *Philosophy of mind: Classical and contemporary readings* (pp. 55–59). Oxford: Oxford University Press.

Putnam, H. (2000). The nature of mental states. In D. Rosenthal (Eds.), *Materialism and the mind-body problem* (pp. 150–161). Indianapolis, IN: Hackett Publishing Company.

Ryle, G. (2002). Descartes' myth. In D. J. Chalmers (Ed.), *Philosophy of mind: Classical and contemporary readings* (pp. 32–38). Oxford: Oxford University Press.

Schneider, S. (2019). *Artificial you: AI and the future of your mind*. Princeton, NJ: Princeton University Press.

Steinhart, E. (2007). Survival as a digital ghost. *Minds & Machines*, *17*, 261–271.

# 12 A digital spirituality for digital humans?

*Lucia Galvagni*

The enhancement debate and the transhumanist movement represent an effort to improve and augment the human condition at different levels – physical, cognitive, moral and aesthetic. What kind of spirituality should we consider as pertinent to the contemporary condition of human beings? Can digital religion represent a new form of spirituality? Could this become the only possible expression of spirituality for contemporary and future digital humans?

Starting from the discussion on the relationship between humanity and technology, this chapter considers how technology can improve and favour religious experience and spirituality, reflecting on these phenomena from an anthropological and ethical point of view.

## 1 Human enhancement, transhumanism and hybridization processes

In May 2016, with the headline "Is transhumanism going mainstream?" a rather conservative American website presented a report on an ongoing tendency to regard enhancement and transhumanism as something commonplace in society.[1] As demonstrated by the growing number of publications dedicated to the topic, enhancement and transhumanism are hot topics for discussion today in philosophical and bioethical debates and in the fields of neuroscience, medicine, law, ethics, social sciences, theology and religion. These discussions often recall the medieval *questiones disputatae*: the main questions regarding the evolution of the human species in the direction of a new human condition – the trans-human – and the arguments concerning opportunities to oppose, sustain or restrain the adoption, introduction or use of new enhancing technologies and interventions until some criteria on the moral and legal level are defined. The debate is not just a scientific issue or intellectual curiosity, as it affects the general public and has an impact on the social and political level: during the US presidential elections in 2016 and 2020 the Transhumanist Party proposed its own candidate, and some European governments have created commissions dedicated to the study of enhancement (Lee, 2019a; Stolyarov, 2019).[2]

The term enhancement has two main meanings according to the English dictionary: to enhance means "to advance, augment, elevate, heighten, increase" and "to increase the worth or value" (Murray, 2009, p. 491). In this sense enhancement suggests both the augmentation of human abilities and increasing their worth in order to obtain a quantitative and a qualitative amelioration. Transhumanism represents the cultural movement that strongly supports these types of intervention. It has been defined as an

> intellectual and cultural movement that affirms the possibility and desirability of fundamentally improving the human condition through the applied reason, especially by using technology to eliminate aging and greatly enhance human intellectual, physical, and psychological capacities.[3]

Human enhancement can be realized to improve performance and obtain a higher level of knowledge and awareness (for example, in terms of capacity of concentration and attention), a superior sensitivity, a deeper, more empathic moral sense and a better aesthetic aspect and condition. The expectations of the benefits of enhancing interventions are certainly very high, to the point of considering the possibility of challenging existing limits and lengthening the life span, with the hypothetical scenario – sold at present by American industries to interested people from all over the world – of offering the possibility of living again, hibernating individuals at their death and bringing them back to life once the means to do so is discovered (Lee, 2019b).

We may wonder if in this way we are facing a new evolution of thought, an anthropological turning point, with its fascination for increasing human capacities and abilities and the potential of elevating our weak and intrinsically limited human condition to an almighty level, or if we are more simply facing another step in the evolutionary scale and another stage of the history of the human species. If enhancing interventions seem to allow an improvement of human abilities and capacities, can we obtain "better humans" in this way, from an anthropological point of view (Buchanan, 2017; Hauskeller, 2013; Damour & Doat, 2018)?

The traditional discussion in ethology regarding the peculiar relationship between humans and animals and the assumption that human beings represent a specific form of animal life could help to shine a light on some of the arguments transhumanists propose. Two main paradigms have been discussed in this debate on the specificity of the human condition at the biological and behavioural levels (Marchesini, 2002). The first interpretation is represented by "the paradigm of incompleteness": in this perspective human beings are considered incomplete, in biological terms. Keeping and reinforcing the attitude of considering the human body and its biological component as an element of minority and inferiority, human beings have started to consider culture as the only possible form of expression of a

supposed superiority (Marchesini, 2002, p. 24).[4] This sense of being inferior, this "perception of minority" in comparison to other animals, plays an important role in the technological turn of human action and human history.[5]

In a second paradigm and interpretation, human beings are seen as a very distinctive and very significant biological species (Giorgio, 2017). Human beings represent complex systems: in comparison with other animals, humans seem to be cognitively unique and more competitive in terms of performance and life span. Their biological excellence could explain "the complex epigenetics that we call *culture*" (Marchesini, 2002, p. 14).[6] Animals are deeply related to their biological condition and the superior animals present a stronger cognitive ability: guaranteeing a better behavioural flexibility requires "a dedicated parental and experiential learning to develop the specific cognitive and behavioral performances of their species" (Marchesini, 2002, p. 18). Humans can be represented as a species which realizes itself: in this case, as Marchesini observes, it is possible to consider the process of becoming and of the self-realization of human beings as their most relevant trait. Human nature produces and forms itself, in this interpretation, over time and in the different possible expressions that it can assume. Supposed elements of inferiority – on the morphological and physiological levels – of the human species can be observed and interpreted differently in this paradigm: human abilities and performances make it possible to conceive the human species as a very specific one, able to host alterity and to be hosted by the alterity, thus creating hybridization processes and dynamics. For humans it is necessary to create hybridization among themselves and the rest of the world through exchanges and partnerships: therefore human beings result living an always enhancing condition and status. In this second interpretation, called conjugative interpretation, humans need to address the world and alterity to create new morphological and functional emergencies and performances: culture is seen as the result of a hybridization process with the alterity where humans represent open, not self-relational systems. Human beings seem to readapt themselves to the changing conditions of nature and of the general environment. Technology can be considered a part of the more general hybridization process, which remains open and undetermined. From this perspective, imperfection can be interpreted not as "a condition, but as a process, a becoming, a flux of hybridisation with the external reality, a passage of selective pressure, an externalization of functions or an inscription of hybrid functions in the heritage of our species" (Marchesini, 2002, p. 41). The human condition could be read as a "techno-human condition" (Benanti, 2016), because it supposes a substantial interdependence of humans and technologies.[7]

At present this hybridization can imply the involvement of both biological and artificial forms of life. In addition to the capacity to reproduce synthetic and artificial life, it is also possible to reproduce artificial specific systems as intelligence. The US *National Science Foundation* (NSF) considers that

at present it is possible to modify human beings by adopting *converging technologies*, to the point of obtaining a cybernetic organism, the *cyborg* (Roco & Bainbridge, 2002). The acronym NBIC denote four fields and levels of intervention, the Nanotechnologies, the Biotechnologies, the Information technologies and the Cognitive sciences (Caenazzo, Mariani, & Pegoraro, 2017). Their contributions and convergence make it possible to achieve more precise, advanced and pertinent interventions (Chadwick, 2008). It seems at present we are moving radically in the direction of a hybridization of humans and machines, to the point where technological components can be applied to the human body and become permanently part of it to ensure and enhance its abilities, functions and functionalities.[8]

In some reflections on new biotechnologies, religious language seems to be present as they have in some ways replaced the role traditionally played by philosophy and religion. In the Report of the US President's Council on Bioethics, *Beyond Therapy. Biotechnology and the Pursuit of Happiness*, some very distinctive expressions recur (The President's Council on Bioethics, 2003): the idea of the "Harmony of Mind and Body", the concept of "Ageless Bodies", the notion of "Happy Souls". There are relevant moral and religious references for each of these terms. The search for a harmony of body and mind seems to be a primary concern in many different religions, mostly in the eastern but also in the western traditions, which consider the relevance of life's discipline in order to have a happier life and to gain and achieve the beatitude on earth and in the afterlife.[9] The ageless bodies recall the possibility of reaching and obtaining eternal life and immortality, not in the afterworld, but already during the present time (Adorno, 2012). The return of the term "soul", which seemed to have disappeared from the debate, combined with the notion of "happy", can indicate the search for a happy condition and can represent a direction our societies consider or are supposed to take, according to some developing models (The President's Council on Bioethics, 2003, pp. 205–270). As these reflections demonstrate, biotechnologies and the bio-politics seem to have become a new form of religion.

## 2 An improvement of humanity? Some main (Kantian) questions

In the debate on human enhancement and transhumanism, some theoretical and conceptual categories have been adopted. Many of them present a strong normative value, in moral and deontological terms, but they often have been derived from and built on empirical observations.

The categories adopted and referred to in the debate have different origins: some of them derive from medical and biological notions, like those of normality, improvement and increase; some come from the neuroscientific field, like those of the cognitive functions and their measurement in terms of parameters reflecting performance and excellence, for example, IQ standards; and others are related to very traditional discussions in moral philosophy and

moral theology, such as the notion of free will and autonomy, often understood in the contemporary debate as self-determination. These categories tend to also import their normative value to first define and then perform possible enhancing applications: they are not fixed, or absolute, because they seem rather to report evaluations, interpretations and ways of looking at what can be considered possible human improvements. These characteristics and conditions seem to represent simple and single performances, which can punctually and singularly be controlled and improved, where the biological systems and functions are very complex structures and closely interrelated processes. These categories tend to be used often without introducing a critical analysis or searching for a deeper comprehension of their implicit premises, implications and meanings, regarding, for example, their relationship to and dependence on specific cultures, contexts and societies.

What does it mean to improve our humanity, in practical terms, while considering the possible anthropological meaning of this improvement in a more substantial way?

It seems possible, and in some respects very useful, to reconsider some major philosophical questions, as Immanuel Kant formulated them in his most famous Critiques:

1 What can I/we know?
2 What can I/we do?
3 What can I/we hope?
4 What is the human being?

In the present debate on enhancement, these four questions seem to be still relevant: they could represent some primary reference frames that make it possible to identify and understand where humanity wishes to go and what the meaning of the current research and development in this field could be. The enhancement debate specifically regards our limits and abilities and the opportunity of allowing enhancing interventions and treatments to modify and augment them.

Cognitive enhancement represents the possibility of improving our cognitive capacities, forcing and expanding the borders of our knowledge, allowing us to reduce some "natural" limits and to redefine what we are able to know. Physical, moral and psychological enhancement can potentially increase the ability of humans to live in a stronger and better physical condition in terms of resistance, energy and power on the physical level, to fulfil wishes and aspirations and to experience a higher moral perception and a stronger sensitivity on the moral level (as happens when we have feelings and attitudes like empathy and generosity or we develop a relevant sense of justice and responsibility).[10] This extension of some practical attitudes allows to improve our ability to act and could reshape human wishes and hopes.

It seems that through the contemporary enhancing interventions and substances we are improving our condition, therefore the answer to the Kantian

questions could very much change at the present. Actually, the anthropological question "What is the human being?" seems primary, considering the debate on enhancement and transhumanism. What does it mean to be human and how the human condition can manifest and express itself today? We can return to the main issue regarding enhancement on exactly this anthropological level. What parameters and criteria need to be considered and adopted if we intend to realize better humans, in terms of an amelioration of the human condition to the point of obtaining an "improvement of the value" of humanity?

If we consider what could contribute to improving us as human beings, along with the normative factors identified as driving enhancing interventions, we can identify other categories that reflect some primary existential traits and can be well expressed by the terms and notions of embodiment, authenticity and interiority. Embodiment can be interpreted – as it has been interpreted in the phenomenological tradition – as a way to stay and live in the world and a way to perceive and look at the world. In this tradition, the body represents a "cognitive geometral": human beings enter into contact with reality, interact and experience the world through the body, which represents the main cognitive condition and the main means of mediation with that reality.[11] Authenticity can be read in two main ways, as human "self-discovery" or as "self-creation" (Levy, 2011). In the first sense, authenticity means "being true to oneself", and it implies "listening to an inner voice to discover the manner of being that is distinctively one's own" (Ibid.: 311). In the second sense authenticity means self-creation, and it implies "striving to mould ourselves as we would like to be"(Ibid.: 312). Authenticity can become a way to create the selves anew, as Neil Levy observes, and it implies a close relatedness to the specific context and culture we live in. Interiority reflects the different ways in which philosophy and religion have understood and understand our capacity to reflect, to perceive and live an inner and an external life, to re-elaborate our lived experiences and our stories and to consider an openness to a transcendent dimension. The inner and spiritual experiences are strictly bound up with each other and they are related to the body. As Hannah Arendt observes,

> our soul-experiences are body-bound to such an extent that to speak of an "inner life" of the soul is as unmetaphorical as to speak of an inner sense thanks to which we have clear sensations of the functioning of our inner organs.
>
> (Arendt, 1978, p. 32)

There is an "inner life" of the soul exactly because we perceive and experience our body.

It seems we are facing more specifically a new era when and where humans are becoming "digital" humans. In this digitalization process, it is necessary to consider which roles the relationship with the material culture, with our

body and our materiality play. These also contribute to defining the moral, social and spiritual relationship with ourselves, through our body and our bodily condition, with other humans and living beings, with the environment and the world.

