TRANSLATOR'S INTRODUCTION

Transhumanism in Translation

This introduction situates Stefan Lorenz Sorgner's *On Transhumanism* within the thematic context of technological innovation, but also within the situational context of the tools and techniques available for translating German philosophy into English. In this book, Sorgner speaks highly of controversial biotechnologies, like xenotransplantation, which would replace, for instance, damaged human lungs with healthy lungs from a pig bred for that purpose. Like an organ transplant in words, a translation introduces foreign ideas into a new cultural body, which could easily reject those ideas just for being foreign. Among other goals, this introduction intends to provide a kind of antirejection drug to offset effects of this book that might lead North American readers to put it down too soon.

THIS TRANSHUMANIST MOMENT

What unites transhumanists is an enthusiasm for research and development into life-changing technologies. They want more technology legalized and made widely available faster, and they come with varied motivations, including curiosity, conviction, medical necessity, and financial interest. In transhumanist visions of the future, unprecedented technologies will release human lives from bodily constraints that medicine has thus far regarded as inevitable. Scientists are now in a position to translate the human genetic code out of the messy handwriting of nature into the exquisite calligraphy of our wildest dreams. More relaxed regulations on new biotechnology (especially gene modification) will open the door to life in the superlative: superior health, supreme cognitive

functioning, unheard of athletic potential, and super-well-being. *On Transhumanism* weighs in on the ethical questions around the pursuit of technologically assisted self-enhancement.

viii It is a defining feature of technology that it exists to serve human wishes. What is so controversial then about saying that it is better to have more sooner? The following examples give a sense of the controversial flair of transhumanist enterprises. Since the late 1970s, at the cryogenics facility in Scottsdale, Arizona, Alcor Life Extension Foundation has been "extending medical care past when the doctors give up on you," as one member describes it (Alcor Cryonics 2015). An Alcor member becomes a patient immediately upon clinical death, at which point "cryoprotectant concentration" is circulated through patients' major arteries. They are then laid in liquid nitrogen-cooled chambers where they are preserved indefinitely.

Even though Alcor has not attempted to revive a patient yet, "it is assumed that the cryopreservation process will someday be reversible" (Alcor Procedures, n.d.). Cryogenics falls within the kind of experimental medicine not covered under health insurance policies, and therefore members typically secure payment to Alcor by naming it as the beneficiary of life insurance policies, taken out in the amount of the $200,000 full-body preservation fee—or $80,000 for the head alone. Members can also pay to have pets preserved for up to $30,000. One Alcor member cancelled her cell phone plan to pay the $600 yearly membership fee and explained to a reporter: "I'm sorry, but I'm just not that excited about phones. I'm excited about teleportation devices or my own personal spaceship. I want to see the future" (CNBC 2016). Of course, Alcor cannot promise that the procedure is reversible, and other futurists, like Michio Kaku and this book's author, are not optimistic that cryonics will work.

Like so many health care procedures, self-optimization tends to be expensive, and it tends to break skin. From late 2016 to early 2019 (at which point the Food and Drug Administration intervened), a San Francisco-based company called Ambrosia was injecting blood plasma from donors under twenty-five, purchased from blood banks, to older clients for $8,000 per liter.[1] Ambrosia hoped to replicate the antiaging effects of this procedure (known as parabiosis) that improved the appearance

of fur and internal organs in mouse trials. Although there have been no human test trials, one Ambrosia client, a sixty-two-year-old mathematician with injuries from a motorcycle accident, reported that his sleep improved significantly after a year of infusions (Carville 2019).

An example of a cheaper, less speculative "biohack" is the microchipping of people. Microchipping is already the favored way of tracking house pets, and in 2015, Biohax International began implanting microchips in the webbing between people's thumb and index finger for only $180 per chip. Within Sweden, where the company operates, thousands of residents rely on their implants in place of credit cards, train tickets, and passports in everyday transactions.[2] E-tickets and online payments are similarly convenient and do not require chip implants (which were, after all, first implemented as tracking devices), but in the world's most paperless society, where fewer than 1% of transactions involve cash, the motivation to streamline transactions is higher than elsewhere (Alderman 2018).

This brief overview gives a sense of the sci-fi appeals of transhumanist enhancements on human existence: from mere convenience to enhanced vitality to immortality. Although the effectiveness of some of these technologies remains speculative, what matters to transhumanists is the relaxation of laws around innovative biotech. Perhaps more so than in other luxury industries, the clientele is mostly male.[3] Transhumanists frame their visions as inclusive of all humans, though, and Sorgner insists that transhumanist goals could benefit nonhuman animals and artificially intelligent machines as well. The US Transhumanist Party thus demands research with the *intention* of improving life "should be rendered fully lawful and their products should be made fully available to the public, as long as no individual is physically harmed without that individual's consent or defrauded by misrepresentation of the effects of a possible treatment or substance" (US Transhumanist Party / Transhuman Party—Official Website, n.d.). By expressing the wish for self-optimization in familiar political language, transhumanism calls for its place in the contemporary policy discussion. Academic work on transhumanism, like the present book, strikes a cooler tone than the movement's political and economic spokespeople, but their shared enthusiasms make these discourses difficult to disentangle.

