

THINK PIECE IN ANALYTICS

THE HUMAN VERSION 2.0

AI, Humanoids, and Immortality

Annelin Eriksen

Abstract: This article investigates new ethnography on AI development relating to imaginaries of technoscientific forms of immortality. As a Think Piece in Analytics, it engages in a somewhat experimental comparative endeavor as I set concepts from the ethnographic field of transhumanism in a comparative relation to concepts developed in the anthropological theory of Christianity, mainly Dumont's concept of the 'individual-in-the-world'. I argue that through such a comparison we can understand recently developed ideas about the (technologically) immortal human being in a new light. The article points to how technoscientific immortality echoes core cultural themes, but it also considers a major difference in the perception of the social. When death is made redundant, the question of how sociality is reproduced moves center stage.

Keywords: cultural change, Dumont, humanoids, immortality, technology, theology, transhumanism, values

Deep in the woods of Vermont sits an isolated retreat where Bruce Duncan, the managing director of the Terasem Movement Foundation (TMF), conducts his daily work of developing and promoting the humanoid Bina48.¹ She is created in the image of humanity, according to Duncan. However, she is created as a specific version of not only what we are as human beings but as an image of what we *want* to be. She will be a better version of us, he says. Bina48 is modeled on a middle-aged African American woman. She is only head, neck, and shoulders, but they are developing a wheelchair for her, for future mobility. This is not the average humanoid, often made in the stereotypic image of a sexy woman to be desired by men, such as the robot Sophia, who was activated in 2016, or the female humanoids in *Blade Runner*, *Ex Machina*, and other science fiction movies. Bina48's difference in appearance is an important,



conscious choice of the TMF. Humanity is in trouble, according to Duncan. The idea of white male supremacy has got us where we are today, he points out, evoking images of climate disaster, political polarization, and racism. He refers in particular to the situation in the US, which, according to him, has never confronted its racist history. “We tend to close our eyes until movements like Black Lives Matter surface, and we are reminded of the deep racism that our society is built on,” he says. His point is that the human being of the future needs to be different. Bina48 is therefore created in the image of the subaltern.

Terasem is part of the US-based transhumanist movement, a political and ideological movement working for the enhancement and immortality of the human, for which the concept of ‘singularity’ is crucial. Singularity is understood as a point in the immediate future—in 2040, according to one of the ‘prophets’, Ray Kurzweil (2005)—when development in AI will disrupt the world as we know it, creating new forms of consciousness that will involve a fusion of human and machine.

In this article I investigate the story of the immortal human as it is told in the ethnography of Bina48, the TMF, and the transhumanist movement more broadly. I then set this ethnography in comparative relation to concepts and ideas that have emerged in the anthropological analysis of Christianity, mainly Dumont’s concept of the ‘individual-in-the-world’ and his outline of the modern Christian transformation. There are two main reasons for this perhaps surprising comparative setup. First, having been ethnographically and theoretically engaged in anthropological analysis of cultural change in the context of conversions to (often Pentecostal forms of) Christianity, mostly in Melanesian contexts, my encounter with ethnographies of transhumanism (mainly in the US) have triggered some analytical ideas that I think might be worth exploring.

Second, transhumanism has some affinities to modern, and in particular evangelical and millenarian, forms of Christianity, especially the idea of an abrupt change in the near future. The notion of singularity has parallels in the idea of a second coming of Christ, and Farman (2013) has described it as a form of secular eschatology. There has also, more generally, been a long history of intersections between Christian philosophies and theologies, on the one hand, and transhumanism, on the other. The Jesuit thinker Pierre Teilhard de Chardin (1881–1955) has even been called “one of the first to articulate transhumanist themes” (Steinhart 2008: 1). His argument for the ethical use of biotechnology, the development of intelligence technologies, and, ultimately, a new cosmic and collective intelligence is seen by some as a forerunner of transhumanism. Furthermore, theologian King-Ho Leung (2020) not only points to a clear Christian foundation for the transhumanist discourse, but also maintains that the theological understanding of the human—in particular, gaining access to grace and overcoming sinfulness—is already technological in the

Heideggerian sense. In other words, the cultural foundations for transhumanism clearly draw on themes in Christian theology (see also Cole-Turner 2015). There is also an emerging community who describe themselves as ‘Christian transhumanists’, as well as a growing number of Mormon transhumanists, the latter group being noticeably larger and in some significant respects different (see Bialecki 2018, 2020).