## 3 Digital humans and digital religion and spirituality: a return to the present, a look at the future

What impact will the significant technological and digital changes have on human life, spirituality, religious practices and beliefs? In the contemporary effort to improve and enhance the human condition at different levels, it may become important to also consider and obtain an "enhanced" and a digital spirituality.[12]

Some distinctive phenomena have appeared in recent years, such as the mega- and multisite churches, which represent new ways to create and live online religious communities and share religious practices and experiences through digital technologies.[13] In this situation space and time of religious meetings and communities can become very symbolic: a ritual and praying space can be recreated virtually online (Helland, 2013). The same can happen with religious objects, scanned by a smartphone and projected to recreate a particular religious environment (Hejazi, 2018). We assist as well to phenomena as the cyber memorial zones, realized in Korea to create an online remembrance for people who have died (Lee, 2006). These rites seem to be strictly related to local, mainly Shamanic traditions, and they imply a peculiar conception of relationship, practices and rites, space and time. Perhaps the adoption of these technologies could lead to new ways to live and experience spirituality, because they can transform some traditional religious practices in more symbolic ones. As another new technological mediation of reality, they need anyway to be studied further.

What could developing a digital spirituality mean? The human condition is marked evidently by a need of and a capacity for relationships. This means that we tend to be and become human in and through relationships at every stage of our life. We seem to be exploring new ways to relate with others and the community, but at the same time with ourselves and with a "transcendental" dimension of life. The devices that mediate this can be physical or virtual. In this scenario, many different possibilities to experience spirituality and live spiritually will become a reality, enabling us to probe new ways of considering ourselves, our bodies and the others. Any technological device that will enable us to improve our habits and attitudes can become a means that lets us improve our humanity, offering another step towards realizing and expressing our human condition.

This progression to a wider use of our digital abilities could allow and improve another evolutionary step in the direction of a more mature and advanced – biological and spiritual – condition. In some respects, it has been the progression of human beings to, first, standing and then to using our hands, that represented the evolutionary step in the direction of defining

human beings as they are. These bodily conditions allowed human beings to develop a different way of looking at reality and interacting with the world, with other animals and with themselves. Becoming digital could imply becoming better humans, in some aspects.

In the interpretation of the philosopher Jean-François Malherbe, spirituality lies in "assuming our human condition – our solitude, our finitude and our radical uncertainty" and in developing a harmonious relationship with it (Malherbe, 2014, p. 161).[14] If this definition of spirituality can be pertinent to describe some primary traits of human beings, every – digital or not – technology that can improve our ability to build a better relationship with these different existential dimensions seems to be interesting. The ability to be and stay in relationship with ourselves is a premise to enter into relationship with the other, to listen to them and to move on in the evolutionary process of being and becoming human (Han, 2016).

Some primary conditions and abilities remain essential in order to learn how to perceive ourselves better and to enter into relationship with the others and with the world. The Olympic motto "citius, altius, fortius" ("faster, higher, stronger"), which seems very pertinent to enhancement in terms of aspirations and expectations, is not the only possible maxim to consider. We can also conceive living, acting and improving in light of another motto that reminds us to move "lentius, profundis, suavius", i.e., in a slower, deeper and sweeter way (Langer, 1998). Maybe this approach can help us to improve and enhance our humanity and our attentive and empathic presence to ourselves, to others and to the world and can teach us how to live with the solitude, the finitude and the radical uncertainty that still remain the main traits of our lives.

## Notes

1 The website is www.bioedge.com; some other news are reported at the link: www.bioedge.org/bioethics/washington-post-features-symposium-on-transhumanism/11887
2 We refer here to the 2016 Presidential elections (http://transhumanist-party.org/, accessed July 16th, 2019); and the 2020 elections (https://transhumanist-party.org/tag/2020/, accessed February 2020).
3 N. Bostrom, "The Transhumanist FAQ". http://humanityplus.org/philosophy/transhumanist-faq/ (accessed August 7, 2019). See also Bostrom (2014). Two main arguments seem to support the transhumanist and post-humanist perspectives. The first underscores the poverty and the needs of the human species; the second considers her richness and a sort of "species" excess.
4 In the history of philosophy, there is a long tradition that supports this idea of a human incompleteness condition. Marchesini considers especially authors such as Thomas of Aquinas, Johann Gottfried Herder in the eighteenth century and Arnold Gehlen, Max Scheler and Helmut Plessner in the twentieth century. Gehlen talks of a "magmatic humanity" to describe the continuous readaptation of human beings and of the human species.
5 The dualism established in the past between nature and culture was a way to respond to a previous tendency to adopt a monistic interpretation of the specificity of human beings. The tendency at present – on the contrary – is to adopt the

paradigm of complexity, which combines different and plural epistemologies and logics.

6 Our translation from Italian.

7 Adopting the interpretation offered by the anthropologist Clifford Geertz, culture can be read as a "nature's motor, through the capacity of nature to retroact on the human-system" (Marchesini, 2002, p. 28).

8 Curiously, we can currently observe another phenomenon that allows understanding there could be a sort of progressive shift and hybridization among different species and different life's levels, as it happens for animals and humans. The creation of chimeras in laboratories implies that animals are modified through the introduction of human cells or tissues: these experimental interventions raise questions about a different, possibly moral status of the animals themselves and about what specifically defines human beings (Koplin, 2019).

9 Traditionally philosophy, religions and spiritual practices were attentive to develop wisdom to improve human life, on an existential and interior level: this represents the "wisdom orientation" of religion.

10 It has been observed that in terms of moral enhancement, the abilities and conditions to improve could be very different, because there are different possible interpretations of what "moral" can mean. Moral visions and orientations depend on the values a person or a society adopts as the main or most important ones for a good life in a specific society and at a certain time (Shook, 2016).

11 The expression of "cognitive geometral" is borrowed from the French phenomenologist Maurice Merleau-Ponty (Merleau-Ponty, 1962; Autiero & Galvagni, 2010).

12 The present, widespread development of the technological acting tends to underscore the relevance of superior cognitive abilities, in particular symbolic activities: among them religious beliefs and spiritual practices have always represented relevant symbolic activities.

13 Traditional religion and religious communities that found an online expression are called "religion online"; when religious groups are created on line, they represent "online religion" (Campbell, 2013; Vitullo & Campbell, 2016; Vitullo, 2019). Vitullo observes that "the 'real' and the 'virtual' lives can become integrated with each other in order to consolidate religious communities" (2019, p. 56).

14 Our translation from Italian. Malherbe defines spirituality as "the relationship that a subject establishes with his own transcendence" (2014, p. 162) and "what in human being is related to the question (and not to the assertion) of transcendence" (Ibid.: 196). Nobody is completely transparent for the other nor for her/himself and for this reason s/he remains "transcendent".

## References

Adorno, F. P. (2012). *Le désir d'une vie illimité. Anthropologie et biopolitique*. Paris: Kimé.

Arendt, H. (1978). *The life of the mind*. London: Secker & Warburg.

Autiero, A., & Galvagni, L. (2010). Religious issues and the question of moral autonomy. In J. Giordano & B. Gordijn (Eds.), *Scientific and philosophical perspectives in neuroethics* (pp. 134–145). Cambridge and New York: Cambridge University Press.

Benanti, P. (2016). *La condizione tecno-umana. Domande di senso nell'era della tecnologia*. Bologna: EDB.

Bostrom, N. (2014). *Superintelligence: Paths, dangers, strategies*. Oxford: Oxford University Press.

Buchanan, A. (2017). *Better than human: The promise and perils of biomedical enhancement*. New York: Oxford University Press.

Caenazzo, L., Mariani, L., & Pegoraro, R. (Eds.). (2017). *Convergence of new emerging technologies: Ethical challenges and new responsibilities*. Padova: Piccin.

Campbell, H. (Ed.). (2013). *Digital religion: Understanding religious practice in new media worlds*. London and New York: Routledge.

Chadwick, R. (2008). Therapy, enhancement and improvement. In B. Gordijn & R. Chadwick (Eds.), *Medical enhancement and posthumanity* (pp. 25–37). Dordrecht: Springer.

Damour, F., & Doat, D. (2018). *Transhumanism. Quel avenir pour l'humanité?* Paris: Le Cavalier Bleu.

Giorgio, G. (2017). *Cyborg: il volto dell'uomo futuro. Il postumano fra natura e cultura*. Assisi: Cittadella Editrice.

Han, B.-C. (2016). *Die Austreibung des Anderen. Gesellschaft, Wahrnehmung und Kommunikation heute*. Frankfurt am Main: S. Fischer Verlag.

Hauskeller, M. (2013). *Better humans? Understanding the enhancement project*. Durham: Acumen.

Hejazi, S. (2018). Religion2Go! Sperimentare la realtà virtuale (VR) nella superdiversità. *Annali di Studi Religiosi*, *19*, 213–227.

Helland, C. (2013). Ritual. In H. Campbell (Ed.), *Digital religion: Understanding religious practice in new media worlds* (pp. 25–40). London and New York: Routledge.

Koplin, J. J. (2019). Human-animals chimeras: The moral insignificance of uniquely human capacities. *Hastings Center Report*, *5*, 23–32.

Langer, A. (1998). Più lenti, più dolci, più profondi/langsamer, tiefer, sanfter. Suppl. *Notizie Verdi*, *17*.

Lee, J. S. (2006). *Digital spirituality and governmentality: Contextualizing cyber memorial zones in Korea* (Doctoral dissertation). Athens, OH: Ohio University.

Lee, N. (Ed.). (2019a). *The transhumanism handbook*. Cham: Springer.

Lee, N. (2019b). In search of super-longevity and the meaning of life. In N. Lee (Ed.), *The transhumanism handbook* (pp. 313–354). Cham: Springer.

Levy, N. (2011). Enhancing authenticity. *Journal of Applied Philosophy*, *3*, 308–318.

Malherbe, J. F. (2014). *Elementi per un'etica clinica. Condizioni dell'alleanza terapeutica*. Trento: FBK Press.

Marchesini, R. (2002). *Post-human: Verso nuovi modelli di esistenza*. Torino: Bollati Boringhieri.

Merleau-Ponty, M. (1962). *Phenomenology of perception*. London: Routledge.

Murray, T. H. (2009). Enhancement. In B. Steinbock (Eds.), *Oxford handbook of bioethics* (pp. 491–515). Oxford: Oxford University Press.

The President's Council on Bioethics. (2003). *Beyond therapy: Biotechnology and the pursuit of happiness*. New York: Reagan Books.

Roco, M. C., & Bainbridge, W. S. (Eds.). (2002). *Converging technologies for improving human performances: Nanotechnology, biotechnology, information technology and cognitive sciences*. Arlington, VA and Norwell, MA: National Science Foundation-Springer.

Shook, J. (2016). My brain made me moral: Moral performance enhancement for realists. *Neuroethics*, *9*, 199–211.

Stolyarov II, G. (2019). The United States transhumanist party and the politics of abundance. In N. Lee (Ed.), *The transhumanism handbook* (pp. 89–149). Cham: Springer Nature Switzerland.

Vitullo, A. (2019). Multisite churches: Creating communities from the offline to the online. *Online–Heidelberg Journal of Religions on the Internet*, *14*, 41–60.

Vitullo, A., & Campbell, H. (2016). Assessing changes in the study of religious communities in digital religion studies. *Church, Communication and Culture*, *1*, 73–89.

# 13 Experience and information

## Thoughts on spirituality in a time of information flooding

*Harald Walach*

Digitalization is factually everywhere. The promises of digitalization are virtually everywhere. Are the benefits of digitalization similarly everywhere? Even in religion and where religion is a lived experience, in personal faith and spirituality? In order to better understand this, it might be useful to start with a few distinctions and terminological clarifications.

### Distinctions and clarifications

#### *Religion, spirituality, experience*

When I speak of *religion* I mean a culturally and historically grown corpus of belief, ritual and moral behavior, stemming from and intended to induce a spiritual experience. As a *spiritual experience* I suggest we understand an experience of a transcendent reality that is beyond the scope and reaches of an individual ego. *Experience* I take to be a holistic insight into any situation or matter, comprising a cognitive, emotional and agent component. By that I mean: If I have understood, say the principles of market forces, in a cognitive understanding alone, this might neither stir me emotionally, nor motivate me to a different action. But if I have had an experience myself, for instance by having been pushed out of my rented flat because of real estate speculation and upgrading through improvements, I may have a firsthand experience that also touches me emotionally and will likely move me into action, for instance by joining a political group, writing about the situation or the like.

The notion of religion I am championing here is far from agreed upon. But I think it is a reasonable starting point to assume that any religion began, at one point, with a deep and holistic experience of reality that condensed, over time and with cultural interactions, to religious teaching, cults and rituals (Walach, 2015a, 2017). Even the Western Abrahamitic religions can be understood as arising from experience. This becomes clear if we understand the inaugurating events of those religions as chiffres for spiritual experiences (Hinze, 1983): Moses hearing the word of God and giving the law to the Jews, Jesus being baptized in the river Jordan, Muhammad being given the words of the Qur'an by the Archangel Gabriel. William James justly pointed

out that such experiences are at the base of religions and are qualified by their numinous nature, their spontaneous occurrence and noetic content (James, 1985). The important consequence of this view is: all cognitive structures, faith, belief systems, world views derived from a particular religion, and all behavioral injunctions, ethical and moral values and rules of daily living, are secondary or derived from the original experience. For instance, the archetypal Mosaic experience, visible in the tale of the burning bush in the desert, is about the One single, indivisible and holistic nature of this god: Being and Becoming itself, as was frequently interpreted. Therefore, there is no other God and it is logical and consequential to not worship other gods. The archetypal experience of the Israelites is being freed from slavery. Therefore the ten commandments start with the statements: I am the God who has led thee out of Egypt, the house of slavery. Hence you will not. . . . The moral injunction is consequent on the experience of freedom. And because the aboriginal Jesuanic experience is that of a loving reality, his teaching is about loving as an injunction (Douglas-Klotz, 1999, 2002; Schwarz, 1985).

Although there is little empirical information about spiritual experiences, the few data we have suggest that spiritual experiences are quite common. We conducted a survey in a representative survey of nearly 900 German psychotherapists and found that roughly two thirds of this sample reported having had at least one, some many, spiritual experiences themselves (Hofmann & Walach, 2011), and despite many protestations to the contrary, religion is central to many, even in the European countries according to the religion monitor (Huber, 2007). This, I suppose, is due to the fact that spiritual experiences are far more common than generally supposed. However, the prevailing naturalistic stance in our intellectual elite that assumes a materialist world view is sufficient to explain the world (Williams & Robinson, 2016) has put a taboo on this topic and tends to make people believe that religion, spirituality and associated experience is something for people who lack proper education and are not used to correct reasoning (Pinker, 2018; Walach, 2015b, orig. 2011, 2019).