THE PRESENT BOOK IN CONTEXT

The English edition of this book can be read as a kind of reverse translation in the sense that the transhumanist movement has already had a more visible following in the Anglophone world than in Europe, as Sorgner points out, and this book originally addressed a German-speaking audience. The US Transhumanist Party, for instance, was the first political party dedicated to the transhumanist movement in the world, and—although American transhumanists come in all political stripes—the party's deregulatory platform appeals to the libertarian contingent so prevalent in the United States. Within Europe, Swedes show the most eager embrace of transhumanism. Swedish society reportedly exhibits fewer fears than its neighbors about data privacy, which some believe explains why they have been quicker to implement transhumanist ideas, like microchipping. Another possible reason why transhumanism commands more respect in Sweden than in other European countries is that Swedes regard their tech sector as foundational to their prosperous economy (Petersén 2018). Whatever the reason, Swedish law is what transhumanists would call "bioliberal" when it comes to legalizing elective enhancement technologies. Since Sweden also provides government-sponsored health care to all its citizens, its laws most closely match the stance of this book's German-born author, who brings European political sensibilities to the transhumanist movement—otherwise dominated by the voices of American tech CEOs.

Sorgner is currently a philosophy professor at John Cabot University in Rome. His centrality in the transhumanist discourse is unmistakable: he is a prolific author, editor of a journal and book series on transhumanism, sought-after as a public speaker, and trained as a Nietzsche scholar. He completed his PhD with Gianni Vattimo, author of over one hundred philosophy books, who himself argues, drawing on Heidegger and Nietzsche, for a "weak" concept of Being that he finds compatible with both Christianity and nihilism. Sorgner is an equally idiosyncratic philosopher. The present book positions transhumanism in unexpected ways philosophically, institutionally, and politically. It argues that Nietzsche's ethics of self-overcoming, his ontology of power, and his quasi-Lamarckian evolutionary views can (and should) be read

as supportive of transhumanism, and that a weak transhumanism, or metahumanism, rejects the premises of humanism in ways compatible with minority rights discourses and leftist posthumanism. The author describes transhumanism as politically unspecific enough for its adherents to combine it with political views as various as libertarianism, classical liberalism, and social democracy.

In 2018, Sorgner spoke on a panel with other Nietzsche scholars, as part of the radio-broadcast Phil.Cologne public debate series. After pointing out that enhancement technologies (vaccines, Viagra, smartphones—our omnipresent sixth sense) already structure our everyday life, Sorgner described a new enhancement on the horizon: implants to measure blood sugar, which could detect oncoming insulin shocks before a person suffered symptoms. The moderator expressed perplexity at Sorgner's great enthusiasm for the implant: "You would have to be awfully *worried* about yourself to be so excited about such a device. Are you so worried about yourself?"[4] Sorgner replied that he considered blood sugar levels a generally reasonable concern. The question with any new technology, though, is whether it raises more worries than it addresses. In the case of real-time health monitoring tools, one concern (that Sorgner raises below) would be that insurance companies could access the data, discover symptoms before the client even notices them, and disqualify clients for care on the basis of preexisting conditions.[5]

In its adoration for tech, transhumanism can look like the inversion of the antiresearch platform of America's religious right, and transhumanism occasionally dovetails with leftist positions. This book argues for the ethical legitimacy of a new reproductive technology legalized in Britain in 2015 that can produce a child with sex cells from three biological parents. That technology has found some resonance with cyber-feminist leader Donna Haraway, who sees three-parent fertilization as an alternative to patriarchal heterosexual coupledom (Haraway 2016, 8, 138). Yet even when such points of overlap occur, most academics see transhumanism's *premises* as glorifying idealized humanity over everything and everyone else (including humans deemed inferior). Since the book primarily defends transhumanism against its German-speaking critics, I will introduce some Anglophone critical positions below in greater detail. But first I want to introduce transhumanism's most

prominent supporters—mostly based in California—some of whom are briefly mentioned in this book.

OF UNIVERSITY PROFESSORS AND TECHNOLOGY EXECUTIVES

In the fourth chapter, Sorgner summarizes Nietzsche's view that powerful individuals shape our perceptions of reality, even our perception of power itself: "The content of the concepts of power is always bound to the perspective of the powerful." The media portrayal of transhumanism in the Anglophone world is highly attuned to this Nietzschean insight and focuses on the wealthiest transhumanists: technology executives, like Elon Musk and Peter Thiel. I will therefore devote this section of the introduction to supplementing the book's focus on transhumanist ideas by introducing the social positions of transhumanism's most prominent academic critics and its most influential spokespeople, beginning with the latter.

