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## A Cult of Technoscience?

Rhetorical Devices, Narratives, and Sociotechnical Visions in Transhumanist Political Party Programs


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Thank You!

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Index of Abbreviations

**AI:** Artificial Intelligence

**NBIC technologies:** nanotechnologies, biotechnologies, information technologies, and cognitive science (Converging Technologies)

**NSF:** National Science Foundation

**SENS:** Strategies for Engineered Negligible Senescence

**SIM/s:** Scientific and intellectual movement/s

**STS:** Science and Technology Studies

**SU:** Singularity University

**TPD:** Transhumane Partei Deutschlands/ German Transhumanist Party

**TPM/s:** Technology- or product-oriented movement/s

**USTP:** US Transhumanist Party/ United States Transhumanist Party

# 1. Introduction

Since the expulsion from paradise, humans have always been imperfect creatures. We fight and sin, we get sick and wrinkly, we are neither all-knowing nor indestructible. We die since the day we were born. But what if we could be freed from this ostensibly fateful condition? What if we could have the strength of Superman, the beauty of Kate Moss, and the intelligence of Albert Einstein combined? What if we would never have to work again? What if we would never have to die? What if there is a land of milk and honey just waiting to be discovered? And what if there is a sociopolitical movement that seems to have a map to discover and conquer this magical place in the very near future?

Visions of a better world are not a new phenomenon but have accompanied human societies in mythologies as well as world-building since the dawn of time (Jasanoff, 2016; Hauskeller, 2012). In a time of "heroic entrepreneurs" (Johnsen & Sørensen, 2017) and "high-tech cowboys" (Haraway, 1991) such as Elon Musk; of Artificial Intelligence (AI) and biotechnology hype, and the ever-increasing power of Silicon Valley, societal movements with their own visions and desires for humanity emerge. Recently, one such movement has gained media as well as scholarly attention: Transhumanism. As a technoprogressive "philosophy of life" (More 2013, p. 4), transhumanism aspires to enhance the human body and mind through the radical employment of science and technology. While in the last months during writing this thesis, articles on the movement downright mushroomed, most scholars are concerned with the theoretical shortcomings of transhumanism thus disregarding real-life practices as well as the recent establishment of issue-specific political parties.

This thesis attempts to approach this gap by examining transhumanist visions in two Western, national contexts: The United States of America and Germany. Wondering which sociotechnical visions are designed in the political party programs of the US and German transhumanist party, I conducted a narrative analysis that allowed me to engage with how sociotechnical visions are designed through the narratives and language politics of the parties. Through focusing on narrative, I attempted to get a glimpse into transhumanist reasoning, mobilization strategies for voters as well as transhumanist ways of (re)telling, rhetorically enacting and extending, stories about science, technology, and society. Doing so, I want to demonstrate the power of technoscience as something touching the very "hearts and minds" of humans and their communal constructs such as the nation-state (Hilgartner 2015, p. 40).

After introducing transhumanism in *Section 2* and reviewing the literature within and outside of *Science and Technology Studies* (STS) in *Section 3*, I delineate my theoretical framework, outline my research questions and explain my methodological approach in the *Sections 4, 5* and *6*. The subsequent empirical core of this thesis is composed of two sociotechnical visions that I encountered in the data and an examination of their fabrication –

the vision of *Paradise (Lost)* and the vision of *Technology = Magic*. Thereafter, I describe how the two parties enact specific roles for themselves in these political documents and wonder if transhumanism could be fruitfully conceptualized as a 'cult of technoscience'. Lastly, I draw the different strands of my research together and open up further questions in *Section 8*.

Due to the potential threats, the national competitive advantages and "life-and-death-significance" (Bostrom 2005, p. 20) that transhumanist technologies, as well as ideology, could signify in the near future, it will soon be a question whether the transhumanist movement is seen as friend or foe by political authorities (Evans, 2007). Now that transhumanism has arrived on the political stage, once fictional technologies have become ever more realistic (Jasanoff, 2016) and human technoscientific augmentation is on the verge of becoming a mainstream political idea in Western societies (European Parliament 2006, p. 24), it is time to take the transhumanist movement seriously as an actor in the very real imaginative battle for possible human futures.

# 2. Mapping Transhumanism

Before I engage with the literature about transhumanism, this section introduces transhumanism and the major actors of this movement. For a start, I outline how transhumanism is defined and elaborate on its history and different sub-streams. After that, I map out prominent transhumanist characters and institutions, and elaborate on the emergence of transhumanist political parties. As a result of lacking academic sources in this regard, I rely hereby largely on my internet research and on literature published by transhumanists.

## 2.1. Self-Descriptions and Definitions of Transhumanism

By its advocates, transhumanism has been referred to as a "nonreligious philosophy of life" (More 2013, p. 4), a "loosely defined movement" (Bostrom 2003, p. 493) that furthers "rational humanism" (Evans 2007, p. 161), an "intellectual and cultural movement" and field of studying technology (Humanity+, 2016-2020), or as an "emergent philosophical movement" (Hughes, 2002). Critics of the movement have called it "intellectually dishonest" (Hauskeller, 2012), referring to it as "scientific extremism" (Evans, 2014), as trivial or pseudo philosophy (Loh, 2018), and Francis Fukuyama (2004, p. 42) who conceives of transhumanism as a "strange liberation movement", even calls it "the most dangerous idea in the world". But what is transhumanism and who are transhumanists?

Fundamentally, transhumanism can be summarized as the idea of transforming the human body and mind through science and technology. Radical life extension, human (physical, mental, reproductive, moral, societal, neurological, genetic) enhancement, cryonics[1], virtuality, and space exploration are thereby overarching interests of most transhumanists and dominant themes in transhumanist writings (Loh, 2018). The umbrella organization of transhumanism *Humanity+* (formerly known as the *World Transhumanist Organization*) defines the movement as:

> "[affirming] the possibility and desirability of fundamentally improving the human condition through applied reason, especially by developing and making widely available technologies to eliminate aging and to greatly enhance human intellectual, physical, and psychological capacities." (cited after More 2013, p. 3)

This self-definition makes one of the core elements and desires of transhumans and transhumanists visible – the strive for conquering disease and aging, and in the end, death.

[1] The practice of freezing dead bodies to revive them in the future.

While aging is envisioned as a disease in transhumanist theory (Tirosh-Samuelson, 2010), death is sketched as an obscene perversity (Loh, 2018), which has caused some transhumanists to rename it as “de-animation”, a label that stresses the envisioned non-permanence of death (Bostrom 2003, p. 493). The biological decay of the human organism through age and disease is consequently not seen as a natural inevitability, but as something that needs to be stopped, hence freeing humans of their caging bodily shell (Vita-More, 2000).

Whereas the mind is said to be augmentable by the use of nootropics, so-called cognitive enhancers or smart drugs (Somit & Peterson, 2012) to increase performance or remove “unwanted memories” (Benedikter & Siepmann 2016, p. 11); the body is envisioned as a site of bionic upgrade, training, and technoscientific intervention, and society is imagined to achieve a state of peacefulness and prosperity due to, for instance, genetic engineering that sorts out aggressive, or other as ‘undesirable’ understood, traits in human populations. One of the goals of transhumanists is thus to transcend the biologically limited “human 1.0” and transform it into a “human x.0” or posthuman (Loh 2018, p. 32), a mode of being which is not only predicted to be intrinsically better (Hauskeller, 2012), but is seen as fulfilling the very nature of the human species, namely – to be more than (just) human.

In transhumanist theory, this technoscientific transformation from human to posthuman is accomplished in evolutionary-like stages. Individuals that are actively in transition towards transhumanity, for example, persons that have technological implants like RFID chips or individuals who take nootropics to increase brain efficiency, call themselves *transhumans* or less commonly “humans+” (Loh, 2018; Tirosh-Samuelson, 2010). The term *transhumanist*, on the other hand, characterizes individuals who work on realizing transhumanist theories, technologies, and research. Accordingly, transhumans almost always identify as transhumanists, but not all transhumanists are actively enacting their transformation just yet (Loh, 2018).[2] It is important to note, however, that not all futurists, technophiles, or body modifiers such as biohackers and biopunks, cyborgs, or members of the quantified-self movement, are or self-identify as transhumans or transhumanists, even though often a sense of curiosity for transhumanist content exists (Huber, 2017). There are theoretical and practical distinctions between these cultures, scenes, and movements, and not all of them are necessarily connected to the posthuman paradigm. Despite of these differences, it is likely that transhumanist parties offer a new political perspective and alternative for members of such techno-enthusiastic “thought collectives” (Fleck, 1979) as well as for innovation-centered elites around the globe.

Indeed, the posthumanist discourse and the schools of thought associated with it have stirred up quite some confusion within the media but also across diverse academic fields

[2] For this reason, I use the general term *transhumanist* within this thesis.

(Ferrando, 2013; Sharon, 2012). Quite frequently, terms such as post- and transhumanism and their respective concepts are confused with one another or employed interchangeably. To address this problem, scholars such as Janina Loh (2018) and Tamar Sharon (2012) have developed classifications to better grasp existing posthumanist approaches and philosophies. I adopt Janina Loh's (2018) distinction between transhumanists, so-called technological posthumanists or Singularitarians (Benedikter & Siepmann, 2016), and critical posthumanists; the latter of which, thanks to Donna Haraway and N. Katherine Hayles, are known within STS. Whereas the differences between those three philosophies are mainly of theoretical nature, they are diverging in their sociopolitical implications and stances as well as often diametrically opposed goals, interests, and adopted identities of participating individuals. Because much of the literature is disregarding their respective individualities, I want to stress these differences, particularly between transhumanism and technological posthumanism/ Singularitarianism. Yet, it is crucial to acknowledge that transhumanism is the only one of these philosophies that has inspired and actively organized a dedicated sociopolitical movement.

Another important actor in the context of transhumanism is the bioconservative movement or the so-called "Bio-Luddites"[3] (Loh, 2018). Bioconservatives are anti-transhumanist groups, frequently, yet not necessarily, inspired by religious, mostly Christian, thought and philosophy (Bardziński, 2015). Due to their objection to the argument that science and technology should enhance the human beyond its natural limitations, bioconservatives are sometimes seen as a counter-ideology to transhumanism (Hansell & Grassie, 2010). While some bioconservatives reject transhumanism because they perceive it as "spiritual heresy" (Hughes 2013, p. 1015), others criticize the ways in which transhumanists approach concepts such as human dignity, security, and equality. In contrast to transhumanist theory, bioconservatives – a label under which also academics like Jürgen Habermas, Leon Kass, and Francis Fukuyama are subsumed – emphasize the value of (human) nature, which they embrace as a "moral category" (Sharon 2012, p. 5). The technoscientific augmentation of the human that is proposed in transhumanism is hence seen as threatening the wholeness of the self and as disemboguing into dehumanization (Sharon, 2012; Bardziński, 2015). Ironically though, bioconservatives and transhumanists share a similar conceptualization of the human, namely, the idea that the human is an entity with clear boundaries, something possessing a unique, somewhat exceptional essence that needs to be preserved (Sharon, 2012).

[3] A term remembering of the "machine-smashing protests" during the Luddite rebellions in Northern England in the early 19th century (Breyman et al. 2017, p. 290).

### 2.1.1. History and Plurality of Transhumanism

It is crucial to wonder at this point how transhumanism has managed to organize social, economic, and symbolic capital in order to stand out from other technology-enthusiastic collectives, and to question what makes it so special as well as powerful to move into the spheres of politics. This requires a look into the history of transhumanism, a history that has been largely told in self-referential terms.[4] Even though Janina Loh (2018) offers a history of the ideas of transhumanism, their relatedness for instance to the Russian bio-cosmists and immortalists of the ending 19th and beginning 20th century (Groys & Hagemeister, 2005; Loh, 2018); the organizational genesis of the movement has, to my knowledge, not been touched upon in non-transhumanist writing. For that reason, I draw on own online research in this regard and on transhumanist sources. While transhumanist philosophy frequently "claims continuity with various esteemed traditions" such as Platonian and Aristotelian philosophy (Porter 2017, p. 239) or references ancient myths such as that of the Titan *Prometheus* in Greek mythology or the Sumerian *Epic of Gilgamesh* (Loh, 2018; Porter, 2017), the movement as such is roughly three decades old (Bostrom, 2003).

Originally, the term *transhuman* came into English language use through the Dante recension of the 19th century (Loh, 2018). Its first theoretical employment is attributed to the biologist, member of the *British Eugenics Society* and brother of Aldous Huxley (author of the science fiction milestone *Brave New World* and, fascinatingly, part of the first generation of New Agers in the 1970s) Julian Huxley in his 1957 book *New Bottles for New Wine* (Loh, 2018; Harrison & Wolyniak, 2015; Aupers & Houtman, 2010). While not yet a systematic transhumanist, Huxley referred to this new worldview as "evolutionary humanism" (Loh 2018, p. 36), and together with his close friends John Burdon Sanderson Haldane and John Desmond Bernal he is seen as an early prophet of transhumanism, whose ideas also got picked up by the so-called *Red Scientists* of Cambridge University in the 1930s (Tirosh-Samuelson, 2010). Eugenic fantasies as well as the idea that science should be used to create a better life through replacing religion as dominant social force played an important role in these deliberations but were overshadowed by the horrors of the second World War, which delegitimized respective imaginaries of a "technoscientific utopia" (Tirosh-Samuelson, 2010; Yar 2014, p. 19).

Likewise, Robert Ettinger, the "father of cryonics" and Fereidoun M. Esfandiary, better known under the pseudonym FM-2030, are considered forefathers of transhumanism (Loh 2018, p. 36). The two popularized the term – Ettinger in his works *The Prospect of Immortality*

[4] See for example, Nick Bostrom (2005) "A History of Transhumanist Thought", in which Bostrom, citing primarily his own work, tries to justify a transhumanist genealogy.

(1962) and *Man into Superhuman* (1972), and FM-2030 in his book *UpWingers: A Futurist Manifesto* (1973) and his self-help test *Are You A Transhuman?* (1989) (Loh, 2018). FM-2030, whose pseudonym is a code for Esfandiary's desired lifespan (he was born in 1930 and wanted to live a hundred years), wrote the first political transhumanist book in which he discussed the replacement of political leaders by "cybernated systems" and the abolishment of all conventional categories of politics and society (Loh 2018, p. 38). His ideas invoke memories of the Italian futurists of the early 20th century with their excitement for technology and war, their emphasis on the "beauty of speed" for the goal of relentless progression, and the denunciation of the old (Marinetti 1909, p. 12). However, as I hope to show, transhumanism incorporates a nostalgia and affinity for the classical-prestigious and for 'high culture' that makes it quite distinct from Marinetti's artistic, and in the end fascist, futurism.