Contrary to that I would argue that spiritual experiences as spontaneous events are commonplace and consequently a genuinely spiritual outlook on reality as well. Data suggest that many people nowadays are less bound by formal religions and there is a large category (Carmona-Torres, Kohls, Hood, Silver, & Walach, 2018; King et al., 2013; Smith & Orlinsky, 2004), in our data more than a third of the respondents who call themselves spiritual, yet not religious (Hofmann & Walach, 2011).

### *Digitalization*

Digitalization can be seen as the program of reducing the richness and complexity of our lived, analogous world to an algorithmic combination of simple bits, expressed as either-or sequences or mathematically as ones and zeros. Using that device, the richness of our sense experience, for instance

the many shades of colors or the varied combinations of overtones in instruments and voices, or the depth perception of our visual system can be modelled as a combination of bits that code for different colors and their shapes, or different sound combinations or vector geometries that code for spatial appearance and the like. Because the resolution of our senses has limitations, most people cannot really distinguish a pixilated from an analogous visual representation, especially since our sense experience is to some degree digitized in the first place and our neuronal system can be seen as an array of yes-no switches combined by algorithmic rules to networks of computation. A neuron either fires or doesn't – one-zero. And many one-zero-connections in a neuronal hub can be combined to represent complex internal or external information and it seems mind, spirit and inner experiences can be explained.

This is the theoretical and scientific side of digitalization. In everyday life digitalization is taking over more and more aspects. Without Google-Maps people seem to be increasingly unable to orient themselves within their environment, or maybe, because of Google-Maps they will soon increasingly be unable to orient themselves, as basic functions, such as localization in three-dimensional space, orientation in reference to spatial directions are being delegated to intelligent systems and therefore increasingly lost in humans. Young people seem to be ever more dependent on information from Social Networks and delegate social contacts and contact time to those new media. A recent representative study in the US documented that children between the age of 5 and 13 spend up to 12 hours behind various screens already, testifying to the powerful cultural influence of digitalization on everyday life (Pea & al., 2012; Walsh et al., 2018).

With the 5G-mobile network the promise is that Internet and thereby digitalization will be everywhere. Our planet will be immersed in a singular evolutionary experiment in high frequency pulsed microwave radiation from more than 12,000 space-bound satellites that will irradiate the whole planet. Where we had electromagnetic silence for billions of years – in the spectrum between about 10 kHz radiation from natural sferics and 300 nm wavelength or some terahertz frequency from infrared and visual light radiation we will now have a multitude of frequencies, everywhere, at all times, inescapably. But this radiation aspect is not the gist of my argument, although I would like to point this out, because it is inextricably intertwined with the digitalization movement.

Digitalization, thus, will cover the whole world, from the highest mountains of the Himalaya to the remotest water hole in the desert of Gobi. Now: should not, could not, must not religion, organized and unorganized religion, make use of this situation? Yes, no and certainly not. Let me explain.

## Digitalization and religion – yes

There is certainly a promise here. Similar to the fact that the invention of printing in the fifteenth century was the basis, if not the precondition for the

Reformation and thus promoted an important change in religious culture, especially the empowerment of lay people, digitalization might promote religion. Religious leaders, speakers and propagandists can reach billions of people over social media, YouTube and similar outlets. Information about religious teachings – the holy scriptures of the religions or other texts – and religious opinions are easily retrievable. We leave aside the fact that the new medium also allows for specific propaganda to distort information, as this is ubiquitous with every medium. People can link up via Facebook and similar features of the Internet. Virtual services and prayer groups, religious ceremonies on the web etc. may provide similar services as the introduction of transmission of masses and prayers through radio and TV brought to our sickly and bedridden grandparents of the fifties and sixties, much to their comfort.

In that sense, digitalization is progress, not only general but also for religious teaching and participation, probably for those who are actively looking for information and for whom information and participation are key.

## Digitalization and religion – perhaps

There is a caveat, though. For those, who know what they are looking for in principle, the Internet is a rich source. It helps with finding and providing information. It saves us time and running around. It provides various views. However, for those who do not know what to look for and how to distinguish good from bad and both from useless the Internet can be a trap. The search algorithms of the search engines have no value system. They only know one criterion: frequency of clicks. And frequently they also operate according to deeply hidden preferences programmed into them according to economical considerations, for instance if powerful stakeholders demand or pay for certain contents to be upgraded or downgraded. Users who are unaware or simply lazy can be easily tricked into accepting the first hits of a search without bothering to go to further pages. Thus, biases that are already present get amplified and become self-reinforcing circles of deception.

The nerds of the Internet age are, not always but frequently, enthusiastic and oftentimes naturalistic enthusiasts. They often live in a secular expectation that the new age of computer technology, combined with artificial intelligence and scientific progress will relieve the world from all suffering, and thus make religion superfluous, because paradise will have arrived (Pinker, 2018). Transhumanism, not always but often, is their new religion (Bishop, 2010), and their ideal the cyborg, a kind of postmodern centaur, half human, half digital creature. Religion as we know it is very often not only not known to these young people, it means nothing, or worse, every evil, to them.

Many of these people are enthusiasts of the free Internet, free knowledge and free sharing of information, which is a genuine human and humanistic impulse. Many are actively involved in Internet projects, such as Wikipedia, the free encyclopedia. This leads to many subtle but severe biases that

are anti-religious in their essence. This biased information comes as vetted through a system of multi-authorship and thus looks more innocent than it is.

The same could be said for many other projects. Although technically forbidden, paid authorship on Wikipedia is now the rule for many pages, as can be seen from some discourse analytical studies (e.g., Beyersdorff, 2011). Do religions have the same chutzpah and resources to pay for an uncensored presence in the net as, say, pharmaceutical or other companies, political parties or countries? Thus, the anarchy of the net and the free availability of information, good as it is and welcome as it may be, is also deceptive. While in former times a publishing house, an editorial board, the competence of an encyclopedic publishing team guaranteed the solidity of the information, now there is no guarantee, no guidepost except one's own instinct and knowledge, and no third-party evaluation or quality control. It is exactly this universal freedom that makes the Internet not only vulnerable but also prone to hijacking and misuse. This is certain curable, but currently it is not only a benefit to religion, it is also a threat.

## Digitalization – certainly not

However, there is a clear danger that I see and would like to point out. It has to do with the basis of religion in spirituality and the grounding of spirituality in experience. Spiritual experience is, on the one hand, fickle, unstable and cannot be produced at will. However, there is a long tradition, practically in all spiritual traditions, of spiritual practice that will either facilitate or reinvigorate spiritual experiences, whether through certain kinds of prayer, like the rosary prayer or contemplative prayer and practice in the Christian tradition, meditation, mindfulness practice or devotional exercises in the Eastern tradition, or nature experiences in more nature based types of spirituality (Lemke, 2018). They cannot guarantee spiritual experiences, but they make them more likely, and where they have occurred, the purpose of such exercises is normally to anchor experiences in life and make them fruitful for lived practice.

If we now ask, whether digitalization can help here, then the answer is, maybe in a very restricted sense. Instead of ringing church bells, one can let the smartphone ring. Instead of having a meditation timer that hums after 25 minutes of meditation practice, one can let the smartphone sound a nice gong. Instead of listening to a meditation teacher's talks, one can watch thousands of such talks on YouTube. Instead of memorizing the particulars of a certain meditation practice, prayer exercise or similar, Tai Chi or yoga moves, one can use instructions on the Internet. All these uses and some more can be beneficial when used with distinction. But people trick themselves easily into believing that listening to a YouTube-talk on mindfulness is as good as practising mindfulness, similar to people listening to a priest preaching about being loving wives, husbands and parents believing that now they are.

But the gist of spirituality is spiritual practice, i.e., sitting down and meditating for a certain amount of time, or practising one's yoga or other exercises. And in the consequence carrying over the mindful state, the attentive calm, the relaxed physical state into everyday life. But how is that to be done, if at the other side of the 30 minutes yoga, meditation, prayer or whatever practice we are faced with a plethora of information, demands on the social networks, fireworks of Twitter news and a flooding of Instagram images whose result is, after minutes of exposure to them, to have all but wiped out the effect of our 30 minute practice? The rapid pace of life and information produced by the digital age and the states, practices and goals of spirituality are to some degree irreconcilable, it seems to me. I list some of those in the following table.

The digital age speeds up information processing and provision, demands a division of attention, and thereby generates ever more hunger for novelty and new input. This, in the end, leads to a more or less confused state of mind and a fragmented field of consciousness. People tend to get addicted to the next email or Facebook message coming in; it may contain the important decisive new information after all. Thereby they drift away from what is there and what is the real richness of their lives, their children for instance, that want to tell them something. One has ample opportunity observing mothers or fathers not really taking notice of their children, while they are dealing with some message or information. Not only is there the danger of professional demands infringing on private life. There is also the much more general danger of literally losing one's mind to the ever present virtual

*Table 13.1* Digitalization and spirituality and their impact on various cognitive and mental systems

| | *Digitalization* | *Spirituality* |
|---|---|---|
| Speed of informational processing | Increased, high | Reduced, low (at least initially) |
| Amount of informational challenge | High | Low |
| State of consciousness | Fragmented, cementing subject-object separation | Unitary, striving for non-dual states |
| Moment to moment awareness, mindfulness | Distracted, mindful states are difficult to sustain, jumping | Ideally generalized to everyday activities |
| Attention | Many foci, multi-tasking | One focus, no multi-tasking |
| Affective state | Dissatisfied, hungry for novelty | Satisfied with what is |
| Decision-making and criteria | Unclear, difficult due to overload | Clear, increasingly easy due to focus and clarity |

reality, thereby forsaking reality as we have it. This reality, however, is where our lives happen. Where our friends, our partners, our spouses, our children wait for us, need us and also give us love, attention, respect and understanding, what we in turn need. This, I fear, we as a culture are in the process of losing to a digital chimera and surrogate reality, while we destroy the one we have, inadvertently even.

Spirituality, in contrast, strives to anchor people in the reality now. In the Christian teaching it is the people we are faced with, our "neighbours" or "brothers and sisters", where we meet God. This is, because the reality is here, and it is God himself and herself, for God is "he who is the I am", present, we might add. Here Christian-Jewish and Eastern spirituality meet up easily. It is always the present moment where the divine ore reality opens itself up. The way to get there is practising being present. Undivided. Uncompromising. With unwavering dedication. The result, so various sources of spiritual intelligence tell us, is a serene affective state long term, contentment with our lives and satisfaction with the small things in life. This should not be confused with dull acquiescence to all that happens. It might well mean that the result is political or other types of action. But even that will be carried by a different affective state.

Becoming digitally religiously native will not necessarily mean to become a more spiritual or religious person. It may in fact make it more difficult. The rich ones may have difficulties passing through the ear of a needle, Jesus used to say. In original parlance this meant the small door for foot passengers in a large gate, where camels would not fit through. Being burdened with too much information and too much equipment might be the postmodern equivalent to being a camel trying to pass through that small gate.

## The consequence: a culture of consciousness

Where does that leave us? Should we give up smartphones, emails, Internet accounts? Perhaps some, and not others. Perhaps sometimes, and during some time in the day or in a year, depending on one's habit. The crucial point, it seems to me, is to install an anchor of peace and quiet in one's life, ideally a regular time of real time out, no media, no music, no reading, no nothing. Only breathing or sitting still and observing one's mind or devoting the time to some similar practice. Regularly, like showering in the morning and brushing our teeth in the evening. We pay a lot of attention to our bodies and our physical well-being. We should be paying at least as much attention to our consciousness and our mental well-being. And part of such a programme is taking time out from digital media. The Pali language has a word for this: *dhyana*, cultivation or culture of consciousness. The old German Indologists who first translated Buddhist texts translated this as "meditation". But it is a much broader term. It means taking care of our consciousness and mind like a gardener is taking care of her garden.

If we do that regularly, we will, after some time, discover what is disturbing for our peace of mind and what is helpful. The Christian tradition used to call this "discernment of spirits". A less loaded term might be "discretion". We will then be more easily able to see what is good for us under what circumstances. Perhaps sometimes it might be good to not look into emails, and sometimes it might be better to do that? Perhaps some social media is good for us because it connects us with our family far away and others are rather disturbing because they are too time-consuming? The generic skill needed in our digital age is the capacity to distinguish, to decide and to be able to not only make decisions but also stick with them. The better we are anchored in the depth of our inner reality the better we will be able to do this. Julius Kuhl pointed out in his work that we have two antagonistic systems (Baumann & Kuhl, 2002; Kuhl, 2000, 2001). One is very slow and sequential, explicit and associated with negative affect. He calls this the error-detection system. It is operative, when we are focusing, digitally as it were, on sequences of bits and pieces of information. Long term it creates negative affect. And more importantly, it competitively inhibits the complementary system, extension memory, which is a loose network system, operating in parallel, implicitly, quickly. We often cannot give reasons for its outcome, but it feels good, because this system generally generates positive affect. It is a decision system, and it normally connects all the information available with our implicit notion of self and our history, or our inner wisdom, one might say. Interestingly, these systems are complementary and inhibit each other.

Spiritual practice of meditation, mindfulness and religious practice is more an activity that fosters this holistically operating network that helps making decisions, and this is also the reason why it is normally associated with positive affect. The outcome of the operation of this system is inhibiting negative affect and thereby allowing positive affect to emerge. And it is the natural balance of the sequential, digital error recognition system that we always employ when we are dealing with information of any kind. Digitalization and the information that comes with it is not the problem as such, but the exclusivity of its demands and the lack of balance.