This book introduces Nick Bostrom and Natasha Vita-More as a Swedish-born Oxford professor and an American artist; they are also cofounder and executive director of Humanity Plus, respectively. Humanity Plus is a think tank whose mission is "to deeply influence a new generation of thinkers who dare to envision humanity's next steps" (Humanity+, n.d.). Their goal of increasing public acceptance of biotechnology has attracted an international base as well as some questionable American donors. Humanity Plus recently made headlines for having benefitted from notorious billionaire eugenicist and convicted sex trafficker Jeffrey Epstein's $20,000 donation in 2011 (Stewart, Goldstein, and Silver-Greenberg 2019).

Bostrom and Vita-More make attention-getting statements in keeping with their role as spokespeople for the transhumanist movement. Natasha Vita-More for instance has raised the possibility of holding a "Super Olympics" with biologically enhanced athletes.[6] Just picturing that image could reframe the doping debate for some sports fans: anti-doping regulations are standing between investors and their dreams of sponsoring supersports for bioenhanced titan-athletes whose feats will be more entertaining than we can even imagine today.[7] Bostrom,

a philosophy professor at Oxford University, has also worked hard to reframe the discourse; he offers a memorable analogy between the mainstream global tendency to accept death as inevitable and the mores of a fictional, backward society that practices human sacrifice and tells children to accept "the sacrifices . . . as a fact of life" (Bostrom 2005c). Through such images and analogies, transhumanist intellectuals enter a cultural war by raising an optimistic bulwark against dystopian films that portray enhancement technologies as primarily oppressive or exploitive, such as *Gattaca* (1997) or *Get Out* (2017).

Tech journalists tend not to report heavily on these transhumanist intellectuals. They instead follow the money by asking who stands to gain most directly by capitalizing on the enhancement technology market. The answer is clearly those with capital invested in biotech industries. For decades now, one of the most prominent transhumanist entrepreneurs has been Ray Kurzweil, director of engineering at Google. After revolutionizing keyboard synthesizers in the 1980s, he turned to biotechnology in the 1990s. He is most famous today for predicting that a singularity event will occur before the year 2050, wherein humans will no longer rely on bodies to process information because they can interact directly over a data cloud (Kurzweil 2005). When a Google executive promises mind-uploading within our lifetimes, a signal to investors cannot help but slip into the prediction: Google technology is about to change the world again, and now is the time to invest *more capital* in Google or else miss out on massive profits.

Other tech CEOs advertise their transhumanism in ways that sound designed to shock. PayPal founder, biotech investor, and outspoken Trump supporter Peter Thiel has expressed interest in receiving transfusions of young people's blood as a way of fighting off death, like what Ambrosia was offering (Kosoff 2016). Tesla's Elon Musk argues that autonomous vehicles will soon replace all jobs involving the driving of automobiles, but he comes prepared with a risky, dystopian-sounding solution: turning unskilled workers into highly efficient cyborgs. In his words: "Some high bandwidth interface to the brain will be something that helps achieve a symbiosis between human and machine intelligence and maybe solves the control problem and the usefulness problem" (Clark 2017). Such workplace innovations sound especially

risky coming from someone whose labor practices around health and safety at Tesla are already under close scrutiny (O'Kane 2018). In his 2018 book, *Schöner Neuer Mensch* (Brave new human), Sorgner argues that prominent transhumanists, such as Elon Musk, make absurd statements—like claiming that we currently live in a computer simulation à la *The Matrix*—because good or bad media attention enhances their brand recognition.

Tech entrepreneurs may seem especially prone to overblown statements, and those statements may dominate the public conversation excessively, but it makes sense to pay attention to them. After all, they are motivated to be well informed about the potential applications of new technology and thus are poised to present provocative bioethical arguments. Dan Faggella, for instance, is CEO and founder of TechEmergence, a marketing research company dedicated to promoting artificial intelligence technologies. Despite his investment in the industry, even Faggella warns that two dangerous extremes of bioenhanced humans will emerge: the "lotus-eaters," who will use AI and bioenhancement to experience escapist pleasures, and the "power-eaters," who will use simulations and self-enhancements to train harder, sleep less, feel fewer distracting emotions, and accomplish more than their rivals: "In the coming century, almost all economic competition, political competition, and war will ultimately be a proxy for obtaining this pinnacle of technological control and power" (Faggella 2018). Faggella's warnings make historical sense when we consider that the internet had its first instantiation in ARPANET, the US military network designed to enhance geopolitical control in Southeast Asia, and that the United States primarily conducts its twenty-first-century wars in front of computer screens (Levine 2018, 13–35). Technology empowers the most powerful most of all. This historical context must be addressed for a transhumanist ethos to be persuasive.