The post-war years and the 1960s then brought chances for institutionalizing transhumanist ideas and "[…] various organizations began to advocate life extension, cryonics, space colonization, and other scenarios; while advances in biotechnology, neuroscience, and nanotechnology began to make their mark" on the world (Tirosh-Samuelson 2010, p. 22). In the 1980s, the British pioneer of cryonics Max O'Connor (today known as Max More) teamed up with Tom Bell (who also goes under the pseudonym T.O. Morrow, a wordplay for 'tomorrow' and the name of a DC comic supervillain[5]) to create the radical libertarian journal *Extropy* (Hughes, 2002). Utilizing the advantages of the "golden era" of hacker and internet culture (Levy, 1984), an email list was founded that facilitated the "meeting of minds" (Bostrom 2005, p. 15) and enabled the emergence of a broad online and offline community (Hughes, 2002). This list was employed to discuss if and how transhumanism should engage in politics, for sharing scientific news, movies, and novels from within and beyond the community's ranks. But also, correspondence like the "extropian enemies list" can be found in these fascinating files (Email List Extropy Institute, 2013).

In 1990, More – the self-proclaimed founder of transhumanist philosophy (Loh, 2018) – published five "principles of extropy" which he revised in 2003 to include: "perpetual progress, self-transformation, practical optimism, intelligent technology, open society, self-direction, and rational thinking" (More 2013, p. 5). The term *extropy* that More and Bell used to designate their philosophy is an antonym for the concept of *entropy*, which besides describing a thermodynamic quantity in physics also characterizes processes of degradation, disorder, and death (Hughes, 2002; Merriam Webster, n.d.). The term *extropian* was thus chosen to highlight the drive for improvement, vitality, functional order, and intelligence, and symbolizes the

[5] The choice for this superhero is itself fascinating. Not only that this fictional character is a futurist and inventor, but while characters out of the Marvel universe are often depicted as struggling with their powers as gifts and curses; DC comic heroes are "more clearly noble and unquestioningly heroic" (Jeffrey 2011, p. 9).

transhumanist commitment to pleasure (Extropy Institute, 2005; Tirosh-Samuelson, 2010). The establishment of the *Extropy Institute* in 1992 in Southern California and the following "Extro" conferences (Email List Extropy Institute, 2013), which gathered scientists such as the roboticist Hans Moravec and the "founder of nanotechnology" Eric Drexler (Hughes, 2002), most likely have been useful networking platforms and fueled the fantasies of attending audiences. The conferences were held until 2004 and were then superseded by the *TransVision Conference* (H+Pedia, 2019). As the main group of today's transhumanism (Loh, 2018), often synonymized with the movement at large, it is thus fair to assume that extropianism was crucial for the flourishing of transhumanism over the last decades.

Alongside extropianism there are also other incarnations of transhumanism. Whereas transhumanist Stefan Lorenz Sorgner divides the movement in carbon- and silicon-based transhumanism, there are subgroups addressing spiritual, aesthetic and, more seldomly, sociopolitical aspects of transhumanism (Loh, 2018). From Christian and Mormon transhumanist groups, transhumanist variants within the Church of Latter Day Saints (Tirosh-Samuelson, 2010), Martine Rothblatt's Terasem movement, and an immortalist church with "monthly science-based services" (Church of Perpetual Life, n.d.); to Neo-Nazi online-forums of so-called "Prometheans" around Marcus Eugenicus (Hughes, 2002), far-right eugenicists and white supremacists like Emil O. W. Kirkegaard or the right-wing, neo-reactionary blogger movement NRx around Nick Land (author of the essay *The Dark Enlightenment* and advocate of an anti-democratic reign of elites) (Loh, 2018) – there exists a broad heterogeneity of how people interpret, enact and live transhumanism. Indeed, the idea that humans can be improved with science, reason, and technology seems to be astonishingly adaptable to diverse sociocultural, spiritual, and political contexts. Despite of this plurality, I talk about transhumanism in the singular, which is not to say it were homogeneous or not multiple.

## 2.2. Figures, Institutions, and the Emergence of Political Parties

In designing a self-image and storyline about oneself, human collectives often rely on heroic figures, individuals that are imagined to be identity-shaping for a respective group. So does the transhumanist movement. This sub-section is concerned with currently significant persons and institutions of transhumanism, and with the establishment of transhumanist parties. The mentioned characters necessarily represent a selection of dominant actors, but I hope they will allow for some insight into how transhumanism is organized.

### 2.2.1. Prominent Actors

I will start with one of the most prominent figures, the "possibly […] most active spokesperson" (Lewin & Edwards, 2012; Mazan 2015, p. 6) and "philosophical dean of contemporary transhumanism" (McIntosh 2010, p. 43) – Nick Bostrom. As founder of the *Future of Humanity Institute* at Oxford University (FHI, 2020) and co-founder of *Humanity+*, Bostrom undoubtedly represents one of the most established advocates of the movement. He might also be considered one of the most radical ones, for instance, when he praises human gene editing by arguing that children are easier to love when they are "bright, beautiful, healthy and happy" (Bostrom 2003, p. 498). With a background in theoretical physics, artificial intelligence, philosophy, computational neuroscience, and logic, he refers to himself as a "polymath" (Bostrom, n.d.), a concept usually employed in respect to glorified thinkers and geniuses of a bygone era of science and intellectualism. In 1998, Bostrom took part in the establishment of the *World Transhumanist Association* (now *Humanity+*), an institution of liberal democratic transhumanism that works on "educat[ing] the masses" about future technologies (Hughes, 2002; Ijem, 2011). Many transhumanist groups from Europe, Asia, and South America have joined the organization that already held 15 000 active members in 2002 (Hughes, 2002).

Another famous proponent is Raymond Kurzweil, whom Janina Loh (2018) classifies as a technological posthumanist because of his thematic focus on singularity and the technology of mind uploading. Kurzweil is known for his achievements in pattern recognition, print-to-speech and music technologies, and has received honors such as the *National Medal of Innovation and Technology* by President Bill Clinton, as well as the highly remunerated *MIT Lemelson Price* (Singularity, n.d.). In 2005, he was labelled the "rightful heir to Thomas Edison" by *Inc. magazine* (Winfrey, 2014) and listed as one of the 16 revolutionaries "that made America" in a *PBS* television series (KurzweilAI, 2005). Further, Kurzweil is the founder and headmaster of Silicon Valley's *Singularity University* (Boenig-Liptsin & Hurlbut, 2016) and Director of Engineering at *Google*. In his massively sold book *The Singularity is Near* from 2005, he announced that the singularity will be achieved by the year 2045, and his predictions, especially the so-called 'law of accelerating returns', were contributory for putting forth a transhumanist logic about an exponentially growing evolution of technology.

As discussed above, Max More was an influential actor in the history of transhumanism. After his and Bell's *Extropy Institute* was closed in the year 2000, he became president and CEO of the *Alcor Life Extension Foundation*, originally founded in 1972 as *Alcor Society for Solid State Hypothermia* by Linda and Fred Chamberlain in Arizona (Alcor, n. d.; Shoffstall, 2010). The company offers cryopreservations (the preservation of dead bodies for reanimation) and holds over 184 first 'vitrified' then in liquid-nitrogen cooled human bodies in

“technological coffins of fiberglass and stainless steel” (Shoffstall 2010, p. 285). More’s wife, Natasha Vita-More (formerly known as Nancie Clark), is likewise a well-known transhumanist, mostly due to her work on virtuality, transhumanist art and design, but also as “leading expert on human enhancement and emerging and speculative technologies” (More & Vita-More, 2013). Vita-More holds the position of chairman at *Humanity+* but remains, to my knowledge, one of the few prominent women in transhumanism.

Another actor, who works on eliminating the very need for cryopreservations (death), is the British bio-gerontologist and “enfant terrible” Aubrey de Grey (Dzugan, 2019). As all the transhumanists introduced here, de Grey has a talent for making headlines, for instance when he proclaimed that the first human to become a thousand years of age is already alive today (Brown, 2017); or when he stated in an interview with the Austrian magazine *Profil*: “I am already doing God's work” (Dzugan, 2019). De Grey is chief science officer and founder of the *SENS Research Foundation* and co-founder of the *Methuselah Foundation*[6]*,* whose “savants” (Methuselah Foundation, 2019) want to eliminate aging through regenerative medicine and “rejuvenation technology” (SENS, 2019). Contending that aging causes more suffering and death than anything else in the world, he envisions himself as a “crusader” in the “war on aging” (cited after Tirosh-Samuelson 2010, p. 39). Moreover, de Grey contends that “it will become impossible to get elected unless you have a manifesto commitment to have a real war on aging” (cited after Brown, 2017), and that rejuvenation clinics with respective technologies as well as a movement against aging will emerge. De Grey further signed up to be a future “neuro-patient” (the cryopreservation of the brain instead of the whole body) at Max More’s *Alcor* foundation (National Post, 2018).

Lastly, I want to introduce two characters that are influential figureheads of political transhumanism in the United States: Zoltan Istvan and Gennady Stolyarov II. With the goal to unite the splintered American transhumanist movement, Zoltan Istvan founded the *United States Transhumanist Party* (USTP)[7] and therewith the world’s first transhumanist party in 2014 (Future Thinkers, 2015). After that Istvan held the position of the first chairman of the party (USTP, n.d.) and ran as a candidate in the 2016 US presidential elections (Benedikter & Siepmann, 2016). Promoting life extension with an ‘immortality bus’, his tour through the states made headlines and ended with Istvan delivering the *Transhumanist Bill of Rights* to the Capitol (Fuller, 2016; Murphy, 2017).

While the religious right in America designated him as nothing less than the Antichrist, Istvan is well-connected to investors such as Peter Thiel, the co-founder of *PayPal*, who invested billions in “parabiosis”, a ‘cure’ against aging achieved through blood transfusions of

[6] Named after one of the longest living trees of the world, the Methuselah.

[7] Which I am going to abbreviate as USTP in the following.

young people (Godwin, 2017). He is further known for his book *The Transhumanist Wager* (2013) in which he proposes a philosophy of "Teleological Egocentric Functionalism" (Istvan, 2020), describes the third world war as a conflict between transhumanists and non-transhumanists, and outlines – in the style of Isaac Asimov's famous robot laws – three laws of transhumanism[8] (Benedikter & Siepmann, 2016). According to Istvan, who intends to live 10 000 years (Benedikter & Siepmann, 2016), his book is now "[…] being taught in dozens of high schools and colleges around the world" (Istvan, 2020). In 2018, Istvan further unsuccessfully ran for the office of governor in California (Bickerton, 2019) and challenged Donald Trump as a Republican candidate for the office of president in 2020, convinced that the greatness of America lies dormant in transhumanism (Istvan, 2020).

The second political transhumanist I want to introduce is Gennady Stolyarov II. He is a founding member of the *Nevada Transhumanist Party* (The Rational Argumentator, 2007) and took over the role of chairman of the U.S. Transhumanist Party from Zoltan Istvan (USTP, n.d.). Stolyarov is known for his children's book *Death is Wrong* (2013), his science fiction novel *Eden against the Colossus* (2004), the philosophical treatise *A Rational Cosmology* (2005) as well as his play *Implied Consent* (2007). He describes himself as amateur mathematician, poet, "rational artist", actuary, novelist, and composer, and publishes transhumanist essays and news on his blog *The Rational Argumentator*, "A Journal for Western Man – Championing Reason, Rights, and Progress since 2002" (The Rational Argumentator, 2007 & 2019).[9] More so, Stolyarov II. hosts the *Virtual Enlightenment Salon* of the U.S. Transhumanist Party on YouTube.[10]

### 2.2.2. Transhumanist Political Parties

Whereas transhumanists such as Natasha Vita-More already engaged in politics in the 1990s (H+Pedia, 2019), the formation of own political parties is a recent, yet global phenomenon (Benedikter & Siepmann, 2016). After the establishment of the United States Transhumanist Party in October 2014, equivalents in the UK and Germany followed in 2015. Parties were also formed in India, Korea, Canada, Austria, Poland, Russia, France, Italy,

[8] 1) A transhumanist must safeguard one's own existence above all else. 2) A transhumanist must strive to achieve omnipotence as expediently as possible—so long as one's actions do not conflict with the First Law. 3) A transhumanist must safeguard value in the universe—so long as one's actions do not conflict with the First and Second Laws. (cited after Istvan, 2020).

[9] Interestingly, the language employed on this blog overlaps with the language of the constitution of the U.S. Transhumanist Party, an indicator that Stolyarov was important in its crafting.

[10] See for instance the edition with Gabor Kiss: https://www.youtube.com/watch?v=cYx7py19vlQ (accessed 05.10.2020)

Scandinavia, and Australia (H+Pedia, 2018; Benedikter & Siepmann, 2016). Even though many of them are precursor groups and in their very infancy, there seems to be an institutionalization phase going on, with some countries like Russia even having more than one party in the making (H+Pedia, 2018).

Most of these national parties are loosely tied to the *Transhumanist Party Global* (which is now being rebuilt as *International Transhumanist Politics Hub*), an institution that:

> "[…] desires to unite techno-progressivist grassroots movements around the world into a single movement that supports the systematic establishment of transhumanist parties." (Benedikter & Siepmann 2016, p. 3)

It is led by Amon Twyman (now known as Amon Asentir), founder of the UK Transhumanist Party (H+Pedia, 2016) and co-writer of the *Technoprogressive Declaration*, which, among others, was signed by the German Transhumanist Party (TPD)[11] (IEET, 2014). Transhumanist parties in Europe further have established the *Transhumanist Party Europe* (TP-EU), that works to bring transhumanist interests in the European Parliament and has initiated workgroups in countries such as Germany, Greece, Hungary, France, Italy, the Netherlands, Poland, Austria, Romania, Russia, Serbia, Spain, Sweden, and Turkey (Benedikter & Siepmann, 2016).

According to the sociologist, bioethicist, and transhumanist James Hughes, there are several political streams within transhumanism that can be demarcated: libertarian, fascist, liberal democratic, and radical democratic/ leftist, all of which embrace "[…] a positive, progressive vision of a sexy, high-tech future" (Hughes, 2002). In a survey within *Humanity+* from 2008, transhumanists within the organization were asked about their political beliefs with the result that 47% identify as leftist, 20% as libertarian, 14% as UpWingers-oriented (the politics introduced by Esfandiary), 11% as not political and 7% as moderately and 2% as strictly conservative (Loh, 2018).

Further worth mentioning as political transhumanist institutions are think tanks such as *Transpolitica*, the *Transhuman Policy Centre*, *Eudoxa,* and the *Institute for Ethics and Emerging Technologies* (H+Pedia, 2018); the extropian political action committee *Pro-Act* (Hughes, 2002) and ally organizations of the US transhumanist party like the stem cell treatment company *AmpliCell Medical*, *SENS*, the *Life Extension Advocacy Foundation* (LEAF), biotech companies like *Sierra Sciences* which are dedicated to the "immortality enzyme" telomerase (Benedikter & Siepmann 2016, p. 9); *Srpska Levica* (the Serbian transhumanist party), and the *Institute of Exponential Sciences* (USTP, n.d.). For a social

[11] Which I will abbreviate as TPD (Transhumane Partei Deutschlands) in the following.

movement, transhumanism enjoys remarkable financial support and “scientific legitimacy”, as for example from the *National Science Foundation* (NSF) and individuals like Mihail C. Rocco and William Sims Bainbridge, who, under the banner of the so-called NBIC or Converging Technologies, promote the transhumanist vision (Tirosh-Samuelson, 2010).