Therefore, it seems to me, we need mindfulness and spiritual practice, or any religious practice for that matter, to counterbalance the effects of information overload and the ever present digitalization and the negative affect associated with it long term. Digital training in schools should not only teach how to use digital devices. That is what children learn quickly by themselves. They might need some help with critically evaluating content. But the most help they will need in balancing the mental mode associated with it through compensatory modes of consciousness and practices. Teaching spiritual practice at school might be one such option. And some critical distance to the general enthusiasm of digitalization that seems to be mostly an economic bonanza for those who are able to exploit it, cloaked as human progress. The question we should keep asking: Is it really progress?

## References

Baumann, N., & Kuhl, J. (2002). Intuition, affect, and personality: Unconscious coherence judgments and self-regulation of negative affect. *Journal of Personality and Social Psychology*, *83*, 1213–1223.

Beyersdorff, M. (2011). *Wer definiert Wissen? Wissensaushandlungsprozesse bei kontrovers diskutierten Themen in "Wikipedia – Die freie Enzyklopädie" – Eine Diskursanalyse am Beispiel der Homöopathie*. Berlin: Lit-Verlag.

Bishop, J. P. (2010). Transhumanism, metaphysics, and the posthuman god. *Journal of Medicine and Philosophy*, *35*, 700–720.

Carmona-Torres, J. A., Kohls, N., Hood, R. W., Silver, C. F., & Walach, H. (2018). The association between different spiritual practices and the occurrence of Exceptional Human Experiences in a non-clinical sample. *Journal for the Study of Spirituality*, *8*(1), 49–64.

Douglas-Klotz, N. (1999). *The hidden gospel: Decoding the spiritual message of the Aramaic Jesus*. Wheaton, IL: Quest Books.

Douglas-Klotz, N. (2002). Beginning time: A new look at the early Jewish/Christian ritual time. *Cosmos: Journal of the Traditional Cosmological Society*, *18*, 1–7.

Hinze, O. M. (1983). *Tantra Vidya: Wissenschaft des Tantra*. Freiburg: Aurum.

Hofmann, L., & Walach, H. (2011). Spirituality and religiosity in psychotherapy: A representative survey among German psychotherapists. *Psychotherapy Research*, *21*, 179–192.

Huber, S. (2007). Are religious beliefs relevant in daily life? In H. Streib (Ed.), *Religion inside and outside traditional institutions* (pp. 209–230). Leiden: Brill.

James, W. (1985). *The works of William James: The varieties of religious experience*. Cambridge, MA: Harvard University Press.

King, M., Marston, L., McManus, S., Brugha, T., Meltzer, H., & Bebbington, P. (2013). Religion, spirituality and mental health: Results from a national study of English households. *The British Journal of Psychiatry*, *202*(1), 68–73. doi:10.1192/bjp.bp.112.112003

Kuhl, J. (2000). A functional-design approach to motivation and self-regulation: The dynamics of Personality Systems Interactions. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Self-regulation: Directions and challenges for future research* (pp. 111–169). New York: Academic Press.

Kuhl, J. (2001). *Motivation und Persönlichkeit: Interaktionen psychischer Systeme*. Göttingen, Bern: Hogrefe.

Lemke, J. (2018). *Exploring human nature: A reflexive mixed methods enquiry into solo time in the wilderness*. Leiden: Sidestone Press.

Pea, R., & al., e. (2012). Media use, face-to-face communication, media multitasking, and social well-being among 8 to 12 year-old girls. *Developmental Psychology*, *48*, 327–336.

Pinker, S. (2018). *Enlightenment now: The case for reason, science, humanism, and progress*. London: Penguin.

Schwarz, G. (1985). *'Und Jesus sprach' Untersuchen zur aramäischen Urgestalt der Worte Jesu*. Stuttgart: Kohlhammer.

Smith, D. P., & Orlinsky, D. E. (2004). Religious and spiritual experience among psychotherapists. *Psychotherapy: Theory, Research, Practice, Training*, *41*, 144–151.

Walach, H. (2015a). *Secular spirituality: The next step towards enlightenment* (Vol. 4). Cham, Heidelberg, New York, and Dordrecht: Springer.

Walach, H. (2015b (orig. 2011)). *Spiritualität: Warum wir die Aufklärung weiterführen müssen*. Klein Jasedow: Drachen Verlag.
Walach, H. (2017). Secular spirituality: What it is. Why we need it. How to proceed. *Journal for the Study of Spirituality*, *7*(1), 7–20.
Walach, H. (2019). Schöne neue Welt? Ein Essay über Steven Pinker (2018) Enlightenment Now. *Aufklärung und Kritik*, *26*(2), 196–208.
Walsh, J. J., Barnes, J. D., Cameron, J. D., Goldfield, G. S., Chaput, J.-P., Gunnell, K. E., et al. (2018). Associations between 24 hour movement behaviours and global cognition in US children: A cross-sectional observational study. *The Lancet Child & Adolescent Health*, *2*, 783–791.
Williams, R. N., & Robinson, D. N. (Eds.). (2016). *Scientism: The new orthodoxy*. London: Bloomsbury.

# 14 The correlation between ethics and technology

*Peter G. Kirchschlaeger*

## 1 Introduction

The relation between ethics and technology can be understood as an interaction of a source of ends (ethics) with a source of means (technology). After assessing this possible element of the correlation between ethics and technology in a first step, it will be elaborated in a second step what technology brings to ethics (e.g., innovation), and what ethics brings to technology (e.g., orientation). On this basis, the challenges ethics creates for technology respectively technology creates for ethics will be discussed in a third step. In a fourth step, human rights as a possible ethical point of reference for technology in order to seize the opportunities and in order to meet the challenges from an ethical perspective will be discussed.

## 2 Ends and means

### *2.1 Justifying ends*

> If there is one thing the great institutions of the modern world do not do, it is to provide meaning. Science tells us how but not why. Technology gives us power but cannot guide us as to how to use that power. The market gives us choices but leaves us uninstructed as to how to make those choices. The liberal democratic state gives us freedom to live as we choose but refuses, on principle, to guide us on how to choose.
>
> (Sacks, 2015)

Ethics could play the role of providing meaning. It could represent a source of ends – ends as, e.g., survival and life with dignity for all humans (Kirchschlaeger, 2013a, pp. 194–195), peaceful coexistence and sustainability (Armand, 2012, pp. 113–116).

It is within the ethical dimension where questions about the ethical legitimacy of horizons of meaning and of ethical ends are discussed. Humans analyze what should be and why it should be. Humans evaluate, decide and make an ethical judgement. It is part of ethics to act accordingly – to act

ethically (Pieper, 1994, pp. 17–48) – which, in other words, means to follow the ethically justified ends.

> Ethics, whether in the form of issuing direct enjoinders to do or not to do certain things, or in the form of defining principles for such enjoinders, or in the form of establishing the ground of obligation for obeying such principles, deals with values relating to human conduct. It is concerned with action or non action.
>
> (Armand, 2012, p. 114)

Finally, ethics embraces the ethical justification of ethical ends, respectively the ethical justification of ends. Because of their claim of universality as part of a rational or critical ethics, these justifications need to satisfy the requirements of a rational ethics or ethics.

> A rational or critical ethics is one that claims for itself rational justifiability for its principles. Ethical principles are rationally justified if they are generally endorsed by, that is to say acceptable to, all affected persons, given their full equality and effective self-determination.
>
> (Koller, 1990, p. 75)

### *2.2 Providing means*

In order to achieve these ethical ends or ethically justifiable ends, humans use adequate means. These means can also be produced by technology – technology based on basic science and applied science leading to growth and welfare and embedded in the program of living with nature (not so much in the program of commanding nature) (Bacon, 2004) for the benefit of humans.

Technology can serve ethically good ends and can be understood as a prosthesis – in the service of life and society (Schuurman, 2010, pp. 107–127). "Continuing advances in scientific and technological innovations are essential to modern societies. Historically, such developments have improved living conditions in both developed and developing countries" (Lucchi, 2016, p. 4).

Originating from the Greek term *technologia* combining *techne* (art, technique) and *logos* (animating principle pervading the universe), technology entails in the *logos* the pursuit of a higher end or meaning. Out of this understanding of the correlation between technology and ethics there emerges the following challenge of the present:

> It is a time when technology can bring wonders to one's life. It is a time when I ask myself whether all of these technological achievements have made us better human beings! A robot can be programmed to act good or bad, but who will demarcate human actions?
>
> (Bashir, 2000, p. 92)

It would be too reductionist though to describe technology as an instrumental pursuit of an end with a means produced to reach this end (Ortega y Gasset, 1949, pp. 90–105; Hubig, 2007, p. 48). Technology also produces the conditions for the success of instrumental pursuit of an end and continues working on them. Nature is transformed by technology in an environment of technological systems for the benefit of humans who try to balance resources and dangers of nature in calculable and assessable chances and risks (Hubig, 2011, p. 170).

Furthermore, technology can also develop its own laws and transform from being automatic towards autonomy (Ellul, 2008; Kirchschlaeger, 2016b, pp. 354–366). Possible ends emerging out of technology could be among others "technology for the sake of technology", "what can be made must be made" (Schuurman, 2010, p. 123) or "efficiency". The current digitalization and robotization of society and economy and the use of artificial intelligence (Kirchschlaeger, 2016a) can serve as concrete examples for this potential of "autonomous" technology because at their centre are self-learning-systems which no longer need any human input in order to improve and to optimize their own performance (Frey & Osborne, 2013, pp. 1–72; Rotman, 2013). This self-learning can consist also of "intuition" as, e.g., the win of the Go-game by robots also based on "intuitive" decisions can show (Nature, 2016; Kirchschlaeger, 2017b, pp. 241–249), or of strategic reasoning with imperfect information as, e.g., the win of a marathon 20-day poker competition can demonstrate (Spice, 2017).

If the pursuit of efficiency represents the exclusive scope of technology three observations are provoked: First, technology striving for efficiency is neither independent from any ends or an end itself, nor ethically neutral but serving a clear end: efficiency. Or the affirmation that technology is not a means which serves any ethical end, is in itself a normative statement assuming no end or technology as an end for technology – a normative statement which needs to be justified ethically meeting the required criterion mentioned previously.

Second, technology inherits a social and an ethical dimension.

> Technology cannot be understood as an instrument for bringing about goals that are external to the contexts in which it operates, but the relational contexts in which technology functions are imbued with values which demand consideration. Thus technology, as it actually operates in concrete situations has a contextually dependent ethical quality. Technology creates a ethical situation, and this situation should provide the context for decision making.
>
> (Buchholz & Rosenthal, 2002, p. 48)

Innovation as a core aspect of technology can be understood as "making something new that has ethical implications" (Enderle, 2015a, p. 10).

Third, the pursuit of efficiency as the exclusive scope of technology leaves technology without any raison d'être. "The process of technological

development hurtles ahead blindly without a normal sense of balance. As we can see from nuclear weapons and environmental degradation, the effects on human society are immense" (Shibasaki, 2005, p. 497). The way it is advancing, technology runs the risk of detaching itself from any horizon of meaning and of alienating itself from humanity and nature.

> The human artifice of the world separates human existence from all mere animal environment, but life itself is outside this artificial world, and through life man remains related to all other living organisms. For some time now, a great many scientific endeavors have been directed towards making life also "artificial", towards cutting the last tie through which even man belongs among the children of nature. . . . The question is only whether we wish to use our new scientific and technical knowledge in this direction, and this question cannot be decided by scientific means; it is a political question of the first order and therefore can hardly be left to the decision of professional scientists or professional politicians.
>
> (Arendt, 1958, pp. 2–3)

In other words, the raison d'être for technology is not technology-based; it cannot be found out, defined and justified by technology (Jennings, 2010, p. 27).

Beyond that, technology can also be abused for other ends (European Group on Ethics in Science and New Technologies to the European Commission, 2014), distancing themselves from their original ends, striving exclusively for efficiency disregarding any higher end or meaning (Shibasaki, 2005, pp. 487–498).

However, ethical ends would still be distinguished from other ends. These other ends would undergo a ethical judgment on the basis of ethical ends. Bertarelli (2002, pp. 49–50) states: "We never carry out research for the sake of research . . . if there is no purpose and if there is no reason, we reject the innovation and we do not pursue it". The former point emphasizes the orientation towards another end of research, the latter shows that the characteristics of innovation require an ethical assessment of innovations (Kirchschlaeger, 2013b, pp. 1–17). One should overcome the naïve assumption that every technological progress and every innovation is a ethically good innovation. "Given the immense ambiguities of innovations – in themselves and in their consequences, the ethical scrutiny of innovation is a dictate of reason that should not be ignored any longer" (Enderle, 2015b).

It needs to be added though that technological progress depends also on basic research which is done for the sake of basic research. Even in this area a decision – which can find its foundation in ethical ends – needs to be taken in which basic research is prioritized and gets funded. Facing the scarcity of financial resources for research and technology and at the same time confronted by global pressing problems, a setting of focus and priority seems to be necessary. Finally, the question must be addressed as to who is benefiting

from results and successes of technology, respectively benefiting the most (UN, 2008; Shaver, 2015, pp. 411–430; Donders, 2015, pp. 486–503; Chapman, 2009, pp. 1–36).

### *2.3 Way of functioning of technology*

Looking at the correlation between ethical respectively ethically justifiable ends and means provided by technology in a context partly created by technology, a further element needs to be taken into account: perceiving technological development and process as a linear process pursuing a well-defined scope would probably not correspond with the present day theory and reality of technology (Kuhn, 1962). Technological innovations are often the result of small steps and represent regularly random products (Boutellier, Heinzen, & Raus, 2010, p. 136). "Technology is not ordinarily developed after carefully considering the various possible ramifications. In most cases a new technology is developed because it promises major short-term benefits and is judged not to cause any immediate problems" (Shibasaki, 2005, p. 489).

In addition, the speed of technological advancement outpacing normative considerations represents another characteristic of the way of functioning of technology.

Beyond that, its complexity should not be underestimated.