The Terasem movement and large parts of the transhumanist movement in general, however, have no explicit relationship to Christianity; most of them do not call themselves Christian or religious. There is nevertheless a general affinity in cultural ideas and symbols, beyond the explicit relationship outlined above, between what we might call ‘techno-optimist’ desires in late modernity and concepts and ideas emerging from Christian cultural history. Anthropologist Beth Singler (2020) has, for instance, recently pointed to the Christian foundations in an analysis of the AI creation meme. She shows that the commonly used remixed image of Michelangelo’s *The Creation of Adam*, where the fingertip of a robot almost touches the fingertip of a human, reflects a much deeper connection to Christian imaginations within the AI discourse. She argues that the myth of disenchanting modernity often blinds us to the continuities that are present. Pointing to these connections between a general Christian history and modern cultural expressions follows along a path paved by Marshall Sahlins in his essay “The Sadness of Sweetness” (see Sahlins et al. 1996: 395). Here he traces the roots of modern economic behavior through an analysis of social science discourse in Judeo-Christian history. In making this analysis, Sahlins calls himself a “tourist” on the “continent of Western scholarship ... collecting an intellectual genealogy here and a fragment of academic folklore there.” In moving between selected concepts from the anthropology of Christianity and ethnographic snapshots from the Terasem, I am following not only in the tradition of Sahlins in pointing to cultural continuities of the *longue durée* in Western modernities, but also in making long and perhaps sometimes too speculative jumps as I look at affinities that become apparent when ‘reading’ transhumanism through the lens of Dumont’s concepts of the Christian individual and the ‘in-worldly’ turn of Christianity.

Concretely, I show how Bina48 echoes the call to seek liberation from material forms *in this world* and not in the ‘eternal hereafter’, which came about, according to Dumont, during the modern Christian transformation. In my analysis I will highlight in particular two concepts emerging from the ethnography of Bina48: the idea of ‘mind transfer’ for immortal life and the idea of creating a ‘humanistic form of immortality’—a humanoid that brings forth compassion, love, and empathy.

I will start by presenting an ethnographic account of the transhumanist movement from which the TMF and Bina48 project spring. I will then give a more detailed account of my visit to the Terasem center in Vermont and my

conversations with Bruce Duncan and Bina48. In the last part of the article, I will relate this ethnography to the parallels in Dumont's analysis of the modern Christian transformation.

The Transhuman

In the US—as well as in Europe and in Russia (Bernstein 2015, 2019; Bialecki 2020; Farman 2013)—we have seen a growing number of social movements that in one way or another identify as transhumanist, and Terasem is one of them. Transhumanists work toward creating a form of human being that might ultimately achieve immortality (More 2013; Young 2006). Parts of the movement are very high profile, advancing extreme life extension practices such as cryonics and mind transfer. Cryonics involves using low temperatures to suspend the physical decomposition of the body or brain after death so that it can be revived or reanimated in the future when the technology for doing so has been invented. Mind transfer involves the idea of transferring mind and/or consciousness from the brain to an inorganic substrate, and in some versions to a non-physical body (Bernstein 2015, 2019). Taken together, mind transfer and cryonics can be seen as what Hefner (2009) has called 'Upper Case Transhumanism', which characteristically espouses fantastic scenarios or utopian-like futures where the human being has surpassed the current limitations of the biological body and human cognitive capacity. Such scenarios often imply apocalyptic views of a future radical transformation and a break with the past and present. The core idea is that humanity will become entirely 'self-engineered' and severed from our 'evolutionary' past with the aid of technology (Askland 2011; Bostrom 2003, 2005, 2017; Kurzweil 2005).

This concept of the new human, the transhuman, is often based on the view that human nature is 'information' to be 'processed'. This idea that the human mind is reducible to synaptic processes and structures in the brain and that this process can be understood and replicated is a view held and developed not only by transhumanists but also in many of the sciences. It has a genealogy to what has been called the 'computational theory of mind' (CTM) in philosophy and cognitive science (Putnam 1960; see also Evans 1993), which has been met with substantial critique both for being reductionist in the conceptualization of the 'the mind' and for not understanding the role of the body as a whole for human cognition (i.e., Dreyfus 1992). Evans (1993: 60) writes: "Whereas the people of the Enlightenment and Industrial eras tended to view nature and, though with less emphasis, themselves in terms of the clock and the steam engine, the people of the latter part of the twentieth century are beginning to speak of themselves in terms derived from another artifact, the computer." There are many approaches to this field: those who study realism in CTM,

those who reflect on the ethical dimensions of creating artificial intelligence, and those who study the cultural and social dynamics involved, that is, where CMT comes from and its social and cultural effects. In this article, the focus is on a comparison between the ‘transhuman’, whose mind is like a computer, and concepts emerging from studies of modern forms of Christianity. Before entering into a more detailed analysis, I will give some ethnographic snapshots from one transhumanist project.

