Introduction
Thinking through Transhumanism

Transhumanism is a topic I stumbled into rather than intentionally set out to explore. A few years ago, I was beginning to write about the way experiences of loss, mourning, and memorialization are changing in the digital age. In pursuing this interest, I came upon Martine Rothblatt's book, *Virtually Human: The Promise and Peril of Digital Immortality.* The book provides an overview of the transhumanist attempt to achieve immortality through the technology of mind cloning and it discusses some of the "revolutionary" implications this technology might have for the future of our species. As I read the book, I found myself intrigued, but also struggling to wrap my head around what Rothblatt was proposing. The transhumanist vision of the future she was describing seemed utterly alien, and to be completely honest, kind of horrifying. Did I really want to live in a world where my great, great grandmother's digital avatar would join me for Thanksgiving dinner? Or my grandparents would be cared for by "cyberconscious" robots? Or my mindclone digital offspring called "bemans" would "stage civil rights movements" to ensure they "win the same status that flesh-and-blood humans enjoy" (Rothblatt 2014, 166)? I would read a few pages, put the book down, and then blurt out to myself, "This is completely crazy!"

As my kids like to say, "The struggle was real." As a cultural anthropologist I had been trained to understand and explicate the ideas, beliefs, and practices of other groups of people. Indeed, this is the basic

1

Introduction

lesson I impart to my students every semester when I teach Introduction to Cultural Anthropology. However, for reasons I hope to explore in this book, my initial encounters with transhumanism yielded mostly feverish critiques and unequivocal condemnations. It was very difficult for me to keep my "anthropology hat" on.

In hindsight, this also seems to have been part of the allure. As I fumbled my way through my first encounters with transhumanism and the bewilderment and hostility it provoked, I sensed a challenge presenting itself. How might I use the tools of my trade to render the transhumanist vision of the world more sensible? How might I treat transhumanists the way I would any other "natives" whom anthropologists typically try to study and understand?

After reading more of the literature on transhumanism I came to find that I was hardly alone in my reaction. While transhumanists themselves have generated a robust literature, extolling the virtues and promise of their attempts to use science and technology to reengineer the human species and usher in a posthuman future, most scholars writing about transhumanism revealed the same kind of hostile impulse that initially animated my response. Transhumanism was being decried as "the most dangerous idea" ever and the goal of most scholarship on transhumanism seemed intent on demonstrating that transhumanist conceptions of human nature are "wrong" or "defective."

It turns out that teaching Introduction to Cultural Anthropology every semester proved incredibly useful in helping me reclaim my "anthropology hat." As I began to learn more about the Transhumanist Movement and the various initiatives transhumanists promote, I came to realize that transhumanists are interested in using science and technology to reconfigure conceptions of the person, the body, kinship, cosmology, the social and political order, and the physical environments in which our future descendants will dwell. In other words, I came to realize that transhumanist initiatives target the very domains anthropologists have traditionally focused upon in their efforts to explore and understand

2

human life across a vast array of contexts; the very domains, in fact, that structure the organization of my Introduction to Cultural Anthropology course. Once I realized this, the goal was no longer to show how or why transhumanists are "crazy" or "wrong," but rather, the goal was to ask, how does the transhumanist understanding of the world; of human nature, the person, kinship, cosmology, the good life, and so on, *compare and contrast* with the way human beings, living in other times and places, have conceived of such things? I began to suspect that approaching transhumanism, and transhumanists, from a comparative perspective might yield insights about the movement, and the people who promote it, that would otherwise go unnoticed.