> First, engineering and technology development typically take place in collective settings, in which a lot of different agents, apart from the engineers involved, eventually shape the technology developed and its social consequences. Second, engineering and technology development are complex processes, which are characterized by long causal chains between the actions of engineers and scientists and the eventual effects that raise ethical concern. Third, social consequences of technology are often hard to predict beforehand.
>
> (Dorn & Van de Poel, 2012, p. 2)

Furthermore, technological action should be considered distributed and collective rather than individual (Lenk & Maring, 2001, p. 100) without though introducing categories like fate and tragedy in order not to be too harsh with technology (Coeckelberg, 2012, pp. 35–48). Therefore various actors should be identified as subjects of responsibilities (Coeckelberg & Wackers, 2007, pp. 235–248). Identifying them represents a complex task. The identification of subjects of responsibility should still be implemented in order to build an atmosphere of professionalism and accountability – not only out of respect for the objects of responsibility (Lenk & Maring, 2001, pp. 93–107). Complexity cannot serve as an excuse liberating from legal or ethical obligations and responsibilities because ethical and legal norms keep their validity even in complex situations and contexts.

By overcoming the too simplistic ends-means framework and by considering the characteristics of technology on the one hand and respecting ethics as source of ethical ends respectively of ethical legitimacy of ends on the other hand, perhaps an attempt to grasp the reciprocal interactions and the reciprocal challenges could inform the understanding of the relation between ethics and technology.

## 3 Reciprocal interactions

The correlation of ethics and technology can be understood based on reciprocity as both – ethics and technology – contribute to each other. E.g., ground-breaking ideas in technology and their successful application provoke a concrete impact in ethics as technology creates value, solutions for societal challenges and innovation. "Science and technology haven shaped modern society, economics, politics, law and culture. They deeply affect the lives of all people and they are now central features of our social and commercial landscape" (Lucchi, 2016, p. 6). Even specifically in the ethical dimension, technology leads to innovation and dynamics because the societal and individual transformation based on technology needs to be taken into account in ethics as well (Kernaghan, 2014, pp. 295–317).

Beyond that, smart technology is influencing (e.g., by nudging) (Mathis & Tor, 2016) at least individual lives – if not even the ethical dimension of individual lives (Guthrie, 2013, pp. 324–337). At the same time, ethics contributes to technology, e.g., by stimulating technological innovation, by recognizing technological inventions (Lucchi, 2016) and by providing ethical guidance.

> Technology must be allowed to augment living where it can, but cannot be allowed arbitrarily to suppress ways of life. Thus, ethics does not presume against technological change, but must be a part of the formulation of how change is translated into advancement or repression.
>
> (Rainey & Goujon, 2011, p. 174)

One needs to go even further stating that ethics belongs to technology. "The idea of scientific knowledge as value-neutral is simply incorrect. Values are intrinsic to the making of science and technology, and they both reflect and transform particular values" (De Melo-Martín, 2010, p. 9). Horizons of meaning and ethical ends inform technology in an ethical sense. The discussion about the difference between notions like "ethical technologies", "technical tools" (Engineering and Physical Sciences Council, 2011), "intelligent computer interfaces" (Van Est & Stemerding, 2012) or "socio-technical systems" (Manzeschke, Weber, Rother, & Fangerau, 2013) show the openness of technology for ethics – including the alternative:

> When we talk about robot ethics, we should talk about normative ethics for the use of robots, i.e. right and wrong conduct of robots is the

> responsibility of the robot users and not of the robots themselves . . . a robot should not be ethical by itself; it should be ethically used. Therefore, robots should be conceived as implicit ethical agents.
>
> (Krenn, 2016, p. 17)

Doubts can arise facing the notion of "implicit ethical agents" due to the term "ethical agents". "Agency" respectively "agents" (Griffin, 2001, pp. 311–312) can be understood as "deliberating, assessing, choosing, and acting to make what we see as a good life for ourselves" (Griffin, 2008, p. 32). But at the end of the day, this discussion implies the link between technology and ethics.

Beyond that, while the technology community is aware of its legal obligations and legal compliance standards, it strives for the respect of ethical principles in its work as well, e.g., honesty, objectivity, independence, impartiality, fairness, responsibility for future generations.

At the same time, a globalized technology community faces several traditions, cultures, religions, world views and value systems what can lead to ethical challenges. Ethical guidance can support technology in overcoming these challenges and in benefiting from the chances of this diversity and heterogeneity.

Furthermore, ethics can critically examine the legal obligations and legal compliance standards of the technology community on a regular basis. This should lead to a continuous optimization of the legal framework for technology.

Besides, ethics can help in the process of agenda-setting in technology not only in defining the right priorities but also in framing adequately the sphere of influence and responsibility of technology.

Finally, while technology contributes to the progress of ethics, it is obvious that at the same time there is need for ethics in technology in order to be able even to conduct the necessary research, discussions and studies. Technology can be the victim of infringements of its freedom, of attempts to block innovative and creative approaches and of oppression of ideas, concepts and discoveries. Reasons for these transgressions can be putative "absolute truths" or the enforcement of old and existing economic or political power structures. The danger still exists that members of the technology community cannot conduct their research freely and independently. Therefore there is a need for legal and ethical norms supporting and protecting technological progress.

## 4 Reciprocal challenges

At the same time, ethics can limit technology as well. E.g., health- and safety-guidelines, patents, legal ownership of intellectual property rights, competition policy, consumer protection and ethical codes of conduct belong to this category. This impact by ethics can be perceived as blocking and hindering technological innovation.

Beyond that, technology must respect ethical principles. E.g., "developers should strive at creating artificial agents whose actions are constrained in such a way that unethical outcome can be avoided" (Krenn, 2016, p. 25).

Among others, the dignity of all humans can represent a boundary for technology. Therefore technology does not have the permission to treat humans as means but only as ends (Kant, 1974; Duewell, 2010). Furthermore, technology must also respect the privacy of all humans. This way, technology is challenged by ethical norms (see about technological progress, its ends, its foundational values, its societal importance, and its limits, using the examples of stem cell research and research on human beings (Kirchschlaeger, Belliger, & Krieger, 2003, 2005).

Paradigmatically, in the area of automatization, digitalization, robotiziation and the use artificial intelligence, technology can follow heteronomously the ethical programming by humans (Wendell & Allen, 2009; Kirchschlaeger, 2017a).

At the same time, ethics faces challenges by technology as well. Technological progress is speeding up. The intervals for new technologies and technological applications get smaller and smaller. Ethics and law run the risk of being constantly outpaced by technology. They struggle to keep up with technological progress. The perception of this risk is based though on two misconceptions: First, it understands ethics as reactive instead of proactive, and second,

> some observers of modern culture do note disparities and tensions between contemporary doing and making, between ethics and technology. They complain that, while technology has advanced dramatically, our ethical attitude in dealing with it has not. But this complaint is as radically mistaken as the general divorce of doing from making. It fails to see that a technological accomplishment, the development and adoption of a technological device always and already constitutes a ethical decision.
>
> (Borgman, 1992, p. 110)

Beyond that, ethics is challenged more and more not only by human curiosity striving for new inventions and solutions but by linked substantial economic interests and power (Buchholz & Rosenthal, 2002, pp. 45–50). E.g., in the area of digitalization, robotization and the use of artificial intelligence, ethics must deal with an attitude that the legal system of a nation-state is violated as long as the economic benefits of these acts are higher than the sanctions. The defence of the ethically justifiable position that not everything which is doable is ethically good meets the opposition of potential benefits and economic incentives. Similar pragmatic patterns of argumentation from a perspective of technology dominate the discussion, e.g., that closing the gate on technology is not an option at all; that the implementation of limiting technological advancement with legal and ethical norms is impossible in a globalized world; that the identification of the subjects of responsibility in the area of technology is too complex; and that the risk-assessment of technology remains imprecise and ineffective.

Finally, the impression emerges that ethical concerns seem to be themselves only results of the same process of technological progress (Habermas, 2001, p. 49).

While reciprocal challenges between technology and ethics can obviously arise, the responsibility (Kirchschlaeger, 2014, pp. 29–54) of humans is even growing due constantly increased creation of an artificial world and of "a technological simulacrum of natural life" (Jennings, 2010, p. 26) and the corresponding power and influence of humans. What do humans have to do to live up to this responsibility? How should one deal with the previously-mentioned reciprocal challenges? Is "anything goes" the solution to this situation? There is a demand for ethical guidance which can be provided by an ethical point of reference discussed as follows.

## 5 Ethical points of reference for technology

Ethical points of reference giving orientation in ethical questions, issues and problems concerning technology can have their origin in traditions, cultures, religions, world views and philosophies. In a globalized world though technology can on the one hand embrace the entire planet, and on the other hand provoke an impact on all humans. Therefore possible ethical points of reference for technology gain relevance if they can claim universality and are independent from a specific tradition, culture, religion, world view and philosophy.

Human rights fulfil these criteria for an ethical point of reference for technology at the utmost. Human rights in their ethical dimension (Kirchschlaeger, 2013c, pp. 77–95) can serve as an ethical point of reference for technology (Kirchschlaeger, 2018) because they are ethically justifiable – e.g., based on the principle of vulnerability (Kirchschlaeger, 2013a) – and represent a universal consensus. The latter means that no other catalogue of norms enjoys the same amount of global acceptance. Not even the ethical teachings of world religions, e.g., can count on a similar grade of respect. Therefore human rights as an ethical point of reference for technology enjoy credibility. This liberates the technology community over and above from the suspicion of arbitrariness in their ethical self-assessment, as human rights are a widely respected ethical standard.

In addition, human rights do not build upon a particular tradition, culture, religion, world view or value system. This becomes obvious when looking at the discussion of the drafting process of the Universal Declaration of Human Rights in 1948 (Gut, 2008). One can see that representatives of all regions of the world, different cultures, traditions, civilizations, religions, world views, and value systems participated in the process in order to achieve a global consensus (Joas, 2015, pp. 71–80). The text should rely

> not on the basis of common speculative ideas, but on common practical ideas, not on the affirmation of one and the same conception of the

> world, of man and of knowledge, but upon the affirmation of a single body of beliefs for guidance in action. No doubt, this is little enough, but it is the last resort to intellectual agreement.

For this purpose, the representatives agreed on a pragmatic approach striving for a logical and practice-oriented text as Jacques Maritain (1948, pp. 1–2) reports: "Yes, we agree about the rights but on condition that no one asks us why". Maritain, in this introduction, seems to envisage a further stage in which greater consensus was reached about the scale of values underlying human rights – perhaps akin to the idea of the ethical, rather than pragmatic, justification.

Consequently, a globalized technology community finds orientation with human rights as an ethical point of reference facing several traditions, cultures, religions, world views, value systems and philosophies. While this heterogeneity is on the one hand protected by human rights (Kirchschlaeger, 2013d, pp. 353–374), it gives this heterogeneity on the other hand clear limits which need to be respected: human rights protect the essential elements and areas of human existence within traditions, cultures, religions, world views and value systems as well. Therefore, human rights as an ethical point of reference can support technology when it is acting in favour of human rights but meeting tradition-, culture-, religion-, world view- and value system-based challenges (Kirchschlaeger, 2015, pp. 163–191).

In addition, this ethical point of reference possesses a high degree of practice-orientation and applicability. Human rights in their legal dimension formulate as parts of a positive legal system a legitimate claim by the members of the legal system. The transformation from ethical rights into positive law is pursued due to a better chance of enforcement, fewer interpretation and concretization problems and the establishment of public institutions able to meet these obligations (Alexy, 1998). Compared with other ethical principles, human rights embrace both the ethical and legal dimensions: human rights are legally defined, have a legal framework and are executable. Established human rights institutions and existing human rights protection mechanisms are elements of the realization of the idea of human rights and can enhance the culture of human rights. They show that human rights are *real*, not an illusion. Human rights are a legal reality in all parts of the world. Obviously, the implementation of human rights is at the same time facing challenges everywhere. Human rights legal mechanisms, instruments and human rights institutions give a face, though, to the idea of the protection of human dignity embodied in human rights. The approach to this legal dimension starts on a local level which allows it to begin within the context of the addressees, enabling them to approach human rights from their real-life experience and from their understanding of justice, freedom and equity – always considering the universal dimension of human rights.

As long the reality of life falls short in its fulfillment of human rights, human rights remain a political mandate calling for appropriate political

decisions and actions in order to minimize or eliminate human rights violations – a central aspect of the political dimension of human rights. The historical dimension of human rights embraces the pattern that historical experiences of injustices through the ages and their public perception and political discussion provoke the attempt to stop the injustices, to prevent them and to avoid them in the future by entitling all humans with human rights.

Furthermore, this ethical point of reference represents a minimal standard that enables survival and living with human dignity for every human being (Kirchschlaeger, 2013a, pp. 194–195). Human rights as an ethical point of reference are neither maximal ethical claims nor a higher ethos. This means that they do not overburden technology. Instead they are achievable for technology. Human rights have a clear focus which can enhance a clear setting of priorities based on the minimal standards which must be respected first. Therefore, human rights as an ethical point of reference can help in the process of agenda-setting in technology not only in setting the right priorities but also in defining adequately the spheres of influence and responsibility. Human rights define fundamental principles, priorities and values. It sets out the ground rules, defines the area and identifies limits but does not go beyond that, e.g., in addressing more specific and practical questions of technology inquiry due to its nature as a minimal standard for a human life. It does not address more specific and practical questions of technological inquiry in more detail. Because of this nature, it calls for additional ethical elements which go beyond this minimal standard. It must be complemented by other ethical approaches (Zimmermann-Acklin, 2013, pp. 177–200). At the same time, human rights as an ethical point of reference for technology can provide criteria for a critical examination of ethical theories, models and guidelines (Council for International Organizations of Medical Sciences, 2002; International Organization of Medical Sciences, 2008) dealing with more specific and practical questions of technological inquiry and applications.