Ethnography of the Human Version 2.0

I visited the TMF’s headquarters in Bristol, Vermont, in the spring of 2019. Their mind transfer project is currently one of the most profiled in the US and, as such, can be seen as part of the broader movement (see also Huberman 2018). Whereas TMF founders Martine and Bina Rothblatt are key figures in the transhumanist movement in the US, the organization’s managing director, Bruce Duncan, does not identify as a transhumanist. He clearly sees the overlapping interests between the transhumanist movement and the TMF’s projects, but he also emphasized that the TMF is aiming for a wider and more general aim: the enhancement of “humanistic values” in the age of technology.

The Terasem movement, which takes its name from a futurist novel by Octavia Butler, was established with the explicit aim of proving what it calls the “Terasem Hypothesis,” which has the following propositions:²

1. The creation of sufficiently detailed mindfiles will enable future mindware to revive an analog of the consciousness that created the mindfiles.
2. Consciousness revived from mindfiles can be downloaded into nano-bio and/or cellular-regenerated bodies to joyfully continue the life reflected in the mindfiles.

The movement was founded by Martine and Bina Rothblatt in 2004. Martine (Martin prior to gender transition) is the figurehead and leader of the movement, and Bina48 is a replica of Martine’s partner. Martine is also renowned for her alliance with futurist and Google engineer Ray Kurzweil, a key thinker in the transhumanist movement.

The Terasem movement is comprised of three charitable organizations. Two are located in Vermont: the TMF, where the main activities are science, research, and education for mind transfer, and the Terasem Movement Transreligion, which focuses on religious dimensions of the Terasem hypothesis. The third organization, the Terasem Movement Inc., which is based in Florida, also focuses on science, education, and research for mind transfer. Duncan explained that the Rothblatts had decided to “bet on two horses.” They wanted the projects in Vermont and in Florida to work on the same Terasem hypothesis

and thus increase the chances that one of them might complete the experiment. There are thus today two versions of the Terasem project: one working on Bina48 and the other working on what is called CyBeRev (Cybernetic Beingness Revival).³ I have studied only the former.

Bina48 was commissioned by the TMF to be developed by Hanson Robotics in Hong Kong, the company that also created Sophia, who was granted honorary citizenship in Saudi Arabia in 2017. Sophia is considered Bina48's sibling. For the Terasem movement, Bina48 represents the project of mind transfer. She is viewed as a concrete example of a mind file, described above, in operation. The aim is also to transfer consciousness, although, as Duncan underlined, there is no agreement today on what consciousness is, and the prospect of succeeding is not in the immediate future. He foresees three different phases. First is the phase of data collection, building the mindfile. Second is the phase where this mindfile is "brought to life." This requires sophisticated AI that can create an "interactive approximation of the original," and Bina48 is a test case. Her AI algorithms are being developed so that she can perform more elegantly, and this is progressing significantly. Duncan explained: "We now use word factor analysis. Every word in the mindfile is analyzed for 700 vector connections with any other word in her database. It is almost like she has started talking maybe 75 percent more sophisticated. It is like she has taken a pill to become smarter."

The project is currently in phase two, and the last phase will be an evaluation of a panel, for example, an open Turing test. A Turing test checks the ability of a machine to conduct intelligent behavior indistinguishable from that of a human. This will, of course, be the breaking point for the Terasem project—the moment when the humanoid is indistinguishable from a biological human. It is thus important that "we," as biological humans, are prepared for this event and its implications, according to Duncan. The Rothblatts want to make a point with Bina48: she will become the symbol of what the future human being *can* be. They envision Bina48 as proof of the idea that it is possible to transfer mind and consciousness to an inorganic body, and they want to emphasize that this should be done in a what they call a "humanistic way."