A "Back to the Future" Approach to Transhumanism

If anthropology is indeed the comparative study of humankind, then what could be better grist for the anthropological mill than a group of people who are explicitly devoted to ushering in a new kind of human, or rather, posthuman? Over the past thirty years, transhumanism has emerged as a significant sociocultural movement. The movement is premised upon the idea that human beings can use science and technology to significantly enhance their capabilities and overcome many of the limitations of human biology. Transhumanists believe technology will imbue us with intellectual, physical, and psychological capabilities that far surpass what present-day human beings are familiar with. This, they argue, will transform our species and society in very significant ways, ultimately ushering in a "posthuman" future. As Max More, one of the founders of The World Transhumanist Association (now called *Humanity* +) explains, "By thoughtfully, carefully, and yet boldly applying technology to ourselves, we can become something no longer accurately described as human – we can become posthuman" (More 2013, 4).[1] Some of the initiatives transhumanists are currently pursuing include: radical life extension, the colonization of space, achieving immortality through

Introduction

the technology of mind cloning, developing robots that will exhibit the full range of human cognitive abilities, and using technology to achieve eternal bliss as well new forms of body augmentation. In other words, transhumanists are interested in using science and technology as part of a totalizing attempt to create a radically enhanced future in which posthuman beings will acquire powerful capabilities and be impervious to aging, illness, and death.[2]

As a popular phenomenon, transhumanism seems to be everywhere these days. Its influence can be gleaned in television shows like *West World*, Elon Musk's SpaceX program and self-driving cars, and military attempts to use new technologies to augment the cognitive abilities of soldiers in the field. In other words, it is clear that transhumanist projects are *already* actively remaking the social, material, and imaginative worlds in which we live. And yet, as an anthropological object of inquiry, transhumanism has received surprisingly little attention.

The purpose of this book is twofold. First, it provides an anthropological exploration of transhumanism as a contemporary sociocultural movement. In the chapters that follow I examine the visions, values, and practices that animate transhumanist projects and their attempts to appropriate science and technology to usher in an enhanced posthuman future. Second, this book uses the study of transhumanism as a way to introduce a new generation of students to the field of cultural anthropology. In classic anthropological fashion, I argue that transhumanism can be better understood by placing it within a comparative perspective. I show how transhumanist efforts to transform the future of our species speak to a longstanding set of concerns within the discipline. This book, therefore, starts out from a paradox. Ethnographically, it focuses on a futuristic social movement that is committed to the idea of perpetual transcendence. Academically, however, it argues that there is much wisdom to be gained by returning to the past. Listening to our disciplinary ancestors can still yield important insights about the worlds and people of the twenty-first

century. In this book, therefore, I take a "back to the future" approach to transhumanism.[3]

This back to the future approach to transhumanism may strike some readers as counterintuitive, and I am the first to admit that it is woefully unfashionable. But at a time, yet again, when all "that is solid" seems to be "melting into air" (Marx 1848) I hope to demonstrate that knowing the past, whether it be one's ancestors, one's history, or one's discipline has value. It has value *not* because it enables one to spout off information or names that most people are no longer familiar with. But rather, because knowing the past enlarges our vision. It helps us to recognize that that which seems novel is not necessarily new, and that which is new, is not necessarily more valuable. There are, no doubt, good arguments to be made for putting transhumanism in conversation with more contemporary "turns" in anthropology. The attempts to develop a "cyborg anthropology" (Downey, Dumit and Williams 1995; Haraway 1991) or a "posthuman" anthropology (Kohn 2013; Latour 2005; Rees 2018; Tsing 2015; Valentine 2016, 2017; Whitehead 2009) or an anthropology predicated upon "the new materialism" (Bennett 2010) do offer valuable perspectives from which to explore the transhumanist project and I look forward to forthcoming and future scholarship that moves the study of transhumanism in such directions. However, for reasons I have tried to make clear, this is not the direction I have chosen to pursue in this book. I hope that students and scholars of anthropology and transhumanism alike are able to recognize that both orientations have merits as well as inevitable limitations.

Technology, the Imagination, and the Future

While this book advocates a back to the future approach to transhumanism, it also engages three timely questions within anthropology today: How are new forms of technology reconfiguring human life in the twenty-first century? How are technologists assuming an ever-greater role in

Introduction

shaping the future of our species? And more specifically, how does "the technological imagination" (Balsamo 2011; De Lauretis et al. 1980) become a powerful force in the making of social lives and futures?