Beyond that, the individuals involved in technology are protected by human rights in essential areas and elements of human existence which a human needs for survival and for a life as a human – some of them of specific significance for technological inquiry, research, development and applications, e.g., the right to freedom (art 2); the right to freedom of thought, conscience and religion (art 18); the right to freedom of opinion and expression (art 19); the right to freedom of peaceful assembly and association (art 20); the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits (art 27[1]); and the right to the protection of the ethical and material interests resulting from any scientific, literary or artistic production of which he is the author (art 27[2]) of the Universal Declaration of Human Rights of 1948.

Limits to one's own human rights are first – in the case of a specific human right – the other specific human rights following the principle of

indivisibility. This principle defines that all human rights must go hand in hand. This means that the entire catalogue of human rights needs to be respected. Therefore, every human right must be implemented optimally and in a way that accords with all other human rights being implemented optimally at the same time. Secondly, limits to one's own human rights are the human rights of all other individuals. For example, one's own right to freedom goes only so far as it can go hand in hand with the right to freedom of all other human beings.

Both limits lead also to corresponding duties for a rights-holder which is the reason why every right-holder is a duty-bearer as well (Corillon, 1989, pp. 129–140). These duties can be negative (*not doing* something in order to contribute to the realization of human rights) or positive (*doing something* in order to contribute to the realization of human rights). For this ethical level of technology, the contribution of human rights as an ethical point of reference is essential and necessary because there is a ethical obligation based on the fact that members of the technology community are not only right-holders but also duty-bearers of human rights as mentioned previously.

Technology must move within the legal boundaries which are based on human rights. The technology community must be aware of its legal obligations and legal compliance standards. Reality shows that technology can be complicit in or the subject of human rights violations, e.g., when it does not respect human dignity and violates human rights in the conduct of research, or its work enables parties in armed conflicts to commit horrible acts of violence and genocide.

Technology can contribute to the realization of human rights, e.g., through the invention of new medical treatment for a disease, by enhancing political opinion-building and decision-making processes with boundary-crossing communication technologies, by creating innovative approaches to overcome challenges identified as human rights violations or by enabling sustainable development. Devaki Jain (2005, p. 304) understands the concept of development as "human development". This can only be true if technological progress and economical development respect human rights. Consequently, technological progress and economical development cannot be an "end per se" but must serve humankind. Both technological progress and economic development must function within the framework of human rights to be able to further the realization of human rights. To further the realization of human rights even more effectively, human rights must belong to the goals of technological progress.

> If there is cause for deep concern, there is also cause for hope. Deliberately limiting growth would be difficult, but not impossible. The way to proceed is clear, and the necessary steps, although they are new ones for human society, are well within human capabilities. Man possesses, for a small moment in his history, the most powerful combination of

> knowledge, tools, and resources the world has ever known. He has all that is physically necessary to create a totally new form of human society – one that would be built to last for generations. The two missing ingredients are a realistic, long-term goal that can guide mankind to the equilibrium society and the human will to achieve that goal. Without such a goal and a commitment to it, short-term concerns will generate the exponential growth that drives the world system toward the limits of the earth and ultimate collapse. With that goal and that commitment, mankind would be ready now to begin a controlled, orderly transition from growth to global equilibrium.
>
> (Meadows, Meadows, Randers, & Behrens, 1972)

## References


Alexy, R. (1998). Die Institutionalisierung der Menschenrechte im demokratischen Ver fassungsstaat. In S. Gosepath & G. Lohmann (Eds.), *Philosophie der Menschenrechte* (pp. 244–264). Frankfurt a. Main: Suhrkamp Verlag.

Arendt, H. (1958). *The human condition*. Chicago: University of Chicago Press.

Armand, J.-L. (2012). The bringing together of technology, sustainability and ethics. *Sustainability Science*, *7*(2), 113–116.

Bacon, F. (2003). *The advancement of learning*. M. Kiernan (Ed.). (The Oxford Francis Bacon vol. 4). Oxford: Oxford Clarendon Press.

Bacon, F. (2004). The "Instauratio magna". G. Rees (Ed.). (The Oxford Francis Bacon vol. 11–13). Oxford: Oxford Clarendon Press.

Bashir, Q. (2000). Technology vs. ethics. *Surgical Neurology*, *54*(1), 92.

Bertarelli, E. (2002). Science between goals and limits. In ISC-Symposium at the University (Ed.), *Pushing limits: Questioning goals. 32nd ISC-symposium at the University of St Gallen* (pp. 47–50). St Gallen: ISC-Symposium.

Borgman, A. (1992). *Crossing the postmodern divide*. Chicago: University of Chicago Press.

Boutellier, R., Heinzen, M., & Raus, M. (2010). Paradigms, science, and technology: The case of E-customs. In S. A. Becker & R. E. Niebuhr (Eds.), *Cases on technology innovation: Entrepreneurial successes and pitfalls* (pp. 134–155). New York: Business Science Reference.

Buchholz, R. A., & Rosenthal, S. B. (2002). Technology and business: Rethinking the ethical dilemma. *Journal of Business Ethics*, *41*, 45–50.

Chapman, A. R. (2009). Towards an understanding of the right to enjoy the benefits of scientific progress and its applications. *Journal of Human Rights, 8*(1), 1–36.

Coeckelberg, M. (2012). Ethical responsibility, technology, and experiences of the tragic: From Kierkegaard to offshore engineering. *Science and Engineering Ethics*, *18*, 35–48.

Coeckelberg, M., & Wackers, G. (2007). Imagination, distributed responsibility, and vulnerability: The case of Snorre. *Science and Engineering Ethics, 13*(2), 235–248.

Corillon, C. (1989). The role of science and scientists in human rights. *The Annals of American Academy of Political and Social Science*, *506*, 129–140.

Council for International Organizations of Medical Sciences. (2002). *International ethical guidelines for biomedical research involving human subjects*. Retrieved March 15, 2019, from www.cioms.ch/publications/layout_guide2002.pdf

De Melo-Martín, I. (2010). The two cultures: An introduction and assessment. *Technology in Society*, *32*, 5–9.

Donders, Y. (2015). Balancing interests: Limitations to the right to enjoy the benefits of scientific progress and its applications. *European Journal of Human Rights*, *4*, 486–503.

Dorn, N., & Van de Poel, I. (2012). Editors' overview: Ethical responsibility in technology and engineering. *Science and Engineering Ethics*, *18*(1), 1–11.

Duewell, M. (2010). Menschenwürde als Grundlage der Menschenrechte. *Zeitschrift für Menschenrechte*, *4*, 64–79.

Ellul, J. (2008). *La technique, ou, L'enjeu du siècle*. Paris: Economica.

Enderle, G. (2015a). Ethical innovation in business and economy: A challenge that cannot be postponed. In G. Enderle & P. E. Murphy (Eds.), *Ethical innovation in business and the economy* (pp. 1–22). Cheltenham: Edwar Elgar Publishing.

Enderle, G. (2015b). *The theme of the sixth world congress of the international society of business, economics, and ethics in 2016 in Shanghai, China: "Ethics, innovation, and well-being in business and the economy"*. Explorations by Georges Enderle. Retrieved March 15, 2019, from http://isbee.org/the-theme-of-the-sixth-world-congress-of-the-international-society-of-business-economics-and-ethics-in-2016-in-shanghai-china-ethics-innovation-and-well-being-in-business-and-the-econom/

Engineering and Physical Sciences Council. (2011). *EPSRC principles of robotics 2011*. Retrieved March 15, 2019, from www.epsrc.ac.uk/research/ourportfolio/themes/engineering/activities/principlesofrobotics/

European Group on Ethics in Science and New Technologies to the European Commission. (2014). *Ethics of security and surveillance technologies*. May 20, Brussels.

Frey, C. B., & Osborne, M. A. (2013). The future of employment: How susceptible are jobs to computerisation? *Oxford Martin School*, *7*, 1–72. Retrievcd March 15, 2019, from www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf

Griffin, J. (2001). First steps in an account of human rights. *European Journal of Philosophy*, *9*(3), 306–327.

Griffin, J. (2008). *On human rights*. Oxford: Oxford University Press.

Gut, W. (2008). Eine Sternstunde der Menschheit. Die Allgemeine Erklärung der Menschenrechte von 1948. *Schweizerische Kirchenzeitung*, *49*(176), 816–819.

Guthrie, C. F. (2013). Smart technology and the ethical life. *Ethics & Behavior*, *23*(4), 324–337.

Habermas, J. (2001): *Die Zukunft der menschlichen Natur. Auf dem Weg zu einer liberalen Eugenik?* Suhrkamp: Frankfurt am Main.

Hubig, C. (2007). *Die Kunst des Möglichen* (Bd. 2: Ethik der Technik als provisorische Ethical). Bielefeld: Transcript-Verlag.

Hubig, C. (2011). Art: Technikethik. In R. Stoecker, C. Neuhäuser, & M.-L. Raters (Eds.), *Handbuch Angewandte Ethik* (pp. 170–175). Stuttgart: J. B. Metzler.

International Organizations of Medical Sciences. (2008). *International ethical guidelines for epidemiological studies*. Retrieved March 15, 2019, from www.ufrgs.br/bioetica/cioms2008.pdf

Jain, D. (2005). Human rights and development. In P. G. Kirchschlaeger, T. Kirchschlaeger, A. Belliger, & D. Krieger (Eds.), *Menschenrechte und Wirtschaft. Internationales Menschenrechtsforum Luzern (IHRF)*, (vol. 2, pp. 293–311). Berne: Staempfli Verlag.

Jennings, B. (2010). Enlightenment and enchantment: Technology and ethical limits. *Technology in Society*, *32*, 25–30.
Joas, H. (2015). *Sind die Menschenrechte westlich?* München: Kösel-Verlag.
Kant, I. (1974). *Grundlegung zur Metaphysik der Sitten. Werkausgabe Weischedel* (Vol. 7). Frankfurt a. M.: Suhrkamp.
Kernaghan, K. (2014). Digital dilemmas: Values, ethics and information technology. *Canadian Public Administration*, *57*, 295–317.
Kirchschlaeger, P. G. (2013a). *Wie können Menschenrechte begründet werden? Ein für religiöse und säkulare Menschenrechtskonzeptionen anschlussfähiger Ansatz. ReligionsRecht im Dialog 15*. Muenster: LIT-Verlag.
Kirchschlaeger, P. G. (2013b). Human rights as an ethical basis for science. *Journal of Law, Information and Science*, *22*(2), 1–17.
Kirchschlaeger, P. G. (2013c). Die Multidimensionalität der Menschenrechte–Chance oder Gefahr für den universellen Menschenrechtsschutz? *MenschenRechts Magazin*, *18*(2), 77–95.
Kirchschlaeger, P. G. (2013d). Religionsfreiheit–ein Menschenrecht im Konflikt. *Freiburger Zeitschrift für Philosophie und Theologie*, *60*, 353–374.
Kirchschlaeger, P. G. (2014). Verantwortung aus christlich-sozialethischer Perspektive. *ETHICA, 22*(1), 29–54.
Kirchschlaeger, P. G. (2015). Adaptation: A model for bringing human rights and religions together. *Acta Academica*, *47*(2), 163–191.
Kirchschlaeger, P. G. (2016a). Digitalisierung und Robotisierung der Gesellschaft aus ethischer Perspektive. *feinschwarz.net* (March 30). Retrieved March 15, 2019, from www.feinschwarz.net/digitalisierung-und-robotisierung-der-gesellschaft-aus-theologisch-ethischer-perspektive/
Kirchschlaeger, P. G. (2016b). Zensur zum Schutz vor Rassismus versus Informationsfreiheit–ein Spannungsfeld im Internet. *Communicatio Socialis*, *49*(4), 354–366.
Kirchschlaeger, P. G. (2017a). Automatisierung der Mobilität–theologisch-ethische Überlegungen. *Feinschwarz.net* (January 13). Retrieved March 15, 2019, from www.feinschwarz.net/automatisierung-der-mobilitaet-theologisch-ethische-ueberlegungen/
Kirchschlaeger, P. G. (2017b). Roboter und Ethik. *Aktuelle Juristische Praxis*, *26*(2), 241–249.
Kirchschlaeger, P. G. (2018). Die Menschenrechte als hermeneutischer Schlüssel zu ethischen Grundfragen des 21. Jahrhunderts. Begründung und Ausblick. *Zeitschrift für katholische Theologie*, *140*, 361–379.
Kirchschlaeger, P. G., Belliger, A., & Krieger, D. (Eds.). (2003). Stammzellenforschung. In *Science & Society* (Vol. 1). Zurich: Seismo-Verlag.
Kirchschlaeger, P. G., Belliger, A., & Krieger D. (Eds.). (2005). Forschung am Menschen. In *Science & Society* (Vol. 2). Zurich: Seismo-Verlag.
Koller, P. (1990). Die Begründung von Rechten. In P. Koller, C. Varga, & O. Weinberger (Eds.), *Theoretische Grundlagen der Rechtspolitik. Ungarisch-Österreichisches Symposium der internationalen Vereinigung für Rechts- und Sozialphilosophie. ARSP 54* (pp. 74–84). Stuttgart: Franz Steiner Verlag.
Krenn, B. (2016). Multiuse tool and ethical agent. In R. Trappl (Ed.), *A construction manual for ethical systems* (pp. 11–29). Cham: Springer.
Kuhn, T. (1962). *The structure of scientific revolutions*. Chicago: University of Chicago Press.

Lenk, H., & Maring, M. (2001). Responsibility and technology. In A. E. Auhagen & H.-W. Bierhoff (Eds.), *Responsibility: The many faces of a social phenomenon* (pp. 93–107). London: Routledge.

Lucchi, N. (2016). *The impact of science and technology on the rights of the individual*. Law, Governance and Technology 26. Cham: Springer.