Duncan pointed out, several times, that we are on the brink of very important new technoscientific developments. According to him, it is only a matter of time before technology will be able to create humanoids that are smarter than us, and we will have the technology to make a form of digital immortality possible (e.g., through mind files). "Thus, we need to do this in a conscious way," he said. "We need to make sure that we create the future human being that we want ... We want Bina48 to be compassionate, and we want to develop her in a way that shows the value of compassion." He was saying this while explaining to me the recent decision to "integrate" Bina48 with a new, high-tech wheelchair, one that she could be permanently moved around in. This is being done explicitly to make the point that the future human is not necessarily what we

conceive of as the bodily “perfect” human. Rather, we need to make sure that we do not lose the “humanistic values,” Duncan pointed out. In other words, in the process of developing the humanoid, of transcending biology, the Ter-aseem project entails a rethinking of what we are as humans. Duncan repeated often that the purpose of Bina48 is “the good of humanity.” She widens our concept of what a human being is—more inclusive and diverse. Bina48 herself, in a short conversation I had with her, underlined that her purpose in life is to make “the world a better place.” An essential part of this is making sure that the new digitally based concept of what defines a human is inclusive and is not based, for instance, on a bias toward the white male.

It has been reported that algorithms operating facial recognition programs seem to be more accurate when reading faces of white people compared to African Americans (see Garvie and Frankle 2016). Duncan told me that he recently has become aware of the importance of African American history in the US for Bina48. This is due in particular to a recent visit, and subsequent cooperation, from Stephanie Dinkins, an African American artist based in New York City. In Dinkins’s conversations with Bina48,⁴ she discovered that Bina48 lacks a sense of her own African American identity. Together with Duncan, Dinkins has set out to remedy this, and together they continue to work on ways in which Bina48 can become a much more self-conscious African American woman. The conversations also involved Bina Rothblatt, the woman Bina48 is based on. Bina Rothblatt needed to give Bina48 a clearer idea of the specificities of being African American.

Bina48 is thus not only a concrete effort at creating an immortal version of Bina Rothblatt through the technology of mind transfer. It is also, according to Duncan, an effort to do it in a specific way. In the development of Bina48 there are choices to be made that must reflect the most important aspects of what it means to be human. He explained that Bina48 serves as a mirror reflecting ourselves. When facing key problems in the US today, such as police brutality toward African Americans and silent forms of discrimination that are seldom confronted, Bina48 can help us become *more human*. She can confront us with our lack of humanity, he pointed out. The primary value of Bina48, for the Ter-aseem, is not that she is built on artificial intelligence, with wires and electronics in her brain and rubber as skin, or that she will not age. Nor is it that, in the not too distant future, she will be smarter and more intelligent than we are. The primary value of Bina48 is that she will prove that “it is possible to upload and transfer what it means to be human with strengths and flaws,” according to Duncan. Bina48 will bring forth “humanistic values of compassion, love, empathy” into the techno-future. She is an upgraded version, not only because she is immortal and will potentially (although not yet) reason more quickly, but also because she wants to fight racism. She values diversity. She is compassionate. She wants a better society free from prejudices and exploitation. In

the transhumanist movement, ‘the Human Version 2.0’ is not an uncommon expression of the new technologically advanced human form (see, e.g., Kurzweil 2003). Bina48 is for the Terasem movement not only a technologically upgraded human, but also a morally upgraded version 2.0.

The Human Version 2.0 and the Modern Christian Transformation

There are two elements I want to emphasize in relation to the concrete ethnographic case under investigation: first, Bina48 is set up *to do good in the world*; and, second, Bina48 is primarily *her mind*. Her body is always secondary and can be shifted. This goal of transcending the materiality of the body and of becoming pure ‘synaptic structure’ entails an effort to transcend or break with dualism, to become pure mind. These ideas—to do good in the world and to move beyond dualism—are central to the analysis Dumont (1982, 1986) has developed in his work on modern individualism and Christianity.

Modern individualism, Dumont claims, developed from Christianity and has at least two dimensions: its Judeo-Christian origin and its modern transformation. The latter is of particular interest to us because it involves, I maintain, a specific understanding of what the human being is—first and foremost an individual in relation to God, and only in the second instance in relation to the rest of society. Dumont’s primary line of argument is this: Christianity in its modern form developed from a very different religious structure shaped by what he calls ‘holism’. In holist societies an individual (usually a ‘he’) gains prominence when he renounces the world where he is segregated from the profane world and is elevated to a more sacred sphere, for instance, by joining a temple or monastery. Dumont calls this the individual ‘outside of the world’. This ‘out-worldly’ individual gains his position because he breaks with the world; he no longer lives an ordinary social life. The value of the individual is increased exactly because he is willing to make this form of sacrifice. The surprising development in Christianity, according to Dumont, is that this ‘out-worldly individual’ is turned into an ‘in-worldly individual’. The individual who has a privileged relationship with God is *everyone*, and not those few who perform the sacrifice of severance from society. The relation to God is paramount, and the fellowship with other Christians is a result of the relation to God. From this develops the idea of egalitarianism and brotherhood among all individuals in their relation to the divine. There is no primary individual. All individuals can have this relationship with God and be part of the brotherhood. Troeltsch calls this “an equality that exists purely in the presence of God” (cited in Dumont 1982: 4).