Persuasive ideas for a just and pluralistic posthuman future do sometimes come from biotech industry leaders, such as "transgender transhumanist" Martine Rothblatt, former outer-space-domain lawyer, founder of SiriusXM radio, and current CEO of United Therapeutics, an experimental pharmaceutical company.[8] Throughout the book, Sorgner pleads that laws should be less restrictive against research on technology

that could transform human potential. Rothblatt frames transhumanism as a matter of minority rights in her blog, books, interviews, and articles. Sorgner makes the same move, for instance, when he discusses three-parent fertilization. This argument for transhumanist reform shifts the focus away from individual achievement toward forms of collective solidarity.

Transgender rights may even be the most provocative "social justice" case for transhumanism. Some transgender people identify as neither "he" nor "she," and they suffer from discrimination wherever binary gender identifications are legally required: when they go to the restroom, complete an application for work, or apply for government or medical services. In the 1960s, medical articles began to report that some patients regarded their need for sex-change surgery as a matter of life or death. For many trans people, a socially ostracized life full of special medical needs is still preferable to the debilitating depression they suffer before their surgery (Meyerowitz 1980). The struggles for legal recognition by those who experience gender-related body dysmorphia makes an apt analogy for those transhumanists for whom laws against mental or physical enhancement (by surgery or medication) stand in the way of biotechnological optimization. When Rothblatt says in a TED talk, "There are seven billion people on this earth, and there are seven billion unique ways to express one's gender," she calls into question the law's codification of gender (Rothblatt 2015). Rothblatt's transhumanism (which Sorgner finds compelling) opposes the state's right to endorse some biotechnologies as medically necessary[9] and to reject others on grounds of being excessively self-interested. Writers who rely on amphetamines like Adderall face a stigma similar to transgender people: because they were medicated, their success is therefore regarded as less "real." While it is a privilege to have access to medications and to sex reassignment surgery, and the government should probably still regulate new technologies, transhumanism may have its ethical center in rejecting notions of "realness" and "naturalness" that stigmatize getting high-tech help.

Let us briefly survey transhumanism's various critics. After all, this book takes its polemical tone in response to them. The book's subtitle refers to a special issue of *Foreign Policy* magazine where each

contributor discusses one of "The World's Most Dangerous Ideas." Francis Fukuyama, the center-right political scientist and regular guest author at *Foreign Policy* who once codeveloped the Reagan Doctrine but more recently came out against the Iraq War, selects transhumanism as the "most dangerous" contemporary idea because its deregulatory impulse could change our bodies and societies irreversibly before we know it: "The seeming reasonableness of the project, particularly when considered in small increments, is part of its danger. Society is unlikely to fall suddenly under the spell of the transhumanist worldview. But it is very possible that we will nibble at biotechnology's tempting offerings without realizing that they come at a frightful moral cost" (Fukuyama 2004).

In 2002 Fukuyama had already published an entire book warning against the risks of bioengineering (Fukuyama 2002), but in the very short 2004 *Foreign Policy* piece cited above, Fukuyama condenses his bioconservative argument against genetic engineering in the name of preserving the "essence" of the human "at the heart of political liberalism." If we do not guard against the transhumanists' "genetic bulldozers and psychotropic shopping malls," the risks would be the neglect of those "left behind" and the possibility that posthumans would be so morally different that they may not even be worthy of human rights. Beyond the political dimension, Fukuyama warns that we cannot anticipate the biological risks for humanity's survival if genetic modifications were widely adopted.

Sorgner opposes this view with a bioliberal stance he articulates at the end of the first chapter: "I believe that constant self-overcoming is central to promoting my own quality of life. I also consider scientific research, especially in biotechnology, extremely important and advocate for greater sponsorship of those research fields. I consider the availability of anesthetics, vaccinations, and antibiotics important achievements. I hope that further achievements will follow to address important challenges. This stance can be parsed as a weak form of transhumanism." Sorgner calls his stance "weak" transhumanism because it leaves the choice to adopt emergent biotechnologies up to individuals. Sorgner thinks that most other transhumanists basically concur: "Transhumanists embrace the liberal-democratic order as foundational and thus attach great importance to the norms of freedom and equality." At the same

time, he makes it clear that a few outspoken "strong" transhumanists argue publicly that genetic engineering and antiaging technologies are morally imperative and that some of these not-so-liberal, "strong" transhumanists do lobby for the use of new biotechnologies to be *required* universally.

Reviewers of the German version of the book reflect the extent of the controversy. One German bioethicist, Konrad Ott, points out that Sorgner's reasons for believing that humanity will evolve into a new species through biotechnology "ultimately remain unexplained." And another German bioethicist, Marcus Knaup, finds the book intellectually unsatisfying and ethically disquieting: "Considering that it advocates liberal eugenics as a self-evident good, draws a grotesque image of humanity, and rejects the core of the ethics of reason by attacking the notion of human dignity, it is indeed a dangerous book, which has nothing to do with serious philosophy" (Knaup 2017, 35). Knaup dismisses Sorgner's arguments by calling on humanistic principles (Knaup is also a Roman Catholic theologian). Like Fukuyama, Knaup is appalled at transhumanism's rejection of traditional notions of "the human" in favor of a flux tethered only to the tech market. According to such worries, everything we associate with being human—war and social justice, medicine and pleasures, our family and social life, access to information, whatever we call culture —may be transformed irreversibly, not necessarily for the better, at the whim of a few entrepreneurs whose motivation is short-term profit.