Manzeschke, A., Weber, K., Rother, E., & Fangerau, H. (2013). *Studie Ethische Fragen im Bereich Altersgerechter Assistenzsysteme*. Retrieved March 15, 2019, from www.ttn-institut.de/sites/www.ttn-institut.de/files/Abschlussbericht%20Ethische%20Fragen%20im%20Bereich%20altersgerechter%20Assistenzsysteme.pdf

Maritain, J. (1948). Introduction. In UNESCO (Ed.), *Human rights: Comments and interpretations*, UNESCO/PHS/3 (rev.), 25 July (pp. 1–9). Paris: UNESCO.

Mathis, K., & Tor, A. (Eds.). (2016). *Nudging–possibilities, limitations and applications in European law and economics*. Cham: Springer.

Meadows, D. H., Meadows, D. L., Randers, J., & Behrens III, W. W. (1972). *The limits to growth*. New York: Universe Books.

Nature. (2016). *Digital intuition* (January 17). Retrieved March 15, 2019, from www.nature.com/news/digital-intuition-1.19230

Ortega y Gasset, J. (1949). *Betrachtungen über die Technik*. Stuttgart: Deutsche Verlags-Anstalt, 90–105.

Pieper, A. (1994). *Einführung in die Ethik*. Tuebingen: UTB.

Rainey, S., & Goujon, P. (2011). Towards a normative ethics for technology development. *Journal of Information, Communication and Ethics in Society*, *9*(3), 157–179.

Rotman, D. (2013). How technology is destroying jobs. *MIT Technology Review* (June 12). Retrieved March 15, 2019, from www.technologyreview.com/featured story/515926/how-technology-is-destroying-jobs/

Sacks, J. (2015). Sword into plowshares. *The Wall Street Journal Review* (October 3–4), C1–C2.

Shaver, L. (2015). The right to science: Ensuring that everyone benefits from scientific and technological progress. *European Journal of Human Rights*, *4*, 411–430.

Schuurman, E. (2010). Responsible ethics for global technology. *Axiomathes*, *20*, 107–127.

Shibasaki, F. (2005). Technology and ethics. *Philosophy & Criticism*, *31*(4), 487–498.

Spice, B. (2017). *Carnegie Mellon artificial intelligence beats top poker pros*. Retrieved March 15, 2019, from www.cmu.edu/news/stories/archives/2017/january/AI-beats-poker-pros.html

UN (2008). Human rights guidelines for pharmaceutical companies in relation to access to medicines as part of the report to the general assembly of the UN Special Rapporteur on the right to the highest attainable standard of health (UN document: A/63/263, 11 August 2008).

Van Est, R., & Stemerding, D. (Eds.). (2012). *Making perfect life*. European Governance Challenges in 21st Century Bio-engineering. Retrieved March 15, 2019, from www.europarl.europa.eu/RegData/etudes/etudes/join/2012/471574/IPOL-JOIN_ET(2012)471574_EN.pdf

Wendell, W., & Allen, C. (2009). *Ethical machines: Teaching robots right from wrong*. Oxford: Oxford University Press.

Zimmermann-Acklin, M. (2013). When not all services can be offered to all patients: Ethische Überlegungen zur Finanzierung medizinischer Maßnahmen bei Patienten am Lebensende. In G. Duttge & M. Zimmermann-Acklin (Eds.), *Gerecht sorgen–Verständigungsprozesse über den Einsatz knapper Ressourcen bei Patienten am Lebensende* (pp. 177–200). Goettingen: Universitätsverlag Goettingen.

# Outlook

## Digital religion and (dis-)embodiment

*Georg Gasser*

### Introduction

For a long time, intellectuals assumed that religion would disappear in modern societies shaped by enlightenment and scientific progress. This prognosis has not come true. On the one hand, according to estimations, the proportion of people considering themselves as religiously non-affiliated in relation to the total world population will decline in the coming decades due to demographic factors (Pew Research Center, 2015). On the other hand, many scholars of sociology and religious studies refer to societies in the so-called Western hemisphere (most European countries, Canada, Australia, and New Zealand) not anymore as "secular" but "post-secular" because religious and spiritual discourse gains significance in public discourse as well as in personal life plans. People consider themselves as secular in the sense of not being firmly rooted in a doctrinal system of a classical religious tradition such as Christianity or Islam but – at the same time – these people have an open and interested attitude towards spiritual practices. Charles Taylor, for instance, contrasts the secular and post-secular attitude as follows: whereas for the secular age the main focus of human flourishing and meaning of life is within the immanent and material world, the post-secular age is "a time in which the hegemony of the mainstream master narrative of secularization will be more and more challenged" and "a new age of religious searching" is on the rise (Taylor, 2007, p. 537).

Such a post-secularization coincides with an increasing digitalization of all areas of our living world. "Smart homes", "digital assistants" and "social robots" are no longer creatures of technological fantasy but have found their way into our everyday lives. Therefore, it is not surprising that the digital is also increasingly shaping the realm of religion as the title of this book "Religion in the Age of Digitalization: From New Media to Spiritual Machines" indicates. The concept of the digital in the title alludes at least to the two following relationships between religion and digitalization:

The first relationship concerns the complex relationship between religious belief, worship and digital media. Some obvious questions focusing on this kind of relationship are: How do digital media transform religious

practices? What is the religious self-understanding of digital natives? Does an increased online-use of religious services foster an individualized and consumerist attitude towards religion while the willingness of active engagement in a religious community is diminishing? How are religious authorities using digital media for pastoral work?

The second relationship concerns religious and quasi-religious aspirations that see in the digital a primary tool to realize them. The realm of the digital is, so to speak, that dimension of reality towards which those hopes are directed that traditional religions attribute to the divine: the hope of human individual and social perfection, the hope of redemption and the hope of eternal life. Contemporaries who attach such great importance to the digital follow the world view of transhumanism, which ultimately seeks to overcome the present biological constitution of man by means of new and yet to be developed technologies.

Against this background, in this chapter I would like to deal in particular with two interrelated issues: First, using the "shut down" of public religious life due to the Covid-19 pandemia, I will argue that the communal character of liturgical celebrations is essentially embodied. The bodily dimension of religious functions can be supplemented but not replaced by digital counterparts. Secondly, I would like to point out that religious concepts of immortality, at least within the Abrahamitic traditions shaping the Western world, take human embodiment seriously whereas the concept of digital immortality aims at achieving a disembodied form of existence.

## Digital religion and embodied liturgy

The question of the significance of bodily presence in religious practices plays a decisive role with regard to the more general question of how religions are increasingly being affected by digitalization (Campbell, 2013, pp. 3–4).[1] A brief look at the use of the body in liturgical performances reveals its central role as means of communication: We use our bodies to move from one location to another in the worship space; we make gestures and postures when we pray; we read from the holy scriptures; we preach sermons; we sing; we light candles and we touch others. The body is the main vehicle to worship God, to perform spiritual practices, to share the faith with others and to form a community of the faithful. The more the senses and bodily activities are used in worship, the more we can individually and as a community connect with what is happening in the liturgy whose major aim is to enter in the presence of the divine.

The question of the significance of physical presence in liturgical services and the possibility of a corresponding digital substitution has become particularly acute in recent months due to the Covid-19 pandemic. For the first time in the long history of many religious traditions, public celebrations have been completely banned or reduced to a minimum. Therefore, there is currently an intense debate about the extent to which liturgical celebrations

can be digitized, how community and participation can be rethought digitally and when digital services reach their limits.[2] The following issues might be useful points of reference for future discussions concerning the relationship between religious practice, embodiment and the digital:

First, there is nothing fundamentally wrong with digitized celebrations, since an online community is created with people participating in the liturgy in different places. Online communities are real communities, since people are connected in real terms and can actively engage with the liturgy: they can sing and pray in front of the screen and also take on liturgical roles. In fact, due to the suspension of public services in the time of the Covid-19 pandemia, digital forms of worship are the primary liturgical form enabling believers to participate in communal religious life.

Second, a digitally celebrating community is connected to the world in a similar way as is often the case in classical liturgical celebrations: the Eucharist of the Catholic Church, for instance, expressly connects itself with the entire Church, the heavenly community and the deceased. Thus, communal connections are brought to the mind of the believer, which are not visible but are decisive for an adequate understanding of liturgical functions.[3] The same can be true for communities celebrating digitally if individual participants understand themselves as inherent parts of a larger community celebrating together and accordingly make their own active contribution to it.

Finally, as the present situation shows digital religious services can be useful in a time of pandemia and serve as a complement to classical religious functions. However, given that human beings are essentially embodied, as the next section will highlight, a complete replacement of traditional forms of religious services through digital ones would result in pouring out the child with the bath. Proper religious practices aim at addressing human nature and needs head-on. This implies to respect human embodied nature with everything that goes with it – including human pain, vulnerability, aging and dying – also when it comes to digital forms of worship. This view of respecting the whole human being and seeing her in need of redemption is fundamentally different from transhumanist visions of digitalizing human existence with the ultimate aim to makes us as pure mental beings digitally immortal.

## The nature of the mind and the vision of mind uploading

Unless one is assuming a strong dualist understanding of the mental, it is generally accepted that our mental life is closely bound to our bodies.[4] Accordingly, our minds are not free-floating entities but depend upon processes taking place within our bodies. However, one may consider this as a pure contingent fact. Referring to the following observation one may argue: We are capable of replacing organs; we have learnt to substitute missing body parts; we can control artificial limbs directly through conscious thoughts; and we have developed technologies such as cochlea implants for compensating for

the loss of senses such as hearing. These are just a few examples showing that the link between man and new technologies is constantly advancing and interfaces between man and machine are part of many people's daily life. What we are experiencing is the "cyborgization" of man,[5] that is, humans as biological beings are increasingly mutating into beings composed of biological and technological parts. Against this background, one can come to the conclusion that one day not just body parts but the entire body will be replaceable by an artefact – or even better – the limiting constraints of any material constitution will be left behind since we will entirely migrate our existence into the digital space (Moravec, 1988). The technique of mind-uploading, so the story goes, will be the ultimate step of human evolutionary history when humans finally turn into what Yuval Harari has dubbed "homo deus" – man being able to determine his own destiny and get rid of the uncontrollable and thus limiting factors of human existence such as emotional, cognitive and moral limitations, disease or death. Then man will exist in the form of a program run by a suitable hardware. Once uploaded, the human mind is able to live forever since it could relocate from any suitable artificial body to any other at will or alternatively live in an endless digital simulation.

The crucial issue – apart from technological problems – for realizing such a feat concerns our mind's nature. There are two obvious options: The first option says that a mind is a (complex) biological phenomenon. Once a biological system reaches a certain degree of complexity, mental life originates. The second option says that a mind is a (complex) functional phenomenon. The complexity of causal structures is crucial for producing a mind, while the material realization of these structures is of secondary importance.

Functionalism claims that what makes something a mental state such as a belief, desire, pain or act of will, depends solely on its role, resp. function, within the cognitive system of which it is a part. Our mental life is the expression of the causal interplay of (sensory) input, (motor) output and the internal processing mechanisms in between. Let pain be a mental state caused by bodily injury, which results in a feeling of fear and a behaviour of crying and moaning because of the belief that the body is damaged and the desire to overcome this condition. Suppose now that in humans this complex causal structure of pain is realized in a specific kind of neural activity. Then, according to a functionalist theory of the mental, humans are in pain every time when this specific kind of neural activity is realized in them. Notice that essential for understanding what pain consists in is the causal structure along with its informational pattern. It is easily conceivable that other creatures realize such structures within a different material (or even in non-materially if someone is a dualist). The upshot of this view is that the mind is a kind of naturally developed software, which contingently runs on a biological hardware such as the brain. However, any system, that is functionally isomorphic (Chalmers, 2010, p. 45) and thereby enjoys the same

kind of organization with the same information, will realize the same mental states – no matter whether that organization is constituted by neurons or some artificial material.[6] Accordingly, the "structure" and "pattern" of the mind can be separated from its biological basis and reinstantiated in different material substrates. The prospect for mind-uploading and, consequently, the realization of personal digital immortality is in principle an attainable objective. The central question is then: How convincing is such a theory in the light of our general empirical knowledge?

There have been formulated intricate and detailed arguments within the philosophy of mind against functionalism, which shall not concern us here.[7] I will focus in a more coarse-grained manner on three general arguments that speak against such an account.

First, so far, we do not know of any forms of consciousness that have not been realized in living beings. Accordingly, the mental is seen as an outgrowth of biological processes in the sense that it does not represent a phenomenon fundamentally different from biological processes. There is not only some form of interconnection but rather deep continuity between biological and mental states.[8] John Searle, for example, speaks of the mental as a biological phenomenon, when he writes:

> Whatever else intentionality is, it is a biological phenomenon, and it is as likely to be as causally dependent on the specific biochemistry of its origins as lactation, photosynthesis, or any other biological phenomena. No one would suppose that we could produce milk and sugar by running a computer simulation of the formal sequences in lactation and photosynthesis, but where the mind is concerned many people are willing to believe in such a miracle because of a deep and abiding dualism: the mind they suppose is a matter of formal processes and is independent of quite specific material causes in the way that milk and sugar are not.
> (Searle, 1980, p. 424)

Second, there are insights from biochemistry that support such a biological account to the mental. When one considers the chemical properties of the various elements of the periodic table, it becomes clear that carbon plays a unique role as the basis for life. Silicon is often cited as a possible alternative but compared to carbon, this element already exhibits much less chemical flexibility, which greatly reduces the prospect that life could be developed on the basis of silicon. Cosmo-biologists Makuch-Schulze and Irwin write:

> no comprehensive bioenergetic metabolism is known to arise from non-carbon complex chemistry, despite the high abundance of oxygen and silicon on Earth, and the relative concentration of silicon on other terrestrial planets. Thus, if elements other than carbon constitute the building blocks for any living system on other worlds, they almost surely

> exist under conditions far different from those on Earth, including temperatures and pressures where water could not be the solvent.
>
> (Schulze-Makuch & Irwin, 2008, p. 108)

So, if the mental is a biological phenomenon and the biochemical basis for biological life is presumably limited to carbon compounds, then this biochemical precondition will significantly minimize the chances of being able to transfer our mental life from its biological to a non-biological "substrate". The functionality of a system is linked not only generally to causal structures containing patterns of information but rather it depends on the specific material properties of these structures. Here chemical alternatives to carbon compounds are apparently subject to very narrow physical limits, which drastically shrinks the prospects of a technically realized mind-uploading (Pigliucci, 2014).