## 2.3. Taking Stock

As we have seen in this short overview, the transhumanist movement is somewhat West- if not indeed US-centered. This might have to do with the roots of transhumanism in Silicon Valley libertarian elitism (Hughes, 2002), but also with the American self-imagination as a nation of progress. All aforementioned transhumanists are accredited academics and technologists in societally recognized and transnationally powerful positions (Doede, 2011), and there exists a tendency to seek publicity, publish speculative bestsellers, and not uncommonly appeal for donations online (e.g. SENS, Alcor, Stolyarov II. and Istvan). It seems that there is a hands-on approach to building industries and promoting transhumanist goals, among others, through the self-marketing of dominant individuals as exceptional experts and guiders into a new human age. This self-imagination, and almost stubborn determination, is something I also encountered in my material and might offer one explanation regarding the question of how a societal movement like transhumanism has acquired the resources and self-esteem to go into politics. The tension between secrecy/elitism and openness/media attention makes transhumanism somewhat impalpable, one possible reason for the lack of case studies that we will encounter in the next chapter – the literature review.

# 3. State of the Art

Transhumanism has been discussed in various academic fields and disciplines. At the heart of these debates lie questions of ethics and human nature as well as the intellectual dismantling of transhumanist theory, its ways of argumentation and underpinnings. While all kinds of topics have been dealt with, such as cooking as a transhumanist enhancement tool (Berg et al., 2016), international security and transhumanism (McIntosh, 2010), or transhumanism and the law (Jougleux, 2015), most inquiries question whether the movement is something to encourage and tolerate or something that should be opposed. The literature thus seems preoccupied with a rather political or normative question: whether transhumanism can be classified as 'good' or 'evil'. In this section, I lead the reader from related STS topics such as science fiction, the figure of the cyborg, and the human enhancement debate towards the STS engagement with transhumanism. These topics are insofar related to transhumanism in that they do not only deal with a fascination, passion for, and optimism about science and technology, but also engage with the issue of fusing human bodies and minds with science and technology. More so, I interweave literature beyond STS's boundaries whenever it enrichens the discussion. I then conclude the section with an examination of how STS has approached social movements in the past, thereby testing different conceptualizations of movements in relation to transhumanism.

## 3.1. Science Fiction, Cyborgs, and Human Enhancement

### 3.1.1. STS and Science Fiction

Whether we think of uploading the mind into a robotic vessel, about colonizing other planets, about cyborgs and Artificial Intelligence, or about enhancing the human through technological bits and medical supplements, the transhumanist goal of transformation through technoscience easily invokes associations and imageries from the genre of science fiction. Science fiction has not only shaped collective imaginations about science and technology through visualizing their dystopian and utopian consequences, their mechanics and visual-material manifestations; it has also aided the circulation and hardening of emotional attitudes, prejudices, imaginaries, and hopes concerning specific technologies, knowledges as well as the scientist herself, as e.g. in the figure of the mad scientist (Toumey, 1992). As a genre, science fiction tells moral tales about the exploit of science and technology, thereby often going to extremes and reflecting on historical moments as for instance the intense anxiety with

technology during the industrialization that came to be written into science fiction literature and movies of the 1910s and -20s (Seeßlen & Jung, 2003).

While Donna Haraway has already emphasized science fiction as a valuable source of technoscientific imaginaries and alternative narratives in the 1990s (McNeill et al., 2017), science fiction has further been used as a kind of reflective surface to engage with public understandings of science and technology in STS. Steven L. Goldman (1989) for instance discusses images of technology in popular American movies from the 1920s onwards, finding that these films primarily carry negative images about technology and reveal a societal mistrust regarding the moral sensitivity of scientists. Particularly in science fiction movies, so Goldman (1989, p. 277), the social disruptiveness and "antihuman force" of technology is problematized. Moreover, the often-secretive ties between technoscience and the military, corporations, and governments are worrying the public, causing the author to ask how and why this ambivalence – between a sociocultural rhetoric of pride for technological innovation and this anxiety – in the American relationship to science and technology has come to be. One particularly fascinating theme within Goldman's (1989) movie-sample is the idea that certain knowledges, and in further consequence technologies, are untamable by their 'nature' and intrinsically corrosive for humans, a thought also present in the debate of transhumanism.

Another line of work within STS concerns the impact of science fiction and popular culture on real-world developments in the technology sector and on scientific practice. David Kirby's (2010) investigation of how popular movies take part in the production of, what he calls, "diegetic prototypes" represents an influential study. Kirby demonstrates how science consultants and entertainment producers have the power to create cinematic scenarios which can stimulate funding and support the development of technologies as well as engage audiences in imagining the implementation of and need for such technologies through playing out and 'virtually witnessing' their potentials (Kirby, 2010). Scientific accuracy and "technological sincerity" play hereby a crucial role in achieving the credibility that is required to frame not yet realized technologies as existing, socially embedded objects in alternative worlds and societies (Kirby 2010, p. 50). The notion of diegetic prototypes is, indeed, translatable to transhumanism because transhumanists actively enact not yet realized technologies, imprinting them with meaning and realness, creating sociopolitical prototypes of the human future through rhetorical means.

Also, Felicity Mellor's (2007) paper on asteroid research and fictional narratives can be positioned within this strand of literature. Mellor (2007) engages with the doom's day scenario promoted by a small group of planetary scientists and astronomers in the 1980s, that an asteroid might impact earth therewith causing global destruction. Showing how the perception of impacts changed through a shift from historical narratives to futurological ones, the author reveals how asteroids became constituted as threats. The construction of "narratives of

technological salvation" (Mellor 2007, p. 499) enabled the group that collaborated with the *Strategic Defense Initiative* (SDI) to tell a story about an inevitable planetary defense system that could vouch for human security. This story was embedded in the broader American imagination, influenced by future-war fiction, that a "new superweapon could deliver world peace", which the author, inspired by Howard McCurdy, reads as a satisfaction of Cold War fantasies (Mellor 2007, p. 499). In her paper, Mellor demonstrates how science fiction and asteroid/civilian and military science co-produced one another, and how facts and terminologies of 'real science' and science fiction became indistinguishably blurred.

The work that maybe comes closest to transhumanism, because it deals with a transhumanist technology and idea – cryonics – is an essay by Grant Shoffstall (2010) about cryonic suspension and science fiction. Shoffstall (2010) starts by voicing an academic dissatisfaction, namely, that there is a lack of inquiries that take fantastic, speculative technological endeavors seriously as a practice and belief. Much rather the legitimacy, feasibility, and credibility of, for instance, transhumanist technologies and the "genie-in-the-bottle fields of nanotechnology, synthetic biology, and geoengineering" (de Saille 2014, p. 142) are questioned, which is, in my understanding, why the discussion of transhumanism is mainly a theoretical one.

Drawing on Jacques Ellul's reading of anti-technological science fiction as a coping mechanism for technological anxiety, Shoffstall (2010) highlights the ideological and performative effects of the science fiction genre. According to Ellul, exactly because fears are played out in the imaginative medium of science fiction, humans come to return with closure, a sense of justification and ease to their own technological societies in the thought of having rejected technology – what they have rejected however is only the imaginative treatment of what technology could be, not their technological status quo (Shoffstall, 2010). In this essay, a narrative account of the history of cryonics is given, showing, among others, how Robert Ettinger, whom I have introduced in *Section 2*, encountered the idea of cryonic suspension in science fiction pulp magazines as a 12-year old boy. Based on Ellul, Shoffstall (2010, p. 293; original emphasis) proposes to read cryonics as a "red herring technology" – technologies that are dangerous not because they might exist or work in the future, but because of "their *spectacular* nature".

Other works dealing with science fiction in STS include projects about the imagery of the 'mad scientist' (Toumey, 1992; Weart, 1988), conceptualizations of science fiction as a theory (Crombez & Dahms, 2015), cybernetic modifications in science fiction (Chaffey, 2014) and, as of recently, also a paper by Constantinos Morfakis (2019) about Michael Crichton's Sci-Fi novel *Micro* in which a character is explicitly identified and portrayed as an STS scholar. Of interest outside of STS, is a proposition by Scott Jeffrey (2011) to read the emergence of the trans- and posthuman discourse as culturally manifested in the superhero genre, which is

close to science fiction. For this review of transhumanism-kindred STS subjects, discussing these inquiries would however go too far. What can be noted though, is that there lies potential for future STS research in the intersections of transhumanism and science fiction – reaching from the militaristic elements in both, to their shared roots in Enlightenment culture as well as a keenness for control, order, and stability reached through the means of science, technology, and rationality (Seeßlen & Jung, 2003; Loh, 2018).

### 3.1.2. STS and Cyborgs

Cyborgs – hybrids of machine and organism – often populate science fiction stories, and they represent another topic area within STS that is close to transhumanism because transhumanists frequently strive for cyborg-like bodies. Whereas we can also find literature that deals with the cinematic cyborg (Dickson, 2016) or with the increasing "cyborgization" of soldiers (Gray, 2003) in STS, the figure of the cyborg has been predominantly discussed in relation to Donna Haraway's (1991) famous conceptualization of the cyborg as a monstrous metaphor and long-overdue figure of liberation from phallocentric, essentialist, purist, and anthropocentric story-lines in Western culture. After outlining how hybrids of all kinds have populated our societies for a long time and emphasizing the importance of feminist science fiction, Haraway (1991) illustrates how the cyborg breaks up rigid dichotomies between human and non-human, subject and object, female and male, human and machine, nature and culture. The 'other' is dissolved in the self and *vice versa* in the cyborg, freeing both constructs from labels of species, gender, race, and maybe most importantly: the burden of identification (Haraway, 1991).

The unified, "able-bodied" (Bridy 2004, p. 149) humanist subject as a cornerstone and essential category of modernity is hence diffracted by the figure of the cyborg that marks the incorporation of sin and perversion in the posthuman, postmodern, and post-gender era. Technologies such as bio- and communication technologies, described as ambivalent like sunshine by Haraway, are thereby envisioned as enablers of a recrafting of bodies and social relations, "[…] in which people are not afraid of their joint kinship with animals and machines, not afraid of permanently partial identities and contradictory standpoints" (1991, p. 295). Also beyond the borders of STS, Haraway's cyborg has been an important point of reference, particularly in the philosophy of critical posthumanism, in which authors such as N. Katherine Hayles, Rosi Braidotti, Cary Wolfe, and Karen Barad have made major contributions (Loh, 2018). Because Haraway's manifesto is often mobilized outside of its intended meaning (Haraway, 2004) and interpreted too literally, as Nick Bostrom does in his history of transhumanism (Bostrom, 2005); and transhumanism and (critical) posthumanism are

frequently confused despite of their opposing assumptions, I want to quickly discuss why Haraway's cyborg is not and cannot be a transhumanist character or ally.

The cyborg, in Haraway's sense, is built on the insight that science, technology as well as 'the human' are nothing pure or independent from one another. Transhumanism and humanism both depart from the opposite assumption, creating notions of science and technology as objective, as servient tools produced after the "measure of man" (Introna, 2010), and framing the human as their rational, autonomous commander. In relation to the cinematic cyborg, Jessica Dickson (2016) has stressed that this represents a master/slave relationship. Whereas the transhumanist cyborg liberates the human of biological limitations, Haraway's cyborg liberates the human of the classifications and mental constructs that haunt human societies. The root of the differences between post- and transhumanism thus lies in one main circumstance: transhumanists want to create a *new* humanist subject, a super-abled human (therefore the prefix *trans*); while posthumanists wish to overcome and abandon the humanist subject (thus the prefix *post*) as a harmful, egocentric category of Western thought (Loh, 2018).

In early humanism, what was called, *humanitas* – a form of civilization through education, philanthropy but also a 'dignified' (and by all means class-dependent) lifestyle – was seen as cultivating the human out of a state of 'barbarism' (Cancik, 2003), framing it as an exceptional and superior being in contrast to animals and other non-humans (which is the anthropocentric and speciesist core of humanism). The human is imagined as an individual that acts according to reason, self-responsibility, rational change, and self-improvement; capacities that stoics described as God-given and divine (Cancik, 2003). Francesca Ferrando offers a good summary of why these notions have been problematized in critical posthumanism as well as in (poststructuralist) STS:

> "In the West, the human has been historically posed in a hierarchical scale to the non-human realm. Such a symbolic structure, based on a human exceptionalism well depicted in the Great Chain of Being[12], has not only sustained the primacy of humans over non-human animals, but it has also (in)formed the human realm itself, with sexist, racist, classist, homophobic, and ethnocentric presumptions. In other words, not every human being has been considered as such: women, African-American descendents, gays and lesbians, differently-abled people, among others, have represented the margins to what would be considered human." (Ferrando 2013, p. 28)

[12] A concept, prominent in medieval Christianity, that describes the 'natural', divine order of all beings in the world (God, angels, humans, animals, plants, rocks, and minerals), inspired by the ideas of Greek philosophers such as Plato, Plotinus, Proclus, and Aristotle (ScienceDirect, 2020).

The project of classification into 'human' or 'lesser-than-human' has been crucial within the history of Western civilization; determining notions of humanness, subjectivity, intelligence, personhood, and consciousness that build on structural discrimination; creating logics, a sense of authority and practices of domination of some humans over others as well as over nature (Ferrando, 2013). Drawing on the assumption that the human is superior to animals and other non-human entities because it possesses the gift of rational thinking, humanism has thus fabricated a notion of the human that, institutionalized in social norms and hierarchies, scientific thought and political institutions, is often embraced as a universal standard. The construction of reason and notions of objectivity, significantly influenced by Enlightenment thinkers such as René Descartes, have contributed to this, as STS scholars such as Londa Schiebinger (1989) have shown in depth.

Transhumanists consequently do not question the Western construction of the human, which is one of the paradoxes in their philosophy, "[…] which pose unredeemable restrictions to its perspectives" (Ferrando 2013, p. 28). Discourses of "biological wholeness" (Dickson 2016, p. 81) as well as the overvaluation of the mind over the body, and their conceptual separation, which Donna Haraway, critical posthumanism, and STS reject, have played an important role in the idea of this humanist subject and continue to do so, as is also the case in debates about transhumanism and disability (Fletcher, 2014), which catapults us nicely into the realm of human enhancement.

### 3.1.3. STS and Human Enhancement

Imaginations of enhancing human capabilities, practices of body modification and cosmetic enhancement, drug consumption for ritualistic or functional purposes, as well as the utilization of science and technology to cope with human problems, are not at all new ideas within human cultures (Thomas, 2012; Sharon, 2012). Today, technological enhancements have become an important aspect of future-oriented policies and speculative investment, profiting, among others, from the futuristic paradigm prevalent in military discourse (Morrison, 2015; Tirosh-Samuelson, 2010).[13] Transhumanism embraces various forms of enhancements, may they be genetic, moral, physical, mental, reproductive, societal, or neurological. Although STS has dealt with the subject of prosthetic limbs and bionics, it has not yet extensively discussed the topic of human enhancement. For this reason, Michael Morrison (2015) has appealed to the STS community to systematically engage with enhancement technologies as well as the concept of human enhancement.