Where humanists fear transhumanism for rejecting the image of humanity they find indispensable to a meaningful life, the movement is just as controversial among the posthumanists, who generally deny that transhumanism goes "beyond" humanism. Posthumanist philosopher Cary Wolf calls transhumanism "an intensification of humanism" for its focus on a generalized human experience to be set apart from the rest of nature and enhanced (Wolfe 2010, xv). Pramod Nayar explains further that transhumanism does not share posthumanism's skeptical insight because the former fails to see "the human as a construct enmeshed in other forms of life" and instead insists "that *there is a distinctive entity identifiable as the 'human'*" (Nayar 2014, 6–7). Nayar thus criticizes transhumanism for overlooking complexity at every turn: it

is "techno-deterministic, and techno-utopian" in that it sees its goals as being "achieved almost exclusively through technology." Furthermore, transhumanism implies body-mind dualism in that it "relies on human rationality as a key marker of 'personhood' and individual identity, and sees the body as limiting the scope of the mind." Sorgner discusses these accusations over the course of the book, mostly by distancing himself from this or that transhumanist who does indeed fall directly into one of the simplistic claims that Nayar describes and insists that none of these *particular* views are *definitive* of transhumanism.

Why is complicity in humanism such a damning accusation? After all, humanism is linked to foundational modern ideals, like human rights and humanistic education. During the rise of colonialism, however, the exclusiveness of humanism was in full view as it was used to justify horrific violence against colonized people by linking humanity to the specifics of European upbringing and, when convenient, making pale skin a qualification for basic human rights. In the wake of the Holocaust, global thought leaders began calling humanism into question. Inspired by developments in feminism, decolonization, and civil rights, twentieth-century thinkers from Franz Fanon to Donna Haraway unmasked the implicit imperialism, white supremacism, speciesism, and misogynistic biologism of humanism by showing that there has always been more to belonging to humanity than possessing a set of biological traits. *Homo sapiens* are always already more than human owing to our deep enmeshment with both the natural and the technological world. Sorgner cites this theoretical overthrow of classical humanism under the name "critical posthumanism." And such critical rethinking of the human is currently redefining "humanistic" academic disciplines around the globe. Transhumanism too counters humanistic axioms, but by different means: with an aspirational program claiming that humans are in fact still all too human and that our humanity is holding us back from an unknown potential.

Because transhumanism advocates changes in the laws, behaviors, and attitudes around biotechnology, its adherents aspire to a better future, whereas "posthumanists are indifferent to the concept of progress," as Sorgner puts it in his third chapter. The tide-that-lifts-all-ships scope of transhumanism differentiates it from other aspirational alternatives

to classical humanism, such as Afrofuturism, an artistic and intellectual movement, which performer Janelle Monáe defines as "us, Black people, imagining ourselves in the future . . . as magical as we want to be" (Zhou 2018). Spokespeople for specific minority groups often feel that their own group could be left stranded by technological process, a view well encapsulated in Gil Scott-Heron's poem: "I think I'll sen' these doctor bills, Airmail special, to Whitey on the moon" (Scott-Heron 1970).

If transhumanism is an enthusiastic response to progress thus far, Afrofuturism is a response to "the digital divide, a phrase that has been used to describe gaps in technological access that fall along lines of race, gender, region, and ability but has mostly become a code word for the tech inequities that exist between blacks and whites" (Nelson 2002). As scholar of Afrofuturism Alondra Nelson points out, "Blackness gets constructed as always oppositional to technologically driven chronicles of progress." Meanwhile, prominent futurists, like Timothy Leary and Allucquère Rosanne Stone, are "seemingly working in tandem with corporate advertisers." Some transhumanists, like Sorgner, claim that transhumanism is not meant to benefit only technocratic elites but is for everyone who desires novelty through biotechnology. Sorgner is aware that the most common sources of resistance to transhumanist visions are doubts—based on history and experience—that the benefits of new biotechnology could ever be distributed fairly.

Despite the ferocity of the debates, staking a position may have a minimal or even a reverse effect on policy. Leading artificial intelligence researchers like Yann LeCun warn that "AI winters," periods of stagnation in research and development, result from too much hype around what new technologies can offer (Marcus 2013). The public already finds achievements in AI underwhelming when the state of technology trails too far behind popular sci-fi scenarios, and a similar risk could accompany transhumanism's efforts to attract interest in biotech through promises of unprecedented new experiences. The best parts of the present book thus do not hype the technologies on the horizon, nor promise wonders, but remind us that further research and more bioliberal laws are still necessary to discover the most life-changing technologies.