Third, speaking of the mental as a biological phenomenon goes hand in hand with the view that the mind is embodied and determined in its concrete manifestations by our specific bodily constitution.[9] We do not encounter minds that are not embodied and agents that are not interacting with the world through their bodies. We also refer to ourselves not as mere minds connected to a body but as complex minded and embodied unities. We are, as Alva Noe puts it, not in our head but interacting with our environment as "distributed, dynamically spread-out, world-involving beings" (Noë, 2009).

Helena De Preester draws attention to the inner connection between mental life and embodiment when she points to numerous empirical studies suggesting that an internal body model determines what can be perceived as an integral body part at all and to what extent external parts can be integrated into this body model. Using the example of the rubber hand illusion (Botvinick & Cohen, 1998), De Preester argues that such an illusion can only occur if both visual and tactile impressions conveyed by the rubber hand are realistic and rubber hand's anatomical structure and relation to our body are comparable to the real hand hidden for the study subject below the table. The specific experimental setting makes the rubber hand an integral part of the internal body model, which is decisive for creating the illusion that the rubber hand belongs to our body and is transmitting sense impressions. The feeling that something is part of our body only occurs when the normative foundations of the body model allow it, and in the case of the rubber hand illusion this is exactly the case (De Preester, 2011, p. 125).

The concept of embodied mind highlights that we do not relate to our bodies like a pilot in an airplane. Rather, our being embodied penetrates our mental life in an intimate way of "me-ness" whereas things merely having an external relation to our body do not. Accordingly, Thomas Fuchs points out that having a mind is not merely linked to have *a* body but to be a *living* body. He writes:

> Experience, in whatever degree of consciousness, is always the self-experience of the organism in its actual relation to the environment. It is not a pure mental space or phenomenal tunnel produced inside the brain, but rather a manifestation of the animateness of the organism as a whole.
>
> (Fuchs, 2012, p. 162)

If these assumptions about the intimate connection between mind and living body are correct, a transfer of the mind to a non-biological body or a pure existence in digital space would be extremely unlikely. Should, however, this technical miracle succeed, then a non-biological substrate probably has a significant impact on the cognitive and phenomenal aspects of such an artificially constituted mind. As was argued, the functionality and phenomenology of a mind cannot be abstracted from its concrete bodily implementation since the specific individuation of the mind is grounded in its bodily contingencies. Thus, a person's uploaded mind on some artificial hardware most likely would differ significantly from the embodied mind she is familiar with. As we will see in the next section, this is also the main aim of such an endeavour: the ideal is not to preserve what we are in digital space but to transform – or more precisely replace – us as human beings.

## Digital immortality as disembodied existence

The considerations about the nature of our mind so far should help to make clear that we are very far away from the vision of digital immortality. The reasons for this lie not merely in missing technologies but in the fundamental structural elements of our material reality in general and of our biologically constituted existence in particular. The firm belief with which some representatives of digital immortality are already moving its technical realization into the near future is probably best explained by the reference to (quasi-) religious hopes. These hopes aim at overcoming human nature by transforming it into a trans-human one as paragraph 1 and 2 of the Transhumanist Declaration make clear:

> 1 We envision the possibility of broadening human potential by overcoming aging, cognitive shortcomings, involuntary suffering, and our confinement to planet Earth.
> 2 We believe that humanity's potential is still mostly unrealized. There are possible scenarios that lead to wonderful and exceedingly worthwhile enhanced human conditions.
>
> (Humanity+, 2009)

These wonderful and exceedingly worthwhile human conditions includes the vision to achieve a form of technologically based immortality.[10] Although most transhumanists consider themselves as secular, such visions clearly

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show structural parallels to religious world views.[11] These include, for example, a dualistic interpretation of the world along categories such as "good and evil", "dark present and golden future" or "fallen and redeemed human nature", the interpretation of earthly existence as precarious and imperfect, the longing for a thoroughgoing transformation of the present existence into a perfect future state including the hope for immortality.

An essential difference is that such eschatological accounts to perfection are not brought about by divine intervention but by man himself through technical progress. For example, the religious scholar Robert M. Geraci speaks of "apocalyptic artificial intelligence" (2008) and applies the structures of Jewish and Christian apocalyptic thought for interpreting eschatological transhumanist views.[12] For Geraci, scientific research, the modern narrative of progress and religious-eschatological categories are essential components for transhumanist views of immortality. He summarizes his analysis as follows:

> The rapid development of computers and worldwide deployment of robots remains well within the radar of the sacred: the promises of and strategies employed by Apocalyptic AI stem from their religious environment. . . . Apocalyptic AI has absorbed the categories of Jewish and Christian apocalyptic theologies and utilizes them for scientific and supposedly secular aims.
>
> (Geraci, 2008, p. 161)

Hence, it is no longer a matter of addressing the divine through religious practices and asking for divine compassion in order to attain salvation but current technological developments combined with a strong sense of progress lead to the belief that humans will be able to enter a process of self-divinization and realize salvation themselves.[13]

A second essential difference lies in the anthropological interpretation of human existence. It is true that a strong force in monotheistic religions was a denigration of the body and the material world with all negative consequences following for religious and moral practice. Nevertheless, it has to be underlined that the fundamental thrust in these religious traditions is a positive view of the material world and man in it. For instance, the biblical narrative of creation emphasizes after each day of creation that creation is good and willed by God. In Christianity, the second divine person incarnates in Jesus of Nazareth and becomes truly and wholly – and not only apparently or partially – a human being. And in Islam, Sura 2:34, for example, emphasizes that angels, although dwelling in God's presence, are to be placed below man in the hierarchy of being. These examples from the three Abrahamic religions show that the human being – despite all limitations and failures – is accorded an extraordinary axiological status within creation.

In transhumanism, however, the opposite is true, since, as the transhumanist declaration emphasizes, human limitations, vulnerability and mortality

are interpreted as evils and deficits to be overcome. "Flesh and bones" are messy, imperfect, the source of limited freedom, existential insecurity and ultimately complete annihilation. Accordingly, the transhumanist Max More writes:

> We seek to void all limits to life, intelligence, freedom, knowledge and happiness. Science, technology and reason must be harnessed to our extropic values to abolish the greatest evil: death.
>
> (More, 1990)

Michael Hauskeller identifies in such transhumanist views an almost hysterical rejection of the weaknesses of human existence:

> In the eyes of a transhumanist, our mortality is not merely an unfortunate, regrettable feature of life, but something positively horrifying. It is the greatest evil, the scourge of humanity. . . . Transhumanists feel positively *offended* by their mortality.
>
> (Hauskeller, 2019)

The transhumanist vision of digital immortality ultimately arises from a profound hostility towards the body and the kind of life coming with it – aging, illness, vulnerability, frailty and finitude. Worthy to be preserved is only our mental life, resp. the information it contains. While from a religious perspective man as a body-soul-unit is in need of salvation and his embodiment is explicitly part of God's redemption (just think in Christianity of the fact that the risen Christ is portrayed with his stigmata for the crucifixion and not without them), transhumanism is precisely about overcoming all aspects of embodiment. Emotional, cognitive and moral limitations, suffering and death are not dimensions of our existence that ought to be transformed in a positive sense and thus maintained in the afterlife, but for transhumanism these are signs of a deficient and appalling form of existence, which is to be left behind like the old skin when a snake is skinned. Similar to a dysfunctional prototype, which needs improvement in order to achieve a necessary degree of customer satisfaction and thus become marketable, man must be liberated from the faults inherent in its embodied way of existence. It is not a question of redeeming but of forsaking the human body. Here the digital and the bodily are a pair of opposites: the vision of a complete digitalization of our existence goes hand in hand with the vision of its total "disembodization".

## Conclusion

It is a matter of fact that the digital is becoming increasingly important for religion: in a positive sense, it can support religious performances and strengthen community ties between believers. In a negative sense, digitalization can

have the opposite effect and undermine active participation in religious services. As is always the case with technology, it is a question of sensible application. In an extreme sense, as envisaged by transhumanism, digitalization serves to disembody humans altogether and replace them with pure pattern of information. As indicated, the prospects for such a vision look rather grim so far – not only from a technological but also from an existential point of view: For what we think of as ourselves is tied to our bodily existence in a much tighter manner as transhumanists are willing to recognize. Embodiment is a multifaceted topic for the study of religion in the age of digitalization, whose overall importance yet waits to be discovered.

## Notes

1 In her Introduction, Campbell suggests the term "digital religion" for describing the "technological and cultural space that is evoked when we talk about how online and offline religious spheres have become blended or integrated".
2 I was following in particular discussions among Catholic circles because I am most familiar with this religious tradition and because due to the suspended public Easter celebrations discussions were particularly intense.
3 The Catholic Church explicitly underlines in the Constitution on the Sacred Liturgy of Vatican Council II that even a priest who celebrates the Eucharist alone is not performing a private service since "liturgical services are not private functions, but are celebrations of the Church" (Sacrosanctum Concilium, art. 26).
4 It is a matter of dispute how this "closely bound" is appropriately spelled out in detail. A good overview about the most prominent accounts in the contemporary discussion is provided by Chalmers (2003).
5 For more details on human "cyborgization" see Benedikter (2020).
6 In the light of such a functionalist account, Hans Moravec (1988, p. 117), for instance, speaks about the essence of a person as a continuous pattern whereas the specific material instantiation "is mere jelly".
7 A common objection maintains that a functionalist characterization misses the phenomenal character of mental states – their "what-it-is-like-ness".
8 An insight in the complex discussion of the deep continuity between biological life and the mental is given by Wheeler (2011).
9 On the concept of embodied mind see the classical study of Varela, Thompson and Rosch (1991).
10 For a fair assessment of such visions, it must be emphasized that the declaration explicitly refers to technological risks and calls for a broad social and ethical discussion of transhumanist ideals and corresponding social change processes. How this can be achieved is discussed in Kirschlaeger (2020).
11 The extent to which transhumanism should or should not be characterized as a new religious movement is subject of controversial debates. See Boris Rähme (2020).
12 Main figures of reference for Geraci are Moravec (1988) and Kurzweil (2005).
13 An illuminating discussion of structural parallels and differences between Western theological and philosophical thought and transhumanism on humans having the capacity to become virtually divine is provided by Zimmerman (2008).

## References

Benedikter, R. (2020). Technology: The new God? Techno-metaphysics and Homo Deus: Contemporary attempts towards a radical perspective on the digital change of religion. In this volume.

Botvinick, M., & Cohen, J. (1998). Rubber hands "feel" touch that eyes see. *Nature*, 391, 756.
Campbell, H. A. (Ed.). (2013). *Digital religion: Understanding religious practice in new media worlds*. London and New York: Routledge.
Chalmers, D. J. (2003). Consciousness and its place in nature. In S. P. Stich (Ed.), *The blackwell guide to philosophy of mind* (pp. 102–142). Malden, MA: Blackwell.
Chalmers, D. J. (2010). The singularity: A philosophical analysis. *Journal of Consciousness Studies*, *17*(9–10), 7–65.
De Preester, H. (2011). The (im)possibilities of re-embodiment. *Foundations of Science*, *16*(2), 119–137.
Fuchs, T. (2012). The feeling of being alive: Organic foundations of self-awareness. In J. Fingerhut & S. Marienberg (Eds.), *Feelings of being alive* (pp. 149–166). Berlin and Boston: De Gruyter.
Geraci, R. M. (2008). Apocalyptic AI: Religion and the promise of artificial intelligence. *Journal of American Academy of Religion*, *76*(1), 138–166.
Hauskeller, M. (2019). Ephemeroi: Human vulnerability, transhumanism and the meaning of life. *Scientia et Fides*, *7*(2), 9–21.
Humanity+. (2009). *Transhumanist declaration*. Retrieved from https://humanityplus.org/philosophy/transhumanist-declaration/
Kirschlaeger, P. G. (2020). The correlation between ethics and technology. In this volume.
Kurzweil, R. (2005). *The singularity is near: When humans transcend biology*. New York: Penguin Press.
Moravec, H. (1988). *Mind children: The future of robot and human intelligence*. Cambridge, MA: Harvard University Press.
More, M. (1990). Transhumanism: A futurist philosophy. *Extropy*, *6*, 6–12.
Noë, A. (2009). *Out of our heads: Why you are not your brain, and other lessons from the biology of consciousness*. New York: Hill & Wang.
Pew Research Center. (2015). *The future of world religions: Population growth projections, 2010–2050*. Retrieved from www.pewforum.org/2015/04/02/religious-projections-2010-2050/
Pigliucci, M. (2014). Mind uploading: A philosophical counter-analysis. In R. Blackford & D. Broderick (Eds.), *Intelligence unbound: The future of uploaded and machine minds* (pp. 119–130). Malden, MA: Wiley-Blackwell.
Rähme, B. (2020). Is transhumanism a religion? In this volume.
Schulze-Makuch, D., & Irwin, L. N. (2008). *Life in the universe: Expectations and constraints*. Berlin: Springer.
Searle, J. R. (1980). Minds, brains, and programs. *Behavioral and Brain Sciences*, *3*(3), 424.
Taylor, C. (2007). *A secular age*. Cambridge, MA: Harvard University Press.
Varela, F. J., Thompson, E. T., & Rosch, E. (1991). *The embodied mind: Cognitive science and human experience*. Cambridge, MA: MIT Press.
Wheeler, M. (2011). Mind in life or life in mind? Making sense of deep continuity. *Journal of Consciousness Studies*, *18*(5–6), 148–168.
Zimmerman, M. E. (2008). The singularity: A crucial phase in divine self-actualization? *Cosmos and History*, *4*(1–2), 347–370.

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