[13] As exemplified for instance in the American *Defense Advanced Research Projects Agency* (DARPA).

In his paper, Morrison (2015) traces the history of human enhancement back to the discipline of bioethics and its discussion of gene therapy, showing how this field came to partially support enhancement for human benefit, but also how human enhancement is nowadays embraced as a label to classify technological innovation.[14] In passing, he thereby mentions transhumanism as a movement that pushes forward human enhancement and requires STS investigation. Ana Delgado, Kjetil Rommetveit, Miquel Barceló, and Louis Lemkow (2012) add in this regard that the debate of human enhancement incorporates a transhumanist strand since the year 2000 and that the emergence of NBIC technologies pushed the idea of immortality.

Most importantly though, Morrison (2015) discusses the boundary between therapy and enhancement – a crucial aspect within the discussion of transhumanism (Sharon, 2012; Fletcher, 2014; Loh, 2018) – that bioethicists traditionally have invoked to construct claims for ethical judgement. The differentiation between therapeutic interventions and interventions for matters of enhancement has been used to delineate realms of 'safe' and 'necessary' (economically supported) and 'nebulous' (unsubsidized) interventions in medical practice as well as social evaluations of what is considered a 'legitimate' or a 'deviant' intervention, the latter of which included surgeries for trans-persons, or as in the case of body art and modification, practices like tattooing, scaring, and piercing (Morrison, 2015; Bridy, 2004; Thomas, 2012).

Sociocultural values and norms thus play a critical role in this distinction as well as in the potential uptake of enhancement technologies, which has further been illustrated by David-Jack Fletcher (2014) who discusses transhumanist enhancement against the backdrop of disability rights, but also by Annemarie Bridy (2004) who has visualized that the therapy/enhancement gap carries implications about rationality and the 'integral' body in the case of apotemnophilia.[15] Indeed, many of these norms and imageries about what is natural and thus legit, normal or desirable, go back to the construct of the humanist subject and its entanglement with efficiency logics, the concept of competition, and specific modes of contemporary self-governance in contemporary Western societies (Van Den Eede, 2015; Fletcher, 2014). The idea of enhancement as well as the wish to become enhanced thus also needs to be read in the context of global consumerism where "the neoliberal call for self-optimization" is particularly strong (Ma, 2016; Wehling 2015, p. 198).

Apart from the distinction between therapy and enhancement, different forms of enhancement have been problematized in terms of their assumptions about how the human

[14] Among others, the idea of human enhancement for the purpose of increasing human productivity was significantly pushed by the NSF report *Converging Technologies for Improving Human Performance* from 2003.

[15] The desire to live as an amputee (Bridy, 2004).

body and mind work, and their potential consequences on a collective level. Particularly genetic and moral enhancements have been heavily criticized – genetic enhancement due to the fact that according genetic changes can be inheritable and thus have an impact on future generations, and moral enhancement because it threatens the idea of free will and capability of choice of humans. Most imaginations about the concept and practice of enhancement indeed trivialize how the human body and mind work, for instance, through adhering to a "gene fetishism" (Haraway 1996, p. 147) and a focus on the brain that simplifies the complex processes that flow into the construction of the human as well as, for instance, the establishment of human abilities such as empathy. Conceptually, enhancement thus reduces the human to a commodity and the body to an accessory, an object, that can be improved.

Human enhancement technologies hence raise manifold questions – about who has the power to define (e.g. a medical condition) and to control and design respective technologies (Sharon, 2012); about the boundaries of medical authority and the bodily autonomy of individuals, and about where therapy ends and enhancement begins. They also confront us with issues of liability, human dignity, and agency. Since, as Michael D. Bess (2008, p. 117/118) points out "[…] technologies for repairing a malfunctioning human body are inseparable from the technologies that allow us to push human capabilities to ever higher levels", the discussion of human enhancement is complex. Indeed, the situation becomes more complicated when we add transhumanist calls for radical enhancement to a "culture of life" (Knorr-Cetina 2005, p. 76) that while being marked by social chasms, not only encourages enhancement for the goal of individual and collective productivity and efficiency, but in order to perfect *life itself*.

### 3.2. Transhumanism in STS

As we have seen, STS has elaborated on topics that overlap with transhumanist thought, interests, and imaginations. Transhumanism as a movement is thereby sometimes mentioned. STS scholars have further researched fields and technologies that can be seen as corresponding with transhumanist goals, such as synthetic biology (Evans & Frow, 2015), regenerative medicine (Lafontaine, 2009; Morrison, 2012) or NBIC technologies (Gelfert, 2012). Nevertheless, transhumanism "in practice" remains empirically understudied within and outside of STS (Jasanoff 2016, p. 75), and the cross-disciplinary debate has been preoccupied with theoretical critiques of transhumanism. In this sub-section, I trace STS discussions about transhumanism. Starting with articles from two edited volumes about transhumanism, I first outline some STS criticisms in regard to transhumanism, and then proceed with journal articles, case studies, and the only paper I have found that engages with the subject of transhumanist political parties.

### 3.2.1. Problematizing Transhumanism

The interdisciplinary volume *Perfecting Human Futures* (2016) edited by Benjamin J. Hurlbut and Hava Tirosh-Samuelson comprises several chapters on post- and transhumanism, especially offering interesting discussions of the religious thought traditions that transhumanist ideas and notions coquet with. The volume includes an article by Sheila Jasanoff (2016, p. 73) on posthuman imaginaries and, what she calls, "technologies of reason".[16] Jasanoff (2016, p. 75) starts her article with a flashback on technoprogressive utopian approaches and "imaginaries of High-Modernism", which were, among others, determinant for the horrors of the Third Reich, a historical connection between utopianism, techno-optimism, and eugenic or otherwise undemocratic notions that has been raised frequently in the transhumanist debate (e.g. Tirosh-Samuelson, 2010; Yar, 2014). She then goes on to analyze posthuman imaginaries based on a poem from Dorothy Roigt and part of a speech from Lewis Strauss. Thereby, Jasanoff highlights one of the main problems of transhumanism from an STS stance, namely, the belief that technology is neutral and can be manipulated and mastered at will. Pointing out that technologies are human, sociomaterial creations and thus entail biases, failures, the blindness, and moralities of humans, she contends that it is impossible to come up with technologies that are layered and thick enough to represent more than one way of living and to achieve the transhumanist dream of perfection.

The second volume I want to refer to is called *H± Transhumanism and Its Critics* edited by Gregory R. Hansell and William Grassie (2010), whose design resembles a dialogue between prominent transhumanists and their opponents, featuring STS scholars like Andrew Pickering, N. Katherine Hayles, and philosopher Don Ihde. While Pickering elaborates on cybernetic images of the brain, the human self and spirituality; Ihde wonders of which human the posthuman will be 'post' and the transhuman 'trans', and Hayles, as she herself phrases it, 'wrestles' with the transhumanist ideology (Hayles, 2010).

With her book *How We Became Posthuman* (1999) N. Katherine Hayles has made an important contribution to STS research on cybernetics and has introduced the notion of the "information theoretic view of the human" (Shoffstall 2010, p. 292).[17] Hayles (2010) begins her chapter in the volume with a review of this conception, which assumes that the human is merely comprised of patterns of information while the material, the body, is insignificant. This form of decontextualization and disembodiment allows transhumanists to argue for and fantasize

[16] As has also been a critique of some other articles in the volume, the terms post- and transhumanism are however employed interchangeably within Jasanoff's article, which contributes to the impression that all posthuman approaches "invite the same result" (Sherbert 2016, p. 164).

[17] Similarly, Janina Loh (2018) describes an "information monism" and Robert Doede (2011) an "informational essentialism" in the transhumanist case.

about a radically altered human (Hayles, 2016; Loh, 2018; Sharon, 2012), because human identity, as well as personality, is thought to lie and be stored in information patterns alone. Many authors across fields have argued against this view of the human and the denial of embodiment, which is integral to the human self, consciousness, and experience (Alfsvåg, 2015; Fletcher, 2014; Loh, 2018); and Scott Jeffrey (2011) has pointed out that transhumanism merely creates new bodies and subjectivities rather than transcending them. Yet, as Hayles (2010) pointedly lines out, transhumanism has continued to grow and to extend its influences despite of such problematizations.

More so, Hayles (2010) examines the topic of reproduction in transhumanist terms through discussing correlating works of science fiction. Among others, she mentions the scenario that genetic manipulation and other technoscientific enhancements could produce a successor species of "superempowered individuals" (cited after McIntosh 2010, p. 33), whether android or human, that are so superior to the previous species (or to the ones choosing not to employ or do not have access to such means) as to cause many international, sociopolitical, and ethical conflicts. This scenario of a 'species divide' and the creation of a potential human 'sub-race' has received much attention in the literature. Scholars like Jürgen Habermas, Francis Fukuyama, George Annas, Rosario Isasi, and Lori Andrews have issued calls for a ban of germline modification, which they see as a crime against humanity and thus equivalent to torture and genocide (Bostrom, 2005; Lewis, 2018; McIntosh, 2010). Structural social problems are thus reproduced in the transhumanist imagination, and the gap between 'haves' and 'have-nots' is biotechnologically inscribed into the human flesh (Bess, 2008), which makes Hayles (2010, p. 225) conclude that "[r]eason is certainly needed, but so are emotion, systemic analysis, ecological thinking, and ethical consideration".

### 3.2.2. Theorizing Transhumanism

Another way of dealing with transhumanism in STS is to position transhumanist theory in relation to other theoretical understandings of technology. Robert Doede (2011), for instance, compares Michael Polanyi's thinking to transhumanism, and philosophers such as Allen Porter (2017) and Babette Babich (2017; 2012/2013) have elaborated not only on Friedrich Nietzsche's notion of the 'over-human' (*Übermensch*) but also on Martin Heidegger's and Günther Anders' philosophies of technology as well as on Ayn Rand's philosophy of objectivism in relation to transhumanism. Additionally, Michael Hauskeller (2016) has written a book about the different mythologies and cultural images (such as the 'summer of youth') that underlie transhumanism.

In his paper, Doede (2011) wonders whether Michael Polanyi would have supported the transhumanist project since he too envisioned technology at the core of a species

transition: Polanyi *into* the species of Homo Sapiens and transhumanists *out of* Homo Sapiens. While, Polanyi talked about the soft technology, the "machinery" of language, which made possible abstract, articulated human thought, the structuring of consciousness, symbol systems, and thus the process of becoming 'human'; transhumanism envisions technology as a means of evolution, superseding nature, and its accidental design of the human towards a transformed, intentionally planned species that realizes humanist values that were once strived for through education and self-discipline (Doede, 2011).

Both of these readings of a species transition rely on human-made artefacts: language and technology. Yet, Polanyi envisions the body as a fundamental site of mental life, even replacing "[…] Descartes' *Cogito ergo sum* ("I think, therefore, I am") with *Ego ergo cogito* ("I do, therefore, I think")" (Doede 2011, p. 231; original emphasis). Whereas transhumanists locate awareness, thought, and intelligence merely in the mind[18], Polanyi argued that every thought is bodily rooted, among others, due to his conception of awareness and his notion of "indwelling" (Doede, 2011). Changing the body through or bringing it into encounter with technoscience would, in Polanyi's logic, have considerable effects upon our modes of thinking, which makes Doede, who stresses that tacit wisdom is not computable, conclude that Polanyi would identify the transhumanist devaluation of the body as "self-defeating" and their neutral-optimistic stance on technology as "[…] woefully naïve and entirely inadequate" (Doede 2011, p. 232).

Although a theoretically stimulating article, Doede blurs the differences between transhumanism and technological posthumanism, which is epistemologically confusing. It is true that transhumanists rely on a reduced notion of the human mind and that their ideas of seamlessly protecting human identity in a highly technologized body are not thought-out. Also, as Doede (2011) emphasizes, transhumanism embraces the broadly shared mechanistic modern metaphor (Jeffrey, 2011) of the "molecular machine" (Winyard 2016, p. 59) of the body as the hardware and the mind, specifically the brain, as the software of the human. Yet, transhumanists are very much attached to the label and idea of the 'human', which they merely intend to perfect. This thesis attempts to demonstrate this by claiming that the transhumanist goal is much more a superhuman than a posthuman – a perfect rather than a cosmic body – inspired, among others, by imageries as that of the superhero that oscillates between the realms of science and magic (Jeffrey, 2011). To clarify this difference once more, while transhumanists absorb or morph technologies in(to) the human, hoping to gain their strengths and to realize ideals such as beauty or productivity (not unlike the ancient thought that with eating meat one would gain the strength of an animal); technological posthumanists dissolve

[18] According to Winyard (2016), this might also have to do with the construction of the *soul* in Christian thought.

the human in technology completely, becoming an entirely new collective existence, often through radically disruptive technologies.

Another way of theoretically engaging with transhumanism is to illuminate how transhumanists conceptualize (human) nature. Based on the example of the enhancement debate between transhumanists and bioconservatives, Yoni van den Eede (2015) demonstrates how both movements conceptualize the human and the technological as being clearly distinct from one another. The human 'core' is not touched by technology, neither in transhumanism nor in bioconservativism. In transhumanism, nature is merely an evolutionary stage in human development, framed as unjust and restrictive due to factors such as finitude and chance (Kolovou & Karageorgakis, 2010). Contrarily, bioconservatives, who Tamar Sharon (2012, p. 4) calls "dystopic posthumanists", see the natural imperfections of the human as that which makes up human values and identity.

As also Elizabeth Kolovou and Stavros Karageorgakis (2010) emphasize, transhumanists want to be free from nature, whereas bioconservatives often romanticize it. The wish to be free from nature thereby incorporates the idea of controlling and subordinating nature which reversely goes hand in hand with the domination of humans. What van den Eede (2015) unfortunately overlooks in his work is the role that technology plays in the transhumanist construction of human nature, namely, that technology is the very thing that makes humans human (Boenig-Liptsin & Hurlbut, 2016; Loh, 2018). In this perception then, technological change and innovation become a moral responsibility, an obligation, and something that is fateful and inevitable because it is 'natural'. Based on Mark Coeckelbergh, van den Eede (2015) nevertheless shows how vulnerability is a defining character of the human and that while some vulnerabilities might disappear through technoscience others are made – or as Hannah Arendt has put it – we lose the concept of the beginning (birth) without the concept of an end (death) (Loh, 2018).

### 3.2.3. Public Perceptions of Transhumanist Ideas

This sub-section deals with case studies about transhumanism that engage with public perceptions of transhumanist ideas. John H. Evans (2014) for instance does so by using data from the *International Social Survey Programme* (ISSP) as well as the US *General Social Survey* (GSS) in the years 1993, 2000, and 2010. In his paper, Evans (2014) attempts to predict challenges for the transhumanist project in relation to how faith in science is internationally distributed. Referring to the eugenics movement that attempted to solve social issues with scientific solutions, he suggests that transhumanism, who has been shown to have established its own "secularized religious motifs" (Sherbert 2016, p. 161); envisions science as inhering "salutary powers" (Evans 2014, p. 815) and that the impact and acceptance of this

movement depend on public faith in science as an institution but also as a source of societal hope and as producer of meaning. Thereby, the author elaborates on the importance of how problems are defined and where they are said to originate, showing that there exists an increasing tendency to see social issues as technoscientifically approachable in today's knowledge societies (Evans, 2014; Boenig-Liptsin & Hurlbut, 2016). As an example, the author refers to the hyperactivity in children that is seen as pharmaceutically treatable rather than produced in and by competitive environments like school.