Healthcare is already distributed extremely unequally in much of the world; self-optimizing technologies would presumably go to those

who could afford to buy a competitive edge. How persuaded you are by Sorgner's response to that argument might be a Rorschach test for your views on technocracy in the present. Sorgner cherishes "liberalism" as the predominant political model that would achieve a just regulation of new biotechnologies. If you rate the successes of liberal regulation of technology well so far, then you may agree with him. If you are concerned about inadequacies in the distribution of health care today (in much of the United States, for instance), then you may be more skeptical. Although Sorgner does not endorse outright libertarianism, he opposes "patriarchal" states that ban, restrict, or criminalize the research, application, and marketing of self-enhancement technologies that would benefit individuals who wish to use them. The book makes gestures, however, to quell readers' fears that, in the posthuman future, the gene-rich will have a new form of capital to lord over the gene-poor, so that the human capital would sink even more for those who cannot afford enhancements (of strength, intelligence, perhaps advantageous forms of emotional coldness) in a competitive economy.

The present book's third chapter argues for a rapprochement between academic posthumanism and pragmatic transhumanism. Sorgner calls this middle ground metahumanism, which "strives to mediate among the most diverse philosophical discourses in the interest of letting the appropriate meaning of relationality, perspective, and radical plurality emerge." He argues that metahumanities would acknowledge the need for technologically mediated progress while also engaging in theoretical debates about the place of the human within the natural world. According to Sorgner, liberal laws on biotechnology are universally desirable on the grounds that liberalism generally is meant to account for the flourishing of all citizens. What the chapter does not discuss is the range of harms that might arise from enhanced humans' new potential. By contrast, when founding theorist of liberalism John Stuart Mill discusses why citizens must be legally entitled to potentially self-harming freedoms, for instance, to consume alcohol, he also discusses why laws must limit the freedom of drunk people to become nuisances (Mill 1859, 181). That is one problem for future work. But liberal theory has always born a sinister problem at its core: no matter how antipaternalistic liberal laws are, the histories of liberal nations notoriously thrive off of the

exploitation of "barbarian" societies—a line of action that Mill endorses in the same essay. The most widespread current enhancements, like smartphones, already depend on cruel and environmentally unsustainable labor practices abroad. To stage a dialogue between transhumanism and the rest of academia would require the "metahumanists" to show as much curiosity about past and ongoing abuses in healthcare and biotechnology as they show about possible bright futures.

TRANSLATING TRANSHUMANISM

Translating from German (a language with around 4.2 million words) into English (a language with around 100 million words) yields abundant opportunities to transform and enhance a text (Jones and Tschirner 2015). In my research on translation, I have argued that one of the most important philosophical tasks of a translator is to look for distinctions that may not exist in a source language, and which the author thus downplays, and to introduce those nuances into the target text (*die Technik*, for instance, can mean "technique" or "technology"—as I discuss below). "Differential translation," as I call it, exposes the reader to the mental flexibility (or terminological conflations) that foreign languages offer (Hawkins 2017). Such translations empower readers to make an informed judgment as to whether they agree with the wisdom implicit in a source language, which sometimes combines concepts that their own language would distinguish, or whether they find the use of these words as terms imprecise. For this empowerment of the reader to work, translators must mark these moments of creativity in introductions, commentaries, or brackets so that readers can trace the use of whichever terms are transformed in the translation. Below I will discuss six words that required creativity in this translation: *er*, *bejahen*, *fördern*, *Technik*, *Technologie*, *Anthropologie*, and *Möglichkeit*.

Er simply means "he," but the German language contains an instance of grammatical sexism not present in English; it uses *er* in places where "he" would stand out as gendered in English. Furthermore, gender stands to be completely rethought in the transhuman future drafted in this book. At one point in the translation, I mark this transhumanist gender

neutrality by turning the grammatical difference between English and German gender specificity into an opportunity to indicate that future humans will not conform to gender binaries: "Who is the posthuman?
 What qualities does he, she, they, or it have?" (*Wer ist der Posthumane*? *Welche Eigenschaften hat er*?)

Likewise, *bejahen* simply means "affirm," but in this book affirmation means support for ontologically varied objects: both for technology and for the values of daring, speed, and innovation. A variety of objects implies varied acts of support, which I represented with various words—including "defend," "embrace," "champion," "argue for," and "tout." This range of words was necessary to convey the transhumanist's multifarious enthusiasm for biotech research, development, and implementation. *Bejahen* defends the rhetorical citadel overlooking the crossroads between improved technology and enhanced lives. Freighting these words with ambiguity reinforces the book's main dare: legalize technology.