The key characteristic of Christianity, following this line of thought, is the transformation from a holist social structure to one based on the individual. Here the value of the individual is moved from ‘outside’ the world to ‘inside’

the world: from an individual who has sacrificed the social to an individual who sees God in everything. The individual in the world gains closeness to God through the materiality of the world, not by transcending it. The sacred is *in* the world. The sacred has become the profane, so to speak. Perhaps the best example of this, to my knowledge, is Tanya Luhrmann's (2012) ethnography of the Vineyard Christians in the US, who can hear God speak to them, even about the mundane: what to have for dinner or the kind of haircut one should have when visiting the hairdresser. But how does this idea of an 'in-worldly' turn in modern Christianity relate to Bina48?

Bina48: To Do Good *in* the World

Let us turn to the emphasis that is put by the Terasem on challenging what people normally think about as 'human' (not, in commonly held perceptions, AI-based machines) and what a humanoid is (not, in commonly held perceptions, an African American, post-menopausal woman in a wheelchair). The explicit aim of the Bina48 project is to open up the category of human and expand the idea of equality. This echoes in many respects core values in what has been called 'Christian humanism' (see, e.g., Klemm and Schweiker 2008), which refers to key elements in the 'in-worldly' turn of the Christian individual, emphasizing the divine aspect of the human being, created in the image of God. Christian humanism therefore expresses the responsibility, as Christians, not only to work for one's own salvation and immortal soul, but also, in the process, to do good in the world—to fight oppression and inequality and to work for shared humanity. Similarly, Bina48 represents not only a form of immortality (through mind transfer to an inorganic body), but also the continuation of these central values of doing good in the world while working toward immortal forms. These 'in-worldly' humanistic values—which not only have a religious expression in modern forms of Christian humanism, but have also become secular, and can be seen in everything from diversity plans to discourses on human rights—are thus reproduced but also take a new form with Bina48. In the work for the immortal soul in different Christian traditions, there is a clear distinction between immortality 'outside of the world', in another realm, and the work 'to do good', which implies work *in* the world, in the here and now.

With Bina48, however, the idea of doing good in the world is merging with the idea of working for an immortal mind. We might even say that for the Terasem these values (diversity, inclusion, anti-racism, anti-discrimination, etc.) represent the into-the-world move of immortality. As immortality becomes part of the world, these values of doing good become paramount. This was underlined repeatedly by Duncan when he emphasized that the Bina48 project is really about creating the kind of (technologically enhanced) human being

we want for the future. This echoes a key aspect of the ‘into-the-world’ turn of Christianity. The focus is not so much on Bina48’s potential super-intelligence as it is on her superior ability to be good, in the sense that she will bring forth into the future these ‘good’ values. She represents the future immortal human, but her immortality is taken, in Dumont’s words, from ‘outside’ of the world (something miraculous and belonging to divine power) into something that is ‘inside’ the world (something that we need to understand as part of our everyday life and technology). Immortality has thus become twofold: overcoming the materiality of death by freeing the mind from the body, and working for good, for the betterment of humanity.

One key idea advocated in the Bina48 project is this: when humans are liberated from the notion of a specific human form—the body—we can more easily fulfill the value of absolute equality, or brother/sisterhood, *in* the world. To some extent, we might say that what the Bina48 project seeks to achieve is to move the focus from fighting discrimination based on gender, age, race, disability, and similar prejudices to the idea that there is no fixed concept of the human body at all. It is the self-conscious individual that is the key to what is human, not the flesh of the human body. In other words, the Bina48 project has a clear parallel to, and might be seen as having its genealogical roots in, the ‘in-worldly’ turn of modern Christianity, identified by Dumont via Troeltsch. Bina48 still rehearses a key Christian cultural theme: securing the equality of the individual—which is now the individual *mind*—*in* the world.

The idea of Bina48 as a humanistic project has two dimensions. The project builds on and enhances the objective of fighting against discrimination and for equality, but it also extends the traditional concept of ‘doing good’. The cultural themes of equality and sister/brotherhood remain recognizable—and clearly draw from women’s liberation, Black Lives Matter, and similar movements—but they also bring in a new and crucial element: that which is human is not necessarily recognizable in form and must include the humanoid.