Evans (2014) goes on to outline three types of faith in science and generates hypotheses for their social distribution, which he then tests with the taken survey data. Whereas the linkage between faith in science and the adaption of transhumanism is an interesting topic, some issues are however problematic in Evans' account and I disagree with his assumption that faith in science alone is decisive for how publics will react to transhumanism or for why individuals might endorse or object transhumanist reasoning and visions for humanity. As I have shown in *Section 2*, transhumanism is adaptable to various societal, religious, and political groups, backgrounds and ideologies, and reasons for its uptake or rejection are certainly more complex than Evans suggests in this paper.

Similar to Evans' paper, there is another STS study that deals with transhumanism through questioning how transhumanist ideas are taken up by the public. Mair Underwood, Helen P. Bartlett, Brad Partridge, Jayne Lucke, and Wayne D. Hall (2009) have examined the transhumanist subject of radical life extension in the context of the Australian city Brisbane. The authors approach community perceptions of the extension of life through interviews and focus groups in a heterogeneously sampled population, concentrating on the question which kind of individuals are likely to be interested in the prolongation of life. Among their participants are self-identified transhumanists, Christians, and so-called 'Raelians', members of an UFO religion (Kirby & Cusack, 2014). The authors find that persons with a more individualistic outlook on life were more likely to be drawn to radical life extension, while participants concerned with its societal consequences such as overpopulation and resource scarcity, but also a fear of lacking companionship by friends and family, denied it. Most of the interested individuals felt that it was self-explanatory why one would want to continue living and saw the refusal of this possibility as 'suicidal'. One interviewee stated that she would not like to extend her experiences as an Aboriginal person. At the same time, an older participant said that due to his age, he would not have any 'societal worth' (Underwood et al., 2009).

Indeed, social status and satisfaction with one's own life were crucial for arguing for or against life extension, enabling participants to imagine the extended life as pleasant and allowing them to be curious about the future. Quality of life as well as continuing to live in a young body arose as preconditions for interested individuals (Underwood et al., 2009). Interestingly, the only person who specifically stated to be intensely scared of death was a self-

identified transhumanist. The Christian belief in life after death further played a role in Underwood et al.'s (2009) analysis, even though religion did not necessarily rule out the desirability of life extension. Some religious participants argued that prolonging one's life is like "trying to play god" (Underwood et al. 2009, p. 501), which – in the theological discussion of transhumanism – is known as the, from the Ancient Greeks derived, "hubris" argument that describes the arrogance and overconfidence of humans (Tirosh-Samuelson, 2010; Thompson, 2017). Also, the distinction between therapy/repair and enhancement played a role in Christian reasoning against life extension, with enhancement being deemed as going beyond the natural. While Underwood et al. (2009) do not offer an extensive discussion or interpretation of the meaning of their findings, they note that the combination of youth culture, the medicalization of aging as well as the social acceptability of enhancement drugs like Prozac or Viagra have created circumstances that are fertile soil for an increased uptake of life extension, a technoscientific prospect which Karin Knorr-Cetina (2005, p. 78) has referred to as one of "the greatest hopes of the twenty-first century".

### 3.2.3. Unpacking Transhumanist Institutions

Another paper that involved fieldwork by Margarita Boenig-Liptsin and J. Benjamin Hurlbut (2016) targets the so-called *Singularity University* (SU) in Silicon Valley. Located on the NASA-AMES research campus and founded by Ray Kurzweil and entrepreneur Peter Diamandis (with the support of companies like Google, Genetech, Autodesk, and Cisco), *Singularity University* represents an institution that is "grounded in a faith in the inevitability of radical, technology-driven social transformation" (Boenig-Liptsin & Hurlbut 2016, p. 239). In their article, the authors show how the SU, while not directly teaching transhumanist theory, symbolizes the incorporation of transhumanist ideas and assumptions into the education system of Silicon Valley (Sherbert, 2016). Moreover, Boenig-Liptsin and Hurlbut (2016, p. 240) speak of a sociotechnical imaginary of transcendence which is intertwined with "[…] the notion that entrepreneurial start-ups and hackers tinkering in a garage have the power to transcend the limits of what is possible". Indeed, as we shall see, this entrepreneurial spirit also played a role in the party program of the U.S. Transhumanist Party, possibly mirroring broader tendencies in American culture.

Boenig-Liptsin and Hurlbut (2016) further emphasize how the authority to imagine is also an authority to declare action in the present, and how the speed of technological development creates a state where policy and law lag behind. In such an innovation culture, experts and the figure of 'the innovator' appear as the only ones fit to envision and control sociotechnical change and are in a privileged position of agency, among others, because the public is framed as impotent, which is widely embraced by SU and in Silicon Valley, and which

STS scholars have termed the 'deficit model' of understanding the public. According to the authors, the transhumanist imagination is founded on the three ideas of transcendence, exponential evolution, and technological inevitability, which they studied through participant observation to see how these ideas are translated into the practices at *Singularity University*.

Importantly, they hereby emphasize, as also Michael Hauskeller (2016) has, that the underlying imagination of perfectibility and human well-being through technology are culturally common and more widespread than one might assume. Interestingly though, Boenig-Liptsin and Hurlbut (2016) found that even though transhumanist ideas are omnipresent in the convictions of students and faculty members at SU (e.g. an understanding of law-like, exponential progress), transhumanism is hardly mentioned in the curriculum, among others, because it is perceived as being too speculative. Yet, SU is highly speculative itself (Boenig-Liptsin & Hurlbut, 2016) and, in my understanding, a perfect ground to naturalize transhumanist views and rhetoric about technoscience, especially by not designating them as such.

### 3.2.4. Transhumanism and Political Science

At last, there is a political science article by Roland Benedikter and Katja Siepmann (2016) about the development of transhumanist political parties. After discussing which transhumanist parties exist globally, the authors engage with the political self-understanding often enacted by transhumanist parties. While technology is proposed against all of humankind's problems (such as poverty, global warming, health), which agrees with the innovation culture prevalent in international political discourse (Korres, 2007) and, as we have seen, Silicon Valley (Boenig-Liptsin & Hurlbut, 2016); transhumanist parties talk about and envision a "third way" of politics beyond the dichotomy of left and right (Benedikter & Siepmann, 2016). This belief arises from the assumption that transhumanism is "post- or meta-ideological", because "[…] the technophile Transhumanist Party [meant here is the U.S. Transhumanist Party] is, by its nature, just as rational, progressive, and participatory as the new technologies themselves and will thus 'naturally' be moving beyond the small battles between left and right" (Benedikter & Siepmann 2016, p. 6).

The authors furthermore note that the speedy development of these parties, as well as their global interconnectedness, has largely been disregarded, and recall that self-centered approaches, like the objectivism of Ayn Rand which attempted to create a "new concept of egoism" and is often recited by transhumanists (Benedikter & Siepmann 2016, p. 7), have shaped political leadership in the U.S. before as for instance in the Reagan era (1967-1989). It is exactly this form of self-centered/individualist reasoning that in the above case study by Underwood et al. (2009) led participants to justify the idea of radical life extension.

## 3.3. Technoprogressive Movements in STS

In this final sub-section of the literature review, I want to discuss how STS has engaged with social movements in its past and clarify how I embed the transhumanist phenomenon within this context. The word *movement* is fascinating to me because it captures a motion, an action, or a trade of something – may it be material resources, emotions, ideologies, or knowledge – that attempts to, and inevitably, cause(s) some form of change. Indeed, activist movements and citizen initiatives around postcolonialism, feminism, and antiauthoritarianism have played an integral role in the formation of STS as a discipline (Breyman et al., 2017). Whereas this political spirit might have become, as Brian Martin has put it, "academized" over time; which has caused Steve Fuller to diagnose a division into a "High" and a "Low Church" of STS (cited after Breyman et al. 2017, p. 293); social movements have always been an essential part of the STS research agenda.

In an article from the *Handbook of Science and Technology Studies* (2017), Steve Breyman, Nancy Campbell, Virginia Eubanks, and Abby Kinchy set out to trace these ties between STS and social movements. The authors mention STS's activist inception in the 1970s, elaborate on the long-term theoretical neglect of the sociology of social movements, and introduce important past and present research (Breyman et al., 2017). Thereby, they describe health social movements, environmental justice movements, and more generally patient and citizen movements, as characteristic fields of STS inquiry, which are frequently examined in terms of knowledge-making practices as well as the tensions between different forms of authority, credibility, and objectivity (Breyman et al., 2017). As two influential examples Steven Epstein's (1995) study of how AIDS treatment activists challenged researchers and clinical trials in the U.S. of the 1980s, as well as Brian Wynne's (1992) inquiry about sheep farmers who, struggling with the Chernobyl disaster, renegotiated expert claims through employing their local knowledge, are mentioned.

According to Breyman et al. (2017), the STS approach to social movements has long been shaped by controversy studies. This theoretical focus on conflict might have supported the development that STS has primarily engaged with social movements that contest science and technology, and less frequently with technoprogressive or -optimistic ones (Breyman et al., 2017). While techno-enthusiastic movements such as the quantified-self movement and their use of wearable computers (Viseu, 2013), and hacker and DIY biology movements have been researched in STS (Delfanti, 2013; Delfanti & Söderberg, 2015), they are not specifically theorized as such. Even though Breyman et al. (2017) acknowledge this circumstance, the authors do not problematize this one-sided interest, which fosters the implicit definition in their paper, that social movements are something that is *per se* against dominant institutions,

classifications, or labels of science, technology, and society, and thus roughly in line with STS criticisms of the very same.

The concept of technology- or product-oriented movements (TPMs) as outlined by David J. Hess (2005) is more balanced in this respect. Based on the work of Doug McAdam, David A. Snow and Alain Touraine, Hess first gives a broad definition of social movements to then carve out his concept of TPMs:

> "SMs [social movements] are understood here to have three major distinctive features: broad scope in terms of organizational diversity and temporal duration, articulation of a social conflict by groups that are disempowered or perceive themselves to be disempowered on at least some issues, and extrainstitutional strategies such as protest against dominant institutions or the creation of alternative institutions." (Hess 2005, p. 517)

While TPMs, according to Hess (2005), can be part of broader social movements such as environmentalism, their hopes and demands for social change are first and foremost materialized and envisioned to lie in a specific technology or a product, which is illuminated by the author through a comparison of the nutritional therapeutics' movement, the renewable energy movement, and the open source movement. Revealing the closeness of such movements to the private sector and their preference for 'infrastructuring' over protest as a means of action, Hess (2005, p. 527) shows how technologies that are imagined to have an alternative character or function are refitted into the conventional public discourse therewith unleashing "object conflicts" between the industrial and the TPMs' vision of implementation. Despite of their alliances with entrepreneurs, inventors, and industrial reformers, alternativeness to as dominant perceived technologies or products (such as the usage of herbs instead of patented public domain drugs) is an important aspect of technology- and product-centered movements (Hess, 2005).

In Hess' concept of TPMs we are getting closer to an STS definition for technoprogressive movements like transhumanism. His concept however describes movements of lay individuals that push one specific technology thereby mobilizing entrepreneurs, inventors, and researchers that otherwise would not consider the development of alternative technology. Many transhumanists are however themselves actors in the industrial and technology sector, pushing not one alternative technology but technology *per se*, striving for not one specific solution to a problem, but to change whole identities, cultural codes and ways of living as is distinctive for so-called "new social movements" (Breyman et al., 2017). The fact that transhumanism is not only a lay but also an expert affiliation consequently needs to find reflection in their definition as a movement.

Scott Frickel and Neil Gross (2005) might be of help here. They have engaged with movements that arise from within science and have developed a general theory of "scientific and intellectual movements" (SIMs), which incorporates central concepts from social movement theory (Frickel & Gross, 2005). As most movements, also SIMs often begin to form due to a dissatisfaction with the status quo and a desire for change. Similar to the work of Thomas Kuhn (1962), who has examined the structure of scientific revolutions, the authors elaborate how, why, and when SIMs arise based on historical examples, focusing mainly on the successful emergence of SIMs and their institutional stabilization. A primary condition hereby is that new ideas, whether progressive or reactionary, are introduced that challenge the dominant paradigm, or what Kuhn (1962) called "normal science", which then invokes battles over the legitimacy of such new ideas, practices, and knowledges. SIMs are thus inherently political, however in a specific sense:

> "[…] we describe SIMs as political in the Weberian sense of relating to 'interests in the distribution, maintenance, or transfer of power' (Weber [1919] 1946: 78) because every program for intellectual change involves a desire to alter the configuration of social positions within or across intellectual fields in which power, attention, and other scarce resources are unequally distributed (Bourdieu 1988; Ringer 1990). Often, movement participants hope to catapult themselves and like-minded others into positions of greater intellectual power and influence, or to shore up such positions when they are threatened […]." (Frickel & Gross 2005, p. 207)

While this does not mean that SIMs are solely motivated in opportunistic terms (being part of a SIM can also be a professional risk), the mobilization of "high-status intellectual actors" (Frickel & Gross 2005, p. 209), some of which might maybe be called 'the elders' of science, is beneficial for making the program of a SIM credible through intellectual prestige and for providing access to opportunity structures and resources in the academic national and cross-national labor market. In the case of transhumanism, such high-status actors have been enrolled or appear as leaders and initiators of the movement. Also, Frickel and Gross (2005) emphasize that the *zeitgeist* and respective epistemic cultures of a field or discipline have to be right for a SIM to grow and that competitor movements can be formed. Contentious ideas of a SIM thus have to be 'packaged' in a way that makes them interesting, but also takes up familiar elements; and collective identities are forged in relation to what kind of thinkers its participants perceive themselves to be. As we will see, in the case of the two transhumanist parties examined here, such a cultural identity role model can be for instance what Steven Shapin (1991) has called the "gentleman-scholar".

Whereas the notion of intellectual and scientific movements of Frickel and Gross (2005) is beautifully outlined and fascinating (personally, I fell very much for their notion of "stealth SIMs"), it only partially matches with the transhumanist movement. Transhumanism neither

grew out of one specific discipline nor does it challenge the prevalent paradigm of a particular field. While SIMs are, in a nutshell, *by* scientists and *for* scientists – meaning that they hardly go beyond the academe and are less publicly visible than social movements (Frickel & Gross, 2005) – the transhumanist movement goes beyond science in an attempt to change humanity at large. Even though transhumanism has been broadly rejected as a 'philosophy' by the academe as we have seen above, it does not simply "fade […] into oblivion" as a SIM would under such conditions (Frickel & Gross 2005, p. 204). Whereas transhumanism, probably mixed with hacker, gamer, and engineering scenes, could have started as a SIM in Silicon Valley, the ideological agenda and meanwhile scope of the movement conforms more with the technocratic movement of the 1930s than with a SIM (Gunnell, 1982). For now, I thus suggest, that transhumanism can be conceptualized as a new social movement with technoprogressive and technocratic orientation.