Standard English translations of *fördern* include "promote" and "support," but I sometimes translate it with "foster" or "enhance" when the context relates to the aims of biotech research (happiness, intelligence, health, etc.), as opposed to describing supporting the research itself. The argument describes a two-part dynamic process where *fördern* is the motor on both sides: if we support new technology, new technology will enhance us. "Technology can already promote (*fördern*) greater diversification of the means of human reproduction." In other words, the technology is already there to make reproduction serve humanity better than it currently does. But new technology still must be implemented in order to foster human thriving: "The traits and capacities that are especially relevant for fostering a good life (*eine Förderung des guten Lebens*) are emotional, psychological, and intellectual capacities along with a long healthspan." Varying the term makes for a more fluent translation, but the message can be stated with one translation: *support* R&D so that new technology can *support* your well-being.

The German word *Technik* has a range of meanings including both "techniques" performed and "technologies" implemented. In contemporary English, the key difference is between the *internalization* of knowledge as technique and the *externalization* of knowledge as

technology. Philosopher Bernard Stiegler's *Technics and Time* differentiates between several meanings of *Technik*'s French cognate, *la technique*, through inflections of the word, but Stiegler's translators Richard Beardsworth and George Collins use the catch-all neologism "technics" to express the fundamental ambiguity of the term (Stiegler 1998, 280).

Like Stiegler's translators, I always rendered *Technologie* as "technology," but unlike them I was unwilling to resort to a neologism for *Technik* because Sorgner sometimes means techniques, sometimes technologies, and sometimes both, and I think these differences give a sense of the transhumanist's role in developing techniques that endow technologies with aspirational value. For instance, in a programmatic sentence from chapter 3, Sorgner writes: "Transhumanism embraces the use of technologies to increase the likelihood that posthumans may emerge" (*Transhumanismus bejaht den Gebrauch von Techniken, um die Wahrscheinlichkeit der Entstehung des Posthumanen zu erhöhen*). One could argue that Sorgner selected *Techniken*, not *Technologien*, because he is referring to the implementation of technologies, rather than their mere capabilities for potential use. However, what we normally call "technology" is at stake: these *Techniken* are as of yet external tools eventually to be integrated into the body.

In the chapter, techniques of self-improvement, like mindfulness training, are grouped alongside the technologies of self-enhancement that could result in humans' becoming capable of seeing UV light. "Techniques and technologies (*Techniken*) can both be means to change a human genome" (*Beide Techniken können Mittel sein, um ein menschliches Genom zu verändern*). The fact that human efforts to shape oneself through self-discipline are more familiar to most people than the tools that would permanently alter sensory experience make self-improvement "techniques" fully compatible with bioenhancement "technologies" in this context.

Stiegler's work presents the philosophical stakes of this loose concept's ambiguity. Consider sentences such as "Technics is the object of a history of techniques, beyond techniques. . . . Technics is not a fact, but a result" (Stiegler 1998, 30). We can only speak of technics by articulating the historical factors that produce a "technical system," which Stiegler defines as "a point of equilibrium concretized by a particular

technology" (Stiegler 1998, 31). Particular technologies—like the steam engine, internal combustion engine, or the Bessemer smelting furnace—transform societies. These transformations have less to with inventive
xxiv genius and more to do with response to a system of technological and economic possibilities, an analysis that Stiegler borrows from historian Bertrand Gille (Stiegler 1998, 35).

Anthropologie is tricky to translate because its meaning overlaps only partly with its English-language cognate. It is a philosophical term in German, whereas its English cognate designates only an academic field. *Anthropologie* has meant something like *theory of human existence* in German philosophy at least since Immanuel Kant lived and wrote. About Kant's idea of human dignity, Sorgner writes, "This term is an ontological one, since it implies a certain anthropology." German-language *Anthropologie* is also a discipline, one that answers questions about humanity's "position" (*Stellung*) in the universe, what distinguishes humans from other animals, and the extent to which biology can explain rationality. Its canonical founding fathers came from a variety of educational backgrounds: Helmut Plessner (1892–1985) from biology, Max Scheler (1874–1928) from theology, and Arnold Gehlen (1904–1976) from philosophy. Anthropology is a highly interdisciplinary field in the United States as well, but its bent is more distinctly empirical, at least since German immigrant Franz Boas (1858–1942) popularized the four fields approach (archaeology, linguistics, physical anthropology, and cultural anthropology). In German, *Anthropologie* still retains a speculative tenor. I often translate it as "theory of the human" to convey that context, especially when the word is preceded by an indefinite article.

The ordinary German word *Möglichkeit* can be translated unproblematically as "possibility," and that is how I usually translated it. The word often occurs in contexts about the "possibility" of human enhancements, where its meaning primarily suggests choice. But sometimes, as toward the end of the book in the discussion of Kevin Warwick's work, the idea is that there is, at least semantically, a latent potential in the technology itself, as opposed to possibilities available to a person: "Kevin Warwick's works clearly show the potential (*Möglichkeiten*) of the latest technologies." Earlier in the same chapter, Sorgner writes about three-parent fertilization and calls this a *Möglichkeit* because it

is legally possible in Great Britain: "This technology (*Möglichkeit*) seems to offer an appealing option" to parents who might want that for disease-prevention reasons, in order to include two lesbian parents and a sperm donor, or for other reasons. Nevertheless, here too the syntax in English suggests that Sorgner is drawing our attention to a potential within the technology itself, and he thus deemphasizes the human agency that implements it. This was a particularly symptomatic ambiguity within a book about the affirmation of liberal choices regarding technology.