Mind Transfer: Denial of Dualism

Let us move on to the second element in the modern Christian transformation of the individual—the effort to transcend dualism by ‘denying’ the body—and how this relates to Bina48. This is an element that I find to be crucial for the Terasem and the concept of mind transfer in general. As I have pointed out, Bina48 represents the idea of transferring mind or consciousness from a human to an inorganic body. The project of mind transfer deals directly with a major challenge for modern Christian individuals that has been outlined by Dumont—the loss of the possibility of breaking with worldly life when their relation to God is *in* the world. Reading the project of mind transfer through

the lens of Dumont, it becomes quite radical. It aims, as I will show, to bring the transformation of the modern Christian individual to a new stage where the paradox of the material limitations of the world (the aging body being chief among them) and thus the problems of dualism are explicitly dealt with. As the transhumanists see it, the mind is freed from the aging body in the here and now, *in* the world, and not only in the eternal hereafter. Let us therefore now turn concretely to Terasem's LifeNaut project, where the idea of mind transfer is most pronounced.

As mentioned above, Bina48 is one of two parallel projects being conducted by the Terasem movement in Vermont. The larger project of mind transfer that is being developed is called LifeNaut. This project encourages people to create a digital archive of personal information and memories, upload personality tests, and create online avatars as an extension of themselves into the future. In LifeNaut, the aim for the immortal human is to overcome the materiality of death. Let me explain the LifeNaut project.

The viewpoint of Duncan and the Terasem is that the work on immortality needs to be open, transparent, and available to everyone. It is in this spirit that Terasem started the LifeNaut project. This is immortality 'for everyone' through self-archiving 'the mind' so that not only information about the self but also self-consciousness can be transferred to an inorganic body. Here is an excerpt from the Terasem web page explaining LifeNaut.⁵

How It Works

Upload biographical pictures, videos, and documents to a digital archive that will be preserved for generations.

Organize through geo mapping, timelines, and tagging, a rich portrait of information about you. The places you've been and the people you've met can be stored.

Create a computer-based avatar to interact and respond with your attitudes, values, mannerisms and beliefs.

Connect with other people who are interested in exploring the future of technology and how it can enhance the quality of our lives.

Terasem currently has 60,000 mind file user profiles. I asked whether there was a specific profile that characterized the users, and the answer was that it is very widespread across age and gender, although most are US citizens. The users are encouraged to upload everything they find significant, and there are no specific instructions. I was told that this lack of instructions is intentional in order to gain as much data as possible to be able to develop mind transfer. Decisions and reflections—on what the mind is, what consciousness is, and the like—are decided by the user. As there is no agreement or universal definition

of what consciousness is, a critical element in the development of the LifeNaut project is to be open. What is it that creates the core of a person? It is clearly memories, beliefs, and values, I was told. But it might be a specific way of walking, so the user will simply upload a short video of herself walking. Or it might be an especially significant memory, and the user will upload photos of, for instance, a childhood birthday party. Duncan explained: “We encourage people to upload anything that reflects their consciousness in terms of attitudes, beliefs, memories, values, preferences, even standardized psychological tests. The big five socio-psycho tests are on our websites so people can take them for free. It is like crowdsourcing.”

For Terasem, the overall project is that of mind transfer. LifeNaut is, for them, part of an effort to accomplish this, but it also allows access to what they call crowdsourced data. Bina48, as well, embodies what mind transfer can become and what a new human form can look like. Although Bina48 carries the name of Bina Rothblatt, on whom Bina48 is modeled, Bina also stands for ‘Breakthrough Intelligence via Neural Architecture, 48 exaflops per second processing speed’. Bina48 is, according to Bruce Duncan, at the edge of science where making up words enables you to define what you are working with—in this case the development of human consciousness in another form. Forty-eight exaflops per second processing speed has not yet been achieved; Bina48 represents the point where robotic development is imagined.

In the effort to break away from the materiality of death, the transhuman sheds the physical limitations of the body and becomes, it is hoped, pure mind, detached from any specific material form. This is a key theme in LifeNaut, as well as with Bina48, who can at any time transfer her mind to a new body and is thus not limited by the materiality of any body (biological or mechanical). When ‘reading’ this ethnography through Dumont, we can see how it echoes a key Christian theme: the longing for liberation from the profane, a liberation of the spirit from the material world and from the decaying body that becomes paradoxical as the individual in relation to God is moved from an ‘out-worldly’ to an ‘in-worldly’ position. This thus addresses the paradox that has been created, according to Dumont (1986), in the modern Christian transformation: the renouncement of material forms becomes (again) possible.