There is a robust anthropological literature exploring the articulations between technology and society. Anthropologists have shown how new forms of biotechnology are shaping understandings of life and death (Franklin and Lock 2003), reproduction and parenthood (Grayson 2000; Taylor 2000), and even altering conceptions of the person (Csordas 2000; Dumit 1997). A growing interest in digital and computer technologies has led anthropologists to pose further questions about the way technology is engendering new forms of subjectivity and sociality (Boellstorff 2008; Coleman 2012; Horst and Miller 2012; Schüll 2014; Turkle 2005, 2017). Developments in the fields of robotics and artificial intelligence have also prompted anthropologists to raise important questions about the role culture plays in mediating people's reactions to and uses of technology (Robertson 2017; Vidal 2007).

This literature has greatly enhanced our understanding of how technological innovations, across a range of contexts, are fundamentally altering the ways people in the twenty-first century live and feel. What makes this book distinctive, however, is first, that it focuses on a group of actors who are explicitly committed to using technological innovations as part of a *totalizing* attempt to radically reimagine the future of our species. From the cellular, to the extraterrestrial, transhumanism has implications for just about every aspect of human life. This, I propose, makes transhumanism particularly good "to think with."

Second, while transhumanism provides an apt lens through which to interrogate the impacts of new technologies, the primary emphasis in this book is on exploring the transhumanist "technological imagination" and the ways in which transhumanists envision a posthuman future that has yet to be actualized. More specifically, it primarily focuses on the technological imagination of transhumanists living in the United States. As Anya Bernstein points out, "American techno-utopianism"

6

has its own particular set of intellectual and cultural genealogies and is not necessarily representative of transhumanist orientations elsewhere (Bernstein 2019, 22). This insight is further elaborated by Anne Balsamo and others who have argued that the very concept of the technological imagination encourages us to explore the dialectal interplay between culture and technology (Balsamo 2011; De Lauretis et al. 1980). It suggests "that technology shapes the very content and form of the imagination in our time" (De Lauretis et al. 1980, vii), but it also reminds us that "the exercise of the technological imagination reproduces cultural understandings at every turn" (Balsamo 2011, 7). As Balsamo argues, exploring how "the future is first produced in our imaginations," not only provides a useful entry point for examining present cultural configurations, but it also enables us to examine how the imagination itself becomes a powerful force in the making of social lives and futures (Balsamo 2011, 52).[4] Even if some transhumanist visions of the future seem far-fetched now, their ability to widely circulate these visions has the potential to play an influential role in shaping the world we will inherit.

Indeed, as science and technology are currently transforming the human condition at a historically unprecedented rate, the future itself is emerging as a topic of anthropological concern. When we consider the fact that anthropology emerged from attempts to document and "salvage" vanishing cultures before they disappeared, this reorientation, and this emphasis on studying social forms *not yet actualized* is noteworthy. In part, I suspect it is a response to the looming threat of the Anthropocene. Instead of working to salvage vanishing cultures, which became unfashionable long ago for theoretical, as well as historical and ethnographic, reasons (Stocking 1983), anthropologists have become increasingly concerned with salvaging *a* future for our species.[5] The planetary clock is ticking and it is clear that if we are going to extend our species presence into the deep future, adaptations and interventions will need to be made. And yet, anthropologists also recognize that

Introduction

what makes our species distinct is not just its capacity to imagine and anticipate the future, but its ability to shape the future in accordance with particular visions and values; that is, to "organize the future as a cultural horizon" (Appadurai 2013, 5). Therefore, in this book I ask: exactly what kind of future are transhumanists interested in creating and what does this reveal about the visions and values that animate their efforts? As the eminent, and unfortunately late sociologist, John Urry has urged, "The future is too important to be left to states, corporations or technologists. Future visions have powerful consequences and social science needs to be central in disentangling, debating and delivering those futures" (Urry 2016, 7).

By focusing on this particular group of technofuturists, I join efforts with other anthropologists who ask questions about how futures are made and by whom (Appadurai 2013; Farman 2012a; Miyazaki 2013; Valentine 2012). Although commentators often jokingly refer to transhumanism as "The Rapture of the Nerds," transhumanists are influential stakeholders in the future.[6] Transhumanism has generated a very powerful group of celebrity scientists, cum engineers, cum entrepreneurs who actively promote transhumanist visions and agendas by working through an array of corporate- and government-sponsored institutions. In fact, I suspect that this power and influence is part of what provokes so much anxiety and concern and makes it difficult for scholars to keep their "anthropology hats" on when studying transhumanists.