These subtle rhetorical relocations of agency from human to tool (akin to the transferred epithets of Homer, e.g., "Zeus's angry lightning bolt") are themselves not problems that can be trusted to machine translation. Nonetheless, as I describe below, the DeepL translation software had surprisingly good suggestions on the level of syntax, many of which I incorporated when translating this book. However, the software's strengths rarely extended to semantic distinctions, such as differentiating "technique" and "technology" in uses of the word *Technik*, and telling *Anthropologie*, the philosophical school of thought, apart from *Anthropologie*, the discipline associated with ethnography.

ENHANCED TRANSLATION

Like all writing, translation has always been a tool-assisted *technology* and is increasingly a computer-assisted one. Translation cannot be reduced to technology, however. As demonstrated in the examples of ambiguity above, it is also a labor-intensive *technique* based on extremely careful reading, a craft that improves with training and practice, and the work is still primarily performed by humans. About halfway through my work on the first draft of this translation project, I began to explore the functions of the Cologne-based DeepL Translator, a web-based machine-translation system. Appropriately enough, the book's author thoughtfully counseled me to try out this cutting-edge translation assistance tool to translate a book whose message was to embrace the expanding human-tool interface.[10]

For all of its strengths, tools like DeepL cannot replace a translator's care with such complex texts. Even the more personalized translation

memory programs, like Trados, generally help translators only with the least rhetorically complex aspects of technical, legal, and medical texts. Software fails precisely in differentiating the tonal and collocational

hallmarks of academic texts from those of other genres like literature, advertisements, or court documents. Machine translations of philosophy texts require time-intensive revision. Yet the embrace of translation software strikes me as transhumanist in the best sense: the labors of reading, understanding, and translation never occur solely in brains, and there is no pure reader to wall off from translation software's "artificial neural networks"—which perform many complex tasks besides translation, including detecting objects on a camera feed and diagnosing diseases. Artificial intelligence is transforming the style and economy of translation now that "deep learning" software is increasingly capable of learning new syntax and idioms. By recognizing patterns in one language, applications like DeepL can recognize word combinations even if the words appear separated within the sentence. Because the software draws on a large corpus of published texts in English, it can then rearrange the words in the proper order in the target language.

Our belief in the autonomy of individual minds (authors and translators) is difficult to relinquish, no matter how much we trust the insights of Freud or Kahneman (Freud 2003 [1920]; Kahneman 2011). Here is a heuristic analogy for understanding the role of the machine in my work on this book. *The Narrative of Arthur Gordon Pym of Nantucket* is written in the voice of the fictional character Pym. In the preface, Pym acknowledges the novella's actual author, Edgar Allen Poe, as the highly involved editor who wrote the beginning of the novella for Pym. Pym reports that he allowed Poe to "draw up, in his own words, a narrative of the earlier portion of my adventures . . . *under the garb of fiction*" (Poe 2008 [1838], 3). However, the author and the fictional narrator occupy different positions in relation to the novella: Poe has a reputation as an author of fiction, whereas Pym calls the very same work an authentic history. At the end of the introduction, Pym claims that the reader will be able to differentiate Poe's fiction from his own history simply because "the difference in point of style will be readily perceived." Though the reader is unlikely to notice that difference, the passage of time while reading a novel facilitates the suspension of disbelief: one forgets that

one is reading a *fictional* story and becomes engaged with it, simply as a story. The same occurs with translations: when the reading experience is engrossing, we easily forget that we are reading a translation—we simply read.

Unlike this introduction, Poe introduces his novella in the voice of a fictional character and thus produces an irresolvable irony: a fictional character claims that he wrote the historically accurate part of the work and that an actual historical person wrote the fictional part. The introduction reads as a literary effect, a verisimilitude with no claim to historical veracity. To accommodate the transhumanist view here, I reserve the opposite judgment for machine-assisted translators. Although I translated as a cyborg, my human judgment ordered the entire process, and I thus do not expect readers to notice any "difference in point of style" in the passages where I considered machine input.

Computer languages can express a great deal, but computers have yet to demonstrate the capacity for the human experience of meaningfulness; for the computer, language functions only as a system of differences between words. The putatively "unsupervised" autonomy of machine learning cannot yet simulate a brain's openness to the manifold of experience. We machine-assisted translators are still performing the labor of translation ourselves, using foreign language skills acquired by *living* in languages, even as external technologies enhance our technique. Like the liberal transhumanist who wishes no one harm in his pursuit of an enhanced life, we cyborg translators hope that you will not judge our hybrid creations defective or inauthentic writing. The responsibility for any mistranslations is therefore mine alone.

—SPENCER HAWKINS, BERLIN, 2020