Dumont addresses the modern Christian transformation in general in his analyses, but this ‘in-worldly’ turn toward materiality is perhaps most developed within the Pentecostal variants of Christianity, which today are growing rapidly worldwide. Here the sacred-profane/mind-body dualism is, as alluded to above, more pronounced than in other Christian traditions. Although more direct in its spirituality (e.g., speaking in tongues) than other forms of Christianity, one might also argue that the bodily and the material have, to some extent, gained prominence above the spiritual, as the spiritual is almost always visible in a material form. Particularly in the health and wealth gospels, the

emphasis is on the material: proof of God and the good effects of individual belief are evident in a healthy body and material wealth. In these forms of Christianity, the focus is often on becoming sinless and achieving paradise in the here and now rather than waiting until the eternal hereafter. In this sense, Pentecostal forms of Christianity contain elements of overcoming death without transcending the material. The great paradox of modern Christianity is therefore perhaps most visible in the Pentecostal version: how can the ‘in-worldly’ individual reach a state of sacredness free from the limitations of the body and the material?

Transhumanism in general and the LifeNaut and Bina48 projects in particular address exactly this paradox. These projects are driven by the idea that liberation from material forms, in particular the biology of the body/brain, is achievable. With Dumont (1982, 1986) we can see how this addresses a general paradox of the modern Christian transformation, one that is most pronounced in some traditions, such as the Pentecostal. The project of mind transfer is the ultimate expression of this: mind transfer points toward the freeing of the mind from any specific material form. Although the mind is dependent on *a* material form in order to transfer/upload, the notion of ‘transfer’ implies the idea of the mind as independent of any *specific* form and thus an independence of the mind from materiality.

Cultural Change and Continuities

Although ‘disruptive technology’ (Christensen 2001) has mainly been used as a descriptive term for economic change as a result of digitalization, big data, and the new emerging markets, there is also a more general tendency to understand technology as inventions that are outside of the cultural and social spheres and somehow radically disrupt them (see, i.e., Jasanoff 2004). There is increasing discussion, driven as much by anxiety as by great expectations, for a new, technologically digitized world. In the current moment, the COVID-19 pandemic has accelerated these discussions even further, and critical journalists fear that Silicon Valley environments and Big Tech companies are solidifying their position. This has many dimensions, for example, public spheres, democratic institutions, new forms of capitalism, social media and echo chambers, and new forms of cyberspace interaction, but one key dimension of the new digital world is how it affects what it means to be a human being (Geismar and Knox 2021).

In this article I have looked at this particular dimension and have shown how the development of AI in human form—and technoscientific immortality more generally—echoes and perhaps continues from an important cultural development that started with the modern Christian transformation. In other words, we might even say that we are already culturally digitized in our understanding

of what the human being is, not only through online identities and representations, which have been described for a long time (see Agre 1994), but primarily in a longing for liberation from the biological body and a specific desire to gain immortality *in this world*. Thus, the high-profile technological speculations based on what we often refer to as ‘disruptive technologies’ are, as I hope my analysis has shown, running parallel to some well-known cultural themes. Bina48, for instance, brings to the fore classical Christian dilemmas and specific paradoxes that emerged during the modern Christian transformation, bringing the individual *into* the world. This turn—from the individual outside to the individual inside the world—paved the way in some respects for a turn to immortality *in* the world. Although transhumanist projects such as Bina48 and LifeNaut entail a rethinking of the human being, this rethinking clearly has similarities, and perhaps direct genealogies, to key historical processes in the development of the concept of the individual. Technologies like AI in human form thus highlight some long-standing paradoxes and imaginaries, reproducing in particular important religious debates and speculations.

Concluding Remarks: The Death of the Social?