## 3.4. Taking Stock

We have seen in this State of the Art, that transhumanism has been often spoken against, whether in regard to theory and ethical reasoning, or actual possibilities of technological realization. It has become visible that transhumanists tend to have an astonishing faith in science and technology in shaping society, thereby rarely questioning the sociopolitical consequences of technoscientific change on a collective level. From an STS perspective, this can be seen as a stance of technological determinism that underestimates the social in the construction of science and technology, objectifying both in the process. Several asymmetries have further been hinted at in the literature, such as the evaluation of the mind over the body and an understanding of the public as deficient.

Indeed, transhumanism operates with notions that might be considered disciplinary 'no-goes' in STS. Among them, universally framed and persuasive constructs such as objectivity, humanity, nature, reason, rationality, and progress, but also the idea that technology is neutral and inherently good – thought traditions that have been criticized in STS due to their significance in power politics and modernity's all-embracing purification programs (Latour, 1993). Technology is politics, from an STS view, and this ostensible reorganization of techno-optimistic, objectivist, and technocratic thought in the form of transhumanism is probably sociohistorically not coincidental. For transhumanists, science and technology can and should solve global as well as interpersonal problems. Thereby, the word *should* already indicates that transhumanism is involved in moral negotiations about what is marked as human or lesser-than-human, what is considered a meaningful state of existence, and in imaginations about 'the good society'. As such, it is a realm of thought and enacted reality involved in decision-making and thus ultimately – politics.

Through being involved in politics, normativity seems to stick to all areas of the transhumanist debate, whether in relation to the normativity of transhumanists in envisioning the future, or the normativity within the literature that problematizes transhumanism. Likewise, this thesis cannot escape normativity. Yet, it is possible to be reflexive about it, and I have, in this spirit, privileged unpacking transhumanist practices over the question if the movement is good or bad. Nevertheless, the latter question will return at the end of this thesis, because some visions for the world are 'objectively stronger', arguably better or worse, than others (Harding, 1993).

As we have further seen in this section, transhumanism has been approached in terms of its different sub-topics such as cryonics, human enhancement or the call for radical life extension. Yet, it is scarcely examined as a movement with own practices, actors, interests, aims, and beliefs. Transhumanism is not an own academic discipline, as we have seen in the preceding sub-section on movements, but merely enacts a lineage to traditions of thought, such as humanism and Greek philosophy, that is constructed as dominant and prestigious in Western historiography (Porter, 2017). Conceptualizing transhumanism as a movement, rather than a philosophy, can help us moving away from the overly theoretical examination of transhumanism towards a more practical engagement with this, as aforementioned, new social movement with technoprogressive and technocratic orientation, and it helps me in making visible the ideologies and morals that undermine it.

Moreover, this section has shown that there have been no studies about the language practices embraced by transhumanists, and that the formation of transhumanist political parties has been largely overlooked apart from one political science paper. Whereas the literature further often deals with the question of transhumanist understandings and conceptualizations of nature, I elaborate on transhumanist views and constructions of culture in this thesis. Arguing that we need to understand the mechanisms and practices that drive this movement and recognize the impact it could have as the "first global […] ideology of politically organized technophilia" (Benedikter & Siepmann 2016, p. 2), this research hence contributes to the literature on transhumanism through empirically engaging with the neglected topic of transhumanist political parties and their visions for the future.

# 4. Theories and Sensitizing Concepts

## 4.1. Sociotechnical Visions, Vanguards, and Imaginaries

This chapter serves the elucidation of the theoretical stances that this research is based on. Because the research questions I focus on are theoretically enriched, it makes sense to antedate this section to make the research questions better embedded and understandable for the reader. Science and Technology Studies (STS) offer diverse theoretical notions and concepts for analyzing the intersections and entanglements of science, technology, and society. Because this thesis deals with the politics of science and technology and their power as inspirational, imaginative resources in two national contexts, the notion of *imaginaries* provided a useful starting point (McNeill et al., 2017).

Various origins and 'theoretical hinterlands' of this concept exist – from sociopolitical theory to psychoanalysis (McNeill et al., 2017). In STS, scholars often refer to "sociotechnical imaginaries", referring to Sheila Jasanoff and Sang-Hyun Kim's work, who helped to theorize and popularize the concept within the discipline (McNeill et al., 2017). Jasanoff and Kim initially focused on nation-states as field units for analyzing imaginaries (Jasanoff & Kim, 2009). Later, they refitted the notion in terms of applicability as well as definition. Sociotechnical imaginaries are now defined as "[…] collectively held, institutionally stabilized, and publicly performed visions of desirable futures, animated by shared understandings of forms of social life and social order attainable through, and supportive of, advances in science and technology" (Jasanoff & Kim 2015, p. 4).

In this definition, it becomes visible why, while sociotechnical imaginaries were a first starting point for my work, I needed additional conceptual resources to think through my cases. Leaning on Jasanoff and Kim's conceptualization, sociotechnical imaginaries have a certain *scope* (they encompass a relatively broad and public audience), *stability*, and *level of institutionalization*. These are all distinguishing marks which could not be assumed to be applicable for a rising sociopolitical movement like transhumanism and, even less, for transhumanist parties. Sociotechnical imaginaries, in my interpretation, are deep-rooted (infra)structures of social values and morality like imaginaries about justice, societal order, or the 'good life'. In contrast to solidified imaginaries, I conceive of visions as more active.

Stephen Hilgartner, who offers both a conceptualization of sociotechnical visions as well as of the collectives that mold and uphold them was thus more fitting as a theoretical framework. Discussing the revolution of synthetic biology in the United States, Hilgartner (2015) proposes a division between sociotechnical imaginaries and visions, the latter of which are championed by so-called "sociotechnical vanguards" – a notion which matched with the

transhumanist movement and its ways of self-enactment like two pieces of a puzzle. Hilgartner elaborates:

> "By a 'sociotechnical vanguard' I mean to designate relatively small collectives that formulate and act intentionally to realize particular sociotechnical visions of the future that have yet to be accepted by wider collectives, such as the nation. These vanguards and their individual leaders typically assume a visionary role, performing the identity of one who possesses superior knowledge of emerging technologies and aspires to realize their desirable potential. Put otherwise, these vanguards actively position themselves as members of an avant-garde, riding and also driving a wave of change but competing with one another at the same time." (Hilgartner 2015, p. 34)

Transhumanists embrace such a visionary role as identity-giving within their movement. They fashion themselves as superior in knowledge, morality, and insight into what the world and humanity at large need, thereby enacting themselves as an intellectual avant-garde. We will be able to observe and dive deeper into these aspects in the analysis section, particularly in *Section 7.5.* that engages with enactments of transhumanist selves.

In contrast to imaginaries, visions are subsequently still in need of allies and thus also have a target they want to reach with their envisioning process. This makes them hopeful, revolutionary and moral in character – they illustrate what *should* be the shared understandings of good and evil in a society from the point of view of a small, less dominant social entity and they promote respective changes (Jasanoff & Kim, 2015; Hilgartner, 2015). Thereby, the investment of talent, hope as well as money is needed (Hilgartner, 2015). Sociotechnical visions are in this sense the little sister of imaginaries and, in my study, desire to grow into more collectively hold and stable imaginaries. In analytical practice, this meant that I had to carefully balance what was a vision of the two transhumanist parties, and which instances in the data could indicate underlying imaginaries shared within or by the national, sociocultural contexts and institutions, the parties are part of.

In building the theoretical framework for this thesis, work on the etymology of the terms "vision" as well as "visionary" were moreover helpful to me. It is crucial to acknowledge this other dimension of the word and concept *vision*, because it contributes to how I perceive of the historically grown, sociocultural idea of 'having a vision', which in turn relates to how I intend to frame transhumanism as a 'cult of technoscience'. This requires us to go back to the origins of the term as well as more mythical, through supernatural discourse lived and colored times in human history. The *Online Etymology Dictionary* offers the following contextualization of the words *vision* and *visionary*:

> "**vision (n.)** c. 1300, 'something seen in the imagination or in the supernatural,' from Anglo-French *visioun*, Old French *vision* 'presence, sight; view, look, appearance; dream, supernatural sight' (12c.), from Latin *visionem* (nominative *visio*) 'act of seeing, sight, thing seen,' noun of action from past participle stem of *videre* 'to see,' from PIE root *weid- 'to see.' The meaning 'sense of sight' is first recorded late 15c. Meaning 'statesman-like foresight, political sagacity' is attested from 1926." (Online Etymology Dictionary, n.d.; original emphases)

> "**visionary (adj.)** 'able to see visions,' 1650s (earlier 'perceived in a vision,' 1640s), from **vision** + -**ary**. Meaning 'impractical' is attested from 1727. The noun is attested from 1702, from the adjective; originally 'one who indulges in impractical fantasies.'" (Online Etymology Dictionary, n.d.; original emphases)

Here, visions incorporate a prophetic quality. These prophetic visions can be encountered for instance in religious stories, fairy tales, and myths; and they also have historical significance because they have been acted upon by contemporaries. It is essential to recognize that visions are in a limbo between fantasy/fiction/myth and reality, and that they cannot just be seen by everyone but appear "[…] as if dropped down from heaven" (Latour 2010, p. 21/22). The *Oxford Dictionary of English Etymology* (2003) stresses this element of visions, describing them as "something that appears to be seen otherwise than by ordinary sight XIII; seeing something not present to the eye […]". Whereas Hilgartner mentions the supposedly superior knowledge of vanguards, he does not elaborate on this somewhat unworldly connotation of visions. Implied in these etymological roots is that visions are received from an outside (potentially supernatural) rather than being actively forged. Individuals to which they appear are thereby transformed into chosen, destined (sometimes cursed, as in the case of witches) characters. Visions, as well as visionaries, are thus of some kind of higher order and quality; something lifted beyond empirical reality, the mundane and ordinary, enabled to see by someone or something. In the case of the transhumanist movement, we will see that this someone or something is science and that transhumanism enacts futures that are not yet reality with immense certainty thereby producing a self-ascribed, yet ambiguous savior-role for its advocates.

Coming back to Hilgartner, it is further fundamental to acknowledge that vanguard movements go through struggles in making and solidifying visions. Sociotechnical revolutions, like all kinds of revolutions, are hard to pull off the ground (Hilgartner, 2015). As societal actors that are embedded in and influenced by imaginary landscapes and "mental constructs" (Lerner, 1986) of their respective "imagined communities" (Anderson, 1983), vanguards mobilize "[…] vocabularies and practices already given and transmitted from the past" (Hilgartner 2015, p. 50). Hilgartner explicitly refers to language here as means to make futures imaginable and through which vanguards are enabled to link their visions to national and transnational

imaginaries, in the process sometimes challenging them. Despite of their revolutionary self-image however, vanguards never formulate their ideas on a blank, neutral sheet. They cannot create sociotechnical visions from a void but rely on a "lineage of visions" and entail a recapitulating and refracting of the past (Hilgartner 2015, p. 39). The vision Hilgartner examined for instance depended on the imaginary of the U.S. as a nation of progress that has innovation deeply rooted in its self-understanding and pride (Hilgartner, 2015). Imaginaries, as well as language, can thus be seen as linked to identity construction and reveal, to a certain degree, the "historically conditioned psychology" (Lerner 1986, p. 231) of cultural-political conglomerates like nation-states.

## 4.2. Narrative as Epistemology

The choice of using narrative as a sensitizing concept 'to think with' was inspired by Donna Haraway's examination of origin stories and narratives about technoscience in her book *Modest_Witness@Second_Millennium. FemaleMan_Meets_OncoMouse* (1996). Therein, Haraway demonstrates the role of different modes of storytelling in scientific practice and the construction of technoscience, stressing how essential narratives are for creating and maintaining webs of power and governance. Taking narratives as a prism through which to look at sociotechnical phenomena, human thought, and action, helps me to underline the fictionality of representation, the importance of stories in the construction of visions, of rumors, thought, and myths; and the hybridity and interpretative flexibility of reality. In today's "densely storied world" (Frank 2002, p. 110), narratives are considered integral components of human cognition and communication, among others, because we lead "storied lives" (Moen 2006, p. 56). They are world-making devices, epistemologies, and methods (Shanahan et al., 2017; Bal, 1993) that are connected to specific emotions and internal atmospheres (Meyer-Sickendiek, 2005).[19] Capturing narrative in theoretical terms is accordingly tricky because it tends to resist straightforward definitions (De Fina & Georgakopoulou, 2011).

For a long time, narratives have been indeed overlooked in academia. Wrapped into a label of fictionality and entertainment, they were ill-reputed as an 'unscientific' mode of thought and knowledge (Czarniawska, 2004; Oliver, 1998). The alleged absence of narrative was equated with the absence of ideology, which was utilized to justify and frame science as "anti-narrative" and thus objective (Sandelowski, 1991). Whereas the beginnings of narrative studies

[19] It is worth mentioning, at least in a footnote, that different genres of narrative produce different emotions: while *utopian* narratives build on the emotion of hope, the *idyll* describes happiness and bliss, the *satire* aggression, the (especially Shakespearian) *melodrama* desire and longing, and the *hymn*, which plays a role in the two transhumanist documents, stands for enthusiasm and excitement (Meyer-Sickendiek 2005, p. 36).

lie in the hermeneutic examination of the Bible, Koran, and Talmud and have a long-standing tradition, the role of narratives in social life was, most prominently, demonstrated by the French philosopher and literary critic Roland Barthes (Czarniawska, 2004). Eventually, the increasing interest in narrative in the social sciences and humanities culminated in the so-called "narrative turn" which led to a rejection of positivist thinking and of master narratives of theory such as objectivism (Kohler Riessman, 2003). Today, a diversity of narrative approaches exists, stretching from theories of narrative such as narratology (Fludernik, 2006), analytical approaches like performance and interactional analysis (Kohler Riessman, 2003), to deconstruction and close reading (Czarniawska, 2004), each theorizing and researching narrative in its own ways.

> "Like life itself, it [narrative] is there, international, transhistorical, transcultural." (Barthes 1966, p. 237)

As Roland Barthes in this quote, I employ a broad understanding of what narrative is and in which forms it can appear. Narrative is, for instance, not necessarily solely expressible in and through written or spoken language. Much more, it can loom and materialize in and through all kinds of symbols, paintings, architectures, gestures, and movements. Because narrative is an elementary device of meaning-making and of, what I personally call, 'truthing'; and as such crucial to how specific groups acquire and construct ways of reasoning, knowing, and logic (Czarniawska, 2004), I agree with Barthes (1966, p. 237) when he claims that "[…] there is not, there has never been anywhere, any people without narrative […]". Stories are always theories of the world (Coles, 1989), or as F. Michael Connelly and D. Jean Clandinin have put it – the phenomenon are stories while the inquiry, the practice, is narrative (Oliver, 1998).