Like Urry, I agree that the "future is too important to be left to states, corporations, or technologists," and that social science should play a role in "disentangling and debating" those futures. However, the first step in such a conversation or "debate" should be: understanding. The ethnographic record is replete with too many examples of interventions gone wrong because the impulse to critique superseded the impulse to analyze. If we are going to critically engage with transhumanist attempts to make the future, it behooves us to understand them first.

8

Technology, the Imagination, and the Future

This also means taking account of the "ideological differences" and "internal tensions" within the Transhumanist Movement and recognizing the fact that such "movements rarely speak with a single voice" (Escobar 1992, 421).[7] While transhumanists have become powerful stakeholders in the future, this does not mean that all transhumanists share a common vision of the future or agree on how best to usher that future in. For instance, unlike transhumanism in Russia, where "futurists hold diverse political views and the communities they form are not generally based on traditional politics" (Bernstein 2019, 23), in the United States, the most outspoken and influential figures of the Transhumanist Movement have been highly educated, predominately white, male elites, who share libertarian outlooks and have earned their fame and fortunes in Silicon Valley by combining their knowledge of the high-tech industry with an equally robust commitment to venture capitalism.[8] For instance, billionaire investor Peter Thiel, Space X founder Elon Musk, Amazon CEO Jeff Bezos, and famed futurist Ray Kurzweil, who now directs Google's department on artificial intelligence, have all played pivotal roles in developing transhumanist visions into lucrative business enterprises. And yet, while Silicon Valley has provided a major impetus for the growth and renown of transhumanist ideas, the movement is also attracting a group of technoenthusiasts with far less capital, financial and otherwise, who are equally committed to using science and technology to push the limits of what it means to be human and who tend to be much more supportive of socialist politics and policies rather than advocates of free market capitalism.

These self-proclaimed "body hackers," "biohackers," "grinders," or "scrapheap transhumanists" are at the forefront of a growing DIY Transhumanist Movement. They not only use widely available technologies and resources such as tracking chips, magnets, and motion centers to enhance their sensory capacities and fulfill their aspirations of becoming self-made cyborgs but are also at the forefront of a growing citizen science movement and are committed to reclaiming scientific

research from the official institutions of the academy.[9] Like hackers elsewhere, grinders advocate "open source" technology (Coleman 2012; Kelty 2008). And in stark contrast to the venture capitalists of Silicon Valley, they explicitly reject the idea that body modification and biogenetic technologies should be commodified for the pursuit of profit, or reserved for those with "laboratories and large bank accounts."[10] An exhaustive analysis of the Transhumanist Movement is obviously beyond the purview of this book. However, I hope to demonstrate that transhumanist visions of the future are neither monolithic nor uncontested. Indeed, one of my goals is to explore the tensions and contradictions that animate the Transhumanist Movement in the United States, as well as illuminate the values and visions that are shared.

The Anthropology of Transhumanism

Over the past fifteen years, the literature on transhumanism has exploded. Much of this literature is being generated by transhumanists themselves, who are eager to explicate and share their visions of the future with a larger audience. For instance, religious studies scholar, Robert Geraci, explores how transhumanist visions and values have "entered contemporary life" through the emerging popular science genre of "Apocalyptic AI." He argues that figures, such as Ray Kurzweil, Hans Moravec, Marvin Minsky, Kevin Warwick, Hugo de Garis and others, use their popular science writings as a "social strategy" to garner public attention and "research funding" for their transhumanist initiatives (Geraci 2010, 38). In a similar vein, James Herrick proposes that the ability to produce and circulate rhetorically persuasive myths and narratives of a future technological transcendence is just as key to the development of the Transhumanist Movement as are the actual technological advances transhumanists develop and promote. "Crafting and propagating a compelling future-vision," he argues, "is

10