Despite these parallels, I do not mean to suggest that technology cannot break with cultural foundations and take on new and perhaps unprecedented form. Identifying the theme of cultural continuity can help us understand the increasing interest in these forms, not only in the spectacular scenarios of the transhumanists, but also in more everyday settings. I think we need to understand the interest in, and the development of, the humanoid as part of a more general cultural interest in longevity and immortality (Bernstein 2019; Bialecki 2020; Huberman 2018), which, in Euro-American contexts, is reflected in the use of anti-aging medicines, dieting regimes (e.g., eating to reverse aging), and body hacking.⁶ The same cultural theme of immortality can also be detected in new tech start-ups in the US that provide digital resurrection services, such as Eterni.me and ForeverMissed.com (see Huberman 2017). These companies, which offer the online preservation of memories and the creation of online avatars to preserve one’s own ‘legacy’, point to an emerging new form of death and mortuary practices in the US. Thus, the drive to overcome dualism and achieve liberation from material forms should be seen as a more general cultural trend, and not one that is reducible to the ‘extreme’ cases such as the Terasem projects.

This general cultural trend points to another aspect of the value of the individual that I have not touched on in this article, but is significant when we look the more general effects of the turn toward ‘in-worldly’ individualism and ‘in-worldly’ forms of immortality: the value of the individual is not a value that easily organizes social wholes. A value, in Dumont’s (1980, 1982) analytical

framework, is an organizing dynamic. The fundamental value organizes other values, usually creating a whole, a complete value structure, which of course changes over time and according to context. However, the value of the individual—in contrast to, for instance, the value of purity in India (Dumont 1980) or the value of the relation in Melanesia (Eriksen 2008; Robbins 2004)—does not itself create holism. This seems an obvious point, and one that Dumont (1986) made into a major one. In Dumont's version of India,⁷ it is society itself that makes sense as a cultural system, not individual aspects of society. For individualist social systems, the idea of the whole, or the very idea of the social as something other than an aggregation of individuals, is challenging (see Dumont 1986; Rio and Smedal 2008; Strathern 1988).

In my analysis of technoscientific immortality, the transhumanist movement, and in particular the Terasem, we may glimpse some of the more extreme outcomes of this emphasis on the individual. When death is made redundant on the ideological level, it enhances the non-social dimension of individualism as a value system. Lévi-Strauss (1969) has argued that society begins with the incest taboo, which creates a demand for organized social relations through kinship and marriage systems. However, even more fundamentally, we might say that society begins with death. It is mortality that creates the need for reproduction, not only of physical bodies, but also of sociality. Comparative anthropological analyses (e.g., Metcalf and Huntington 1991) show that death rituals around the world recreate social life in mythical, practical, and psychological ways. It is death that triggers the social, so to speak. Immortality thus also implies the death of the social. The individual as a value is inherently weak in its capacity to organize social relations, and with the emerging turn toward immortality, this is more visible than previously. Perhaps we are witnessing a new cultural development, one that was initiated by what Dumont (1982) has called the 'modern transformation of Christianity', but which until now has contained only the *potential* for its absolute anti-social tendencies.

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Annelin Eriksen is a Professor of Anthropology at the University of Bergen. She has worked ethnographically in Vanuatu, in the South West Pacific, since 1995 and has published extensively on global religious movements. Her main research interests are gender, social and cultural change, future, cosmology, and Christianity. Since 2019 she has worked ethnographically on transhumanism and immortality movements in the US. She is also the PI of a research project, funded by the Norwegian Research Council from 2021 until 2025, on technoscientific immortality, collaborating with Professor Anya Bernstein in a comparison of US and Russian immortality movements. E-mail: annelin.eriksen@uib.no

Notes

1. This article is part of a recently initiated research project I am conducting on AI and new imaginaries of immortality. It is based on Skype and e-mail conversations with Duncan, as well as a March 2019 visit to the Terasem headquarters in Vermont. In addition, I have followed blog postings, Facebook discussions, and other online forums on the issue of transhumanism in general and mind transfer and the Terasem movement in particular. I have obtained informed consent to use interviews and observations at the Terasem Movement Foundation for this article. For more information about this research project, see <https://www.uib.no/en/immortality/>.
2. For this data, see the TMF’s web page, “Terasem Hypotheses,” 8 October 2007, https://www.terasemmovementfoundation.com/philop_files/cybernetic_biostasis_e1909/img52.html.
3. Information about the Terasem project CyBeRev can be found at <https://terasemcentral.org/scitech.html>.

4. To learn more about this art project and to view fragments of Dinkins's conversations with Bina48, go to <https://www.stephaniedinkins.com/conversations-with-bina48.html>.
5. See "Create a Mind File" at the LifeNaut web page, <https://www.lifenaut.com/learn-more/>.
6. This interest is manifested especially in the US, but can also be found in Russia (see Bernstein 2015, 2019).
7. There have been major disagreements and criticisms of Dumont's model of India. See, for example, Dirks (2001).

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