In the literature, approaches to narrative analysis are divided in two sub-streams, those focusing on *form* and those elaborating on *content*. Both come with different assumptions. While the former argues that language is a universal, almost mathematical structure and attempts to reveal the single components of narrative (*how* the story is told) and typologizes its different genres; the latter focuses on the messages, the content, of narrative (*what* story is told) (Kohler Riessman, 2003; Matejka & Titunik, 1973). Viewed as separate from one another, both viewpoints have their theoretical and practical problems, above all, the assumption that form and content can be distinguished in the first place. It is thus common today to see content and form as co-constitutive (De Fina & Georgakopoulou, 2012; Czarniawska, 2004), because in narrative – an experience I also made during coding – "everything, in one way or another, is significant. […] everything has a meaning, or nothing has" (Barthes 1966, pp. 244/5).

Barthes fittingly describes why narrative is so difficult to grasp in this latter statement. Narrative is simultaneously located everywhere and nowhere. It does not have a clear unit of occurrence as, for instance, a sentence or a paragraph. Nor does it have a fixed form, manifestation, or stable parameters to search for in an utterance. Instead, narratives can span over whole texts; they can be implied, or even lie within single words. When researching them, one encounters societal, personal, ideological, national as well as theoretical narratives in one and the same text. Narrative thus works on, in and through different layers, and it depends significantly on one's research question to find out where and how to look at them. As we will see, I was curious about both: which sociotechnical visions (the phenomenon/the stories/the visions) are established in my data and how (the inquiry/the narratives) this is achieved. This presented me with some methodological challenges and resulted in a mixed-methods approach combining structural analysis with deconstruction, a hybrid of radical rewriting and interruption techniques, close reading, rhetorical, and dramatist analysis (Czarniawska, 2004). Before discussing my research questions and methodological conduct though, I discuss some theoretical assumptions about language that shaped this thesis.

## 4.3. Language as a System of Hyperlinks

> "Meaning outside a sign is a fiction."
> (Vološinov 1929, p. 28)

Language is a curious entity. Personally, I think it is one of the most fascinating aspects in studying human societies, since as Ludwig Wittgenstein (1922, § 5.6) has so famously proposed: "The limits of my language are the limits of my world". Language is not only something highly historical and cultural, but a force linked to human consciousness, communication, emotion, and mind (Czarniawska, 2004). It can connect or divide; create networks and intersubjectivity, and, for better or worse, allows us to draw boundaries – between self and other, human and non-human – thus supporting the formation of concepts and classifications. As Gerda Lerner has outlined in her book *The Creation of Patriarchy* (1986), name-giving is a tremendously powerful, in her context God-given, activity and the authority and right to participate in it is unevenly distributed. In Biblical times for instance, naming contained a magical quality, because it brings something into being – it is an act of creation (Lerner, 1986) and makes reality (Asdal, 2015).

On a basic level, name-giving refers to the maybe smallest unit of language: the word. Words are ubiquitous in our everyday lives; they are "[…] present in each and every act of understanding and in each and every act of interpretation" (Vološinov 1929, p. 15). In this

thesis, I see them as socially manufactured cultural artefacts. Words can thus be examined, twisted and turned; they are material-semiotic and flexible in their meanings. However, they only have representational power in a system of references. Language subsequently is at the same time an open and closed system, a system of ever-changing, heavily intertwined hyperlinks; a metaphor I borrow from Donna Haraway (1996). The word *hypertext*, as the *Cambridge Dictionary* (2014) outlines, describes "a way of joining a word or image to another page, document, etc. on the internet or in another computer program so that you can move from one to the other easily". The internet is *the* example for a hypertext and stands for dense interconnectedness. It is comprised of hyperlinks, which can be accessed and clicked at almost infinitely to get to another 'place' – a different website, article, image and so on.

Language behaves similarly. As it is the case online, in the hyperlinked system of language hardly anything is lost or forgotten. Meanings, and attached discursive and emotional vibes (Meyer-Sickendiek, 2005), that certain words or expressions once had, do not vanish without a trace just because specific fashions of speaking, writing or new meanings are more dominant than others in a respective time and setting. Often the reappearance or recombination of older meanings and the adaption or introduction of new vocabularies symbolize a shift in societal discourse and value systems (Hilgartner, 2015).

While I see language as a structure, this should not mean that it is just *out there* or a closed system. Rather, the hyperlinks it is composed off constantly change their connections to each other, new ones are added, old ones revived, it is a "system of systems" (Vološinov 1929, p. 5). In my opinion, it is possible to unpack parts of this huge meaning-holding entity and vessel, among others, because of my assumption that meaning, as well as the human self, know no borders or boundaries. We absorb, internalize – we *are* – anything there is and was in the world, or to say it with an idiom often used in the queer community, we are 'dripping with' society. Humans share collective memories, ways of storytelling, and figures of thought in their manifold manifestations, and there is vivid exchange and transfer across languages and cultures. As humans, we are deeply entrenched into the modes and paradigms of our time, carrying with us, at least subconsciously, our history. Associations or alienations we have and experience due to a specific phrasing in a text for example are thus not merely coincidental, but they can be sources of knowledge, insight, and access points to "cultural heritage" (Doede, 2011) and embodied knowledges, as I hope to show in my analysis.

Lastly, I want to briefly speak about the ideological power of language, and its links to identity and habitus construction on an individual as well as collective level. The Russian linguist Valentin Nikolaevič Vološinov, who brought together the philosophy of language with Marxism, can be of help here. For him, the study of speech acts can "illuminate not only the mysteries of the human psyche, but also the complex phenomenon called 'social psychology' in Marxism […]" (Matejka & Titunik 1973, p. 3). Although a bit deterministic in that Vološinov

sees language as the fundamental aspect of being and becoming human (as other linguists and historians too), I must admit that I privily agree with him (Vološinov, 1929; Lerner, 1986). The development of signs aided humans not only in character and identity formation as a species but was crucial for the development of abstract thought, trade, governance and state systems, which is why Erich Fromm saw humans as “half-animal and half-symbolic” (Lerner 1986, p. 199).

In his philosophy, Vološinov speaks about the ties of language, ideology, and consciousness. Because signs, such as linguistic ones, only develop through interaction and thus arise on “interindividual territory” (Vološinov 1929, p. 12), he reasons that ideologies stretch from consciousness to consciousness. Individual consciousness is “ideological through and through” (Vološinov 1929, p. 22) because it is deeply social and hence also an arena of class (and other) struggles. As such, habitus construction, socialization but also culture, are to be regarded as something ideologically shaped, and it is no wonder that power and language have such a fascinating relationship as well as deep-reaching influence on humans and the construction of their communities.

# 5. Research Questions

## 5.1. Research Question and Sub-Questions

This thesis approaches sociotechnical visions through language in two transhumanist political documents. In the preceding chapter, I have elaborated on how I theorize the relationship between visions and narratives, how I conceptualize and perceive of language, and how the notions of sociotechnical vanguards and imaginaries play into my research. These theoretical considerations and assumptions are important for understanding how I proceeded methodologically. Before elaborating on method, I outline the research questions that drove this inquiry. Since I conducted a document, in specific a narrative, analysis, the material was the starting point around which I could tailor my research. This allowed me to engage with my data early on, see what it 'offered', and what questions were possible to ask in relation to it. I also have to say that I was immediately drawn to my material, especially due to their creative, indeed – vision-inspiring – use of language. The main research question thus developed relatively quickly and is as follows:

> *RQ: Which sociotechnical visions are designed in the U.S. and German transhumanist party programs, and how are they established?*

Though a seemingly simple question, particularly the second part of my research question was complex to answer. To underline the agency of the parties in establishing sociotechnical visions in their party programs, I chose the word *designed* within the question, which implies activeness thus stressing that visions are not merely coincidental or passively created. Additionally, several sub-questions helped me to specify and narrow down my ways of looking at the data. First and foremost, I needed to know which kind of narratives are at work in the documents, which is reflected in the following sub-question:

(1) What narratives about science, technology, nature, and society are at work?

There were, of course, many more narratives in the data than those of the four domains that I focus on here in this question. It further became apparent during the analysis that the narratives within the documents are dependent on what kind of language and rhetoric are embraced by the parties. The next sub-question thus had to address the issue of how language and rhetoric contribute to establishing narratives and, in further consequence, sociotechnical visions:

(2) What terminologies and rhetorical strategies are employed in the two documents, and what are their functions?

Further important to me was a question about how the parties present, enact, envision, and perform themselves within the documents. Since language reflects habitus, knowledge, and social positioning of uttering entities; and stories and narratives about science, technology and society are actively and passively (re)told, supported, rejected or incorporated in the self, a question about identity and self-construction was essential:

(3) How do the parties envision themselves and the transhumanist movement more broadly?

This question is also significant in a political sense, because it gives insight into the 'psyche' of the movement through revealing the "mental constructs" (Lerner, 1986) it builds on, but also mirrors the sociocultural as well as political composition of the parties' respective nation-states. Finally, the last sub-question is an analytical one:

(4) Can transhumanism be conceptualized as a 'cult of technoscience'?

This question developed out of my long engagement with transhumanism and the observations I was able to make, and I will elaborate on it in *Section 7.6.* of my findings.

# 6. Methodology and Materials

## 6.1. The Documents

The research material for this thesis consisted of about 60 pages of text. I downloaded them in October 2019 from the webpages of the US and German transhumanist party, and then printed and paginated them for the manual coding procedure. Since the two documents are public political writings and openly available, I did consider this ethically justifiable without the explicit consent of the parties. The documents are written in the respective national languages: (American) English and German. While the US document carries the title of a "constitution" (USTP, 2017), the German party refers to its document as "Partei- und Arbeitsprogramm" (party and working program) with a manifesto-like "Präambel" (preamble)[20] at the beginning of the program (TPD, 2017).

In terms of layout and structure, the document of the U.S. Transhumanist Party (USTP) is organized legalistically. It is divided in 3 articles, 82 sections, and some sub-sections. Articles and sections are marked by Roman numbers and written in bold, while sub-sections are labelled with Arabic numerals. The German Transhumanist Party (TPD) structured their document in 10 thematic sections[21] colored in mid-blue, each accompanied by an introduction to the overarching topic, and then a list of policy suggestions in the form of bullet points. In contrast to the US party, the TPD displays their party logo, a white silhouette of a human head on a mid-blue ground, on the cover of its document. While the USTP also has its own party logo on their website (an infinity symbol interwoven with an arrow, the latter of which most likely symbolizes the infinite progress of technology), Gennady Stolyarov II. recently started an interesting discussion about a collective symbol for the transhumanist movement on the website of the USTP.[22]

[20] A term that normally refers to the ceremonial declaration at the beginning of national constitutions.

[21] Universal basic income and taxation, education and school, democracy and society, progress and technology, health and medicine, security and hazard prevention, environment and energy, universal rights and freedom, economy and infrastructure, science, and research

[22] Suggested as transhumanist symbol were, among others, the Old-Egyptian *ankh* as a sign of vitality and eternal life, which also might be connected to hermetic and theosophical traditions. See the full discussion here: http://transhumanist-party.org/2019/08/18/transhumanists-need-new-symbols/ (accessed 02.03.2020)

## 6.2. Process of Data Analysis

Analyzing qualitative data is always a bit like taming an animal to me. It includes different entities 'sniffing' at each other, approaching one another carefully and sometimes suspiciously. Interpretation thereby goes through diverse stages, from raw to cooked and thus to cultural (Lévi-Strauss, 1964). Since I chose pre-existing documents to be my research material, the involvement in the data production through the negotiations between research participants and researcher as well as the questioning of intentions, the observing of body languages, and digging deeper in a real-time interview or fieldwork situation, was not possible. While every methodology has its limitations – enabling some questions while not allowing to ask and answer others – this does however not mean, that there was no immersion into the research setting or no participation, performance, or presence of diverse actors.

They just appeared in an immaterial form, as traces of the already concluded production process of the documents. Even though I was not part of the immediate crafting of the material, I was receiver of the stories the documents told (the ones I was meant to see and the ones that were underlying and had to be dug out), and I negotiated with them almost as if in a trade relationship and played with different ways of engaging and reading them. To me, they nearly materialized as entities with an own appearance and voice during the coding, which on the one hand was owed to the particularity of my material (especially the American document, whose way of writing and use of grammar produced a kind of textual herald that announced the messages of the party) and on the other hand, to the way I conceptualize and envision documents more generally.

Speaking from a social science perspective, documents can be understood as "situated products" (Prior 2007, p. 345). They take manifold forms and shapes; they are fluid rather than fixed (Clarke, 2005), function as social agents and messengers, and are saturated with contentual, sociocultural, symbolic, and many other forms of meaning (Prior, 2007). They are "[…] bits of the material world […] that we've imbued with the ability to speak" (Levy 2001, p. 23). Yet, documents do not speak on their own. Nor do they simply represent or reveal their meanings straightforwardly (Shankar et al., 2016). Much more, as Donna Haraway visualizes it, documents "[…] resemble messy bundles of yarn" (Shankar et al. 2016, p. 66). Whilst analyzing these bundles, their knots are unraveled, and the individual strings are woven into new patterns by the one who engages with them. Philosophically speaking, I cannot resist but to quote Suzanne Briet here, who so beautifully has wondered: "Is a star a document? Is an antelope on the savanna a document?" (cited after Shankar et al. 2016, p. 61).

Furthermore essential, is that documents are instruments of power, control, and organization as well as "political technologies" that structure knowledge and discipline individuals (Shankar et al., 2016). In my case, the documents need to be seen as enacting,

formalizing, and making transhumanist parties and their sociotechnical visions for the world more real. The evaluative hierarchy that exists between the written and the spoken word is an integral part of the power history of Western civilization (Prior, 2007); of bureaucratization, abstraction, simplification and rationalization processes that were and are required for upholding the idea and realizing the objectives of constitutional, "high modernist" nation-states (Scott, 1999). Indeed, there seems to exist a downright fetish with documentation and data in today's societies (Shankar et al., 2016), which also finds reflection in our language (e.g. the idiom 'having something in black and white'). The fact that transhumanist parties publish their own manifesto-like programs can accordingly be seen as a way of institutionalizing and stabilizing transhumanism, a manner of making it more real as an actor within the world, symbolizing, to quote Zoltan Istvan, that "transhumanism is here to stay" (Wood, 2015).

Moreover, documenting is a practice of memory and historiography (Lerner, 1986), and it was fascinating to encounter those aspects within the material. Particularly the USTP writes as if it was already a well-established political body and, from a future perspective, enacts itself as an important historical entity. The party records how they want to be remembered. The field of literary criticism offers a well-fitting notion for this dynamic, which in German is called "Nachlassbewusstsein" (loosely translatable as 'inheritance consciousness') (Sina & Spoerhase, 2013). This notion describes the autobiographic consciousness that authors, as well as scientists and politicians, have when leaving behind their works; well-knowing that the public will be interested in assessing, interpreting, and molding them and their legacies, and thus tinker with how they are collectively remembered (Sina & Spoerhase, 2013). Estates of deceased authors thus often mirror such an awareness, and some individuals even take active provisions against an in-their-eyes untrue representation of them and their work. I see some form of 'inheritance consciousness' at work in the USTP's constitution, and I interpret it as an implicit desire to be significant enough "that a beam of light should, at least for a moment, illuminate them" (Foucault 1979, p. 79), but also as an attempt to control how transhumanism is written into history, which facts about it are made and circulated. The written word thus also functions as a medium through which humans remember and continuously prove to themselves their existence.

Against this background, there were indeed entities that were present in and shaped the coding process: the two transhumanist parties (USTP and TPD); the documents (which were actors and research fields at the same time); the languages utilized; myself as sense- and order-making agent, and the characters the parties constructed and introduced within their documents. These entities can be seen as congruent with what narrative analysts and literary theorists have described as the 'multi-voicedness' or "polyphony" of texts and their respective narratives (Bakhtin, 1984; Park-Fuller, 1986; Moen, 2006). To engage with this polyphony was

challenging, and a scheme for narrative coding by Johnny Saldana (2009) then served as a starting point for my coding approach.

Saldana's scheme focusses on the form of narratives and their structural elements. He suggests 11 categories through which to look at a given text in terms of narrative: (1) *type* of narrative such as survivor narratives, coming-out or cautionary tales (2) *genres* of narratives like tragedy, comedy or melodrama (3) the *purpose* of a narrative as for personal, historical, moral, emancipatory, therapeutic reasons (4) the *setting*, so descriptions of environment, season, locale (5) the *plot*, its elements (conflict, climax, turning points) and how it is told (episodic, chronological) (6) *characters* such as the narrator, protagonist, antagonist or secondary characters (7) *characterizations* such as physical description, status, motivations, and characterizations such as the hero or trickster (8) the *form* of a narrative such as monologue, soliloquy and dialogue (9) the *point of view*, so the use of first-, second- and third-person narrating; omniscient or witnessing narrators (10) the *elements* of a narrative like foreshadowing, flashbacks, flashfowards, juxtapositions, irony, motifs, symbolism, allusions, metaphors, similes, and codas (11) and, lastly and irrelevant for my endeavor, *spoken features* such as pauses, tone, emphasis, fluency, alliteration, dialect (Saldana 2009, p. 111/2).

In a first instance, I had to make these categories usable for my research, define what they mean and how they are theoretically underpinned. To me, not only the implied structuralism of Saldana was something I did not agree with, but my intuition was that many of his categories relate better to the character of stories rather than narratives. His scheme was nevertheless highly useful since it served as inspiration for my own coding scheme, in which I maintained some of the proposed categories, but also added new one's which became important during the coding.

When I approached the data with the resulting scheme, I envisioned it as a first 'close reading' of the material. Yet, it turned out to be a time-consuming and extensive way of analysis, which I eventually loved because it required a lot of going back and forth within the data and thus revealed many layers of the two political texts. Quickly it became apparent that the divide between narrative content and form, that is so often discussed in the literature, is simply impossible to uphold during the coding process: the form shapes the content at all times and *vice versa*. The analysis became in this sense also a form of ontological decision-making in that it bordered on and confronted me with issues typically raised in language philosophy and the linguistic sciences, which is why I found it helpful to keep a research diary for noting down theoretical doubts but also associations that the documents evoked in me. Interestingly, it became evermore blurred what a narrative is, how it can be found and determined in a text at all because meaning has such an intertwined, complex texture that it was hard to reduce sociotechnical visions to narratives only. This is further why terminologies, expressions, and rhetorical tools became important in my analysis, which were not only peculiar in these

documents, but also indispensable in establishing the narratives and the two sociotechnical visions I identified in the data.

A friend of mine found a nice analogy for this kind of analysis. He compared it to 'the un-baking of a cake' – the deconstruction of a finished 'cake' (the documents) and the distillation of its ingredients and "building blocks" (Prior 2007, p. 346). It is a very fitting comparison, I think, especially since the ingredients such as single words and their etymological and discursive histories became so substantial for my research and theoretical reasoning. While I am aware that the use of language can be both, unconscious or intentional (sometimes in a nether-land in-between), I want to stress that these documents can be assumed to be well-negotiated and thought through. In contrast to the texts resulting from an interview, where the production context is more spontaneous and open, but sometimes also stressful for research participants, these documents were probably not written in one go. Instead, they were most likely carefully (re)phrased through different collaborating actors, made for specific audiences and purposes, and with specific interests in mind. The parties were therefore not forced into a narrative but crafted their own without my influence. Of course, it must be considered thereby that the political sphere has own speech norms and habits, linguistic codes, forms of writing, and pools of narratives that are considered legitimate or appropriate in a respective cultural and institutional setting (Silverman, 2011), which is why I assumed, among others, to be confronted with quite formal writing techniques.

Since I am not an English native speaker, it was further helpful to consult with two US American native speakers about my interpretation of expressions, wordings, and grammar usage. Whereas I also used different dictionaries and the linguistic literature to verify my hunches, these discussions were very productive. Additionally, I had one of the native speakers' mark everything that felt strange or interesting to them in the US document, which was overlapping with the instances and passages that estranged me in the document. I also discussed with German native speakers about my interpretations, however not that coherently since I grew up within the semiotic frame of the German/Austrian language. However, it was challenging to conduct an analysis in two different languages because each of the documents inspired own ways of looking at them, each of them had culturally specific ways of producing narrative, storytelling techniques, or other linguistic effects. And unavoidably, I carried unconscious biases and assumptions about German as well as about American culture into the research, which I tried to reflect throughout the process. Worth mentioning here is that there seems to be a knowledge transfer from American to German transhumanism, because concepts from the largely English transhumanist literature were copied, sometimes word by word, within the German document.

For the writing-up of my analytical chapter, I translated German quotes with the help of *DeepL,* an online translation service, and dived into the transhumanist and academic literature

once more. Only after becoming clear about what the sociotechnical visions were in the material, I was able to dissect what narratives were necessary to establish them and how these narratives were conversely established through language use and rhetoric. To see which visions were sufficiently supported by my data, I drew maps which helped me to narrow down my thoughts and sort out the most important codes. Part of this map-drawing was also the recording of suspected underlying imaginaries within the data. In this way, I realized that I have three on each other depending, interlinked groups of findings: (1) rhetorical devices and language (2) narratives (3) and sociotechnical visions. Whereas narratives and rhetorical devices/language co-produced each other, they were both needed to create the sociotechnical visions within the documents of the USTP and TPD. See the following illustration for how these three components played into each other:

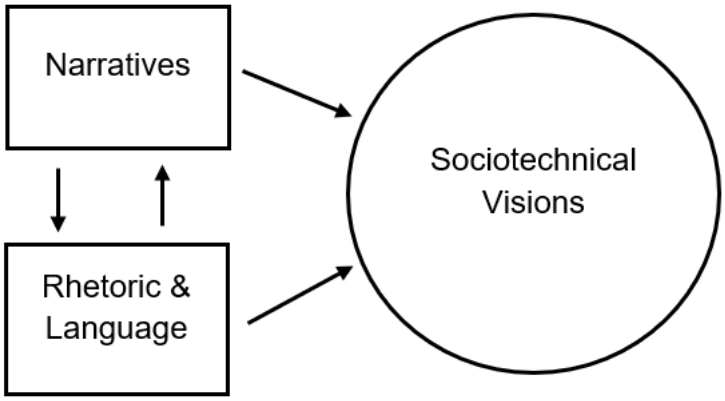


*Figure 1*

As such, the writing up of the analysis was the more important and difficult analytical stage for me. Whereas the coding was inspiring and creative, yet exhausting and time-consuming, tying all the thoughts together and making them understandable for others was challenging.

## 6.3. Associations as Methodological Tools

There is one last methodological tool that was important during the data analysis, and I referred to it as 'autoethnographic association diary'. Essentially a research diary, it functioned as an instrument of documentation and reflection, but also as an analytical means. Because stories are produced with an audience in mind (Silverman, 2011; Kohler Riessman, 2003) and are as such performative, I found it helpful to write down whatever alienated me or evoked specific associations and images in my mind. As I have outlined in *Section 4*, I believe

that language does not coincidentally trigger emotions, associations, memories, experiences, and visions but that there is a reference system of meaning which, even though in continuous flux and change, allows us to re-trace and unpack ‘inter- and intramental images’ (Moen, 2006) embodied in language. Stories carry collective histories and emotions because “stories go in circles” (Metzger 1986, p. 104). Politicians, as actors that want to persuade, play with multiple repertoires of stories to inspire their potential voters and to create their visions for the world. The diary thus helped me to collect associations which I then could revisit later and figure out why they arose in me. Sometimes I discovered why they came up, and sometimes I did not. Sometimes they held meaning for the documents, and sometimes they did not. In any case, the captured associations enabled me to honor and take my own interwovenness in societal stories and imageries seriously, and it certainly revealed interesting aspects of the transhumanist discourse for this research and for future projects.

# 7. Discussion and Findings

As we have seen in the previous sections, how we speak and write reflects assumptions of our thinking, of the ideologies we are part of, the theories we believe in, and the societies we want to establish. As such, language is deeply political in that it helps us build concepts in and for the world. Languages are cultural products charged with countless (hi)stories of their continual enactments. They can be tainted and part of bigger discursive webs. Political documents, as well as the thought collectives (Fleck, 1979) they grow out of, have their own languages, style habits, and dependencies on literary and societal genres, on narratives, and imageries. Inspired by the work of authors such as Donna Haraway, Valentin Nikolaevič Vološinov and Gerda Lerner, I see the languages we construct, reinvent, instrumentalize, sometimes recycle, as hyperlinks of sociohistorical meaning in which we all, sometimes consciously sometimes unaware, are embedded and participating in. As are language, images, and imagination, so also the three core parts of my findings – visions, narratives, language and rhetoric – are intrinsically bound to each other.

In the following, I proceed chronologically to answer the research question and sub-questions outlined in *Section 5*. First, I describe the sociotechnical visions that I encountered within the transhumanist programs: the vision of *Paradise (Lost)* and the vision of *Technology = Magic*. After each vision, I then approach sub-question 1 and 2 by unpacking the rhetorical devices, language repertoires, and narratives that are necessary to design them and that illuminate the ways of reasoning and the assumptions of the TPD and USTP. Thereafter, I go on to show how the parties envisioned themselves and the transhumanist movement more broadly in their documents thus answering sub-question 3. Lastly, I engage with sub-question 4 through wondering whether transhumanism can be conceptualized as a ‘cult of technoscience’. Before that however, it makes sense to quickly dive into both documents thematically, to give the reader an impression of the material, the two parties, and their recommendations for a better future.

## 7.1. The Party Programs

In this sub-section, I describe the main themes and policy suggestions of the US and the German transhumanist party. While I cannot go into all of the parties’ propositions and their respective intricacies in detail, because this could fill another Master’s thesis, I am outlining the overarching subjects presented in the documents. Science and technology thereby play a crucial role in almost all of the points made by both parties, much along the lines of an “obligation/commitment to progress” (TPD 2017, p. 14).

Whereas the US Transhumanist Party begins their constitution with a section about core ideals and a review of the party's history, the German party starts with their preamble, which serves as a passionate introduction to and explanation of what transhumanism is. Thereby, the TPD already states in the first sentence that their party is "oriented towards many modern humanistic ideals (such as rational reason or a comprehensive education)" (TPD 2017, p. 2), and goes on to note that science and technology are essential for progress and a "happy, self-determined and fulfilled life" (TPD 2017, p. 2). Transhumanism is described by the German party as a means to "strive for higher things" and "stands for not being satisfied with what has been achieved" so far in human development (TPD 2017, p. 2). Through science, progress and technology, human societies can develop 'positively' (TPD, 2017) and humans are enabled to emerge towards becoming better beings.

As a specific aim, the TPD mentions the wish to promote transhumanist values in Germany and oppose "current political developments" through the design of a "future-optimistic […] political vision" (TPD 2017, p. 4). Whereas, the party also talks about policy changes that are specific to Germany, as for instance the "gradual abolition of Hartz IV"[23] (TPD 2017, p. 9), and is generally more concrete in its suggestions than the American party, most of the proposed changes are thought of in a universalized way, as we shall see in a bit. In terms of political demands and positions, the TPD – like the USTP (2017, p. 8) – supports the idea of a universal basic income (TPD 2017, p. 9), aims to "democratize, digitalize and idealize" (TPD 2017, p. 7), and expresses a close identification with the European Union. Fascinatingly, the party states that EU member states should be fused into one "European federal state" (TPD 2017, p. 13) with the goal of someday approaching a "political union of all states" (TPD 2017, p. 13), which stands in opposition to the more nationalistic stances and rhetoric of the USTP.

A subject that is particularly present in the TPD's program is the theme of education. Repeatedly, the party talks about education as a means to enlighten the public and produce reasonable citizens, thereby imagining that this will achieve a reduction of "widespread scepticism about technology" (TPD 2017, p. 6). While education should still be "casual" (German: *zwanglos*) and not enforced; knowledge, education and digital goods should be openly available and costless for everybody, and science should be "[…] as free as the people themselves" (TPD 2017, p. 5). For the German transhumanist party, education and development are "[…] the most important trademarks of a mature society" (TPD 2017, p. 10), whereby education is personality-forming in that it should stress specific values such as "self-responsibility" (TPD 2017, p. 10). While education should be standardized and is strongly interlinked with the labor market and the establishment of "future-compatible training" (TPD 2017, p. 11), it should also be individualized. Social changes in regard to education are

[23] Hartz IV is the German unemployment benefit.

furthermore an issue, for instance when the party states that high levels of education should be socially 'accredited and esteemed' (cf. TPD 2017, p. 10).

Unsurprisingly, both transhumanist parties further have a strong focus on, what the TPD calls, "real health" (TPD 2017, p. 7) and on expanding the medical sciences and health care systems in their respective countries. The TPD for instance demands:

> "[…] a consistent reorientation of the health care system towards the development of ideal health and optimal well-being. Instead of simply treating diseases, as soon as they become noticeable, we focus on preventive and regenerative medicine as well as on the respective maximum extension of the healthy life span of humans. (TPD 2017, p. 5)

Both parties demand acceleration and extensive funding of life-prolonging medical measures as well as faster approval procedures for and marketing of drugs and, among others biotechnological, therapies and treatments. In this regard, the USTP addresses the American *Food and Drug Administration* (FDA), whose conduct the party refers to as a "moral travesty" (USTP 2017, p. 24). More so, both transhumanist parties demand a legalization of cryonics (TPD 2017, p. 17; USTP 2017, p. 5).

Science is an omnipresent theme in both documents. Demands of the TPD are for instance that research institutes should conform to an "obligatory reason-based ethics of science" as well as "clear and strict guidelines for a more independent science" (TPD 2017, p. 25). While the parties talk about the importance of inter- and transdisciplinary research and advocate for a closer relation of scientific and public institutions, the issue of science funding and patents are particularly often mentioned. Funding should be drastically increased for specific disciplines and fields, such as "goal- and solution-oriented research programs" (TPD 2017, p. 25), basic research within the natural sciences or Artificial Intelligence (AI) research. The American transhumanist party speaks hereby interestingly not only of an increase in funding, but of a "redirection of research funds" (USTP 2017, p. 5), and demands more resources for the *National Institutes of Health* (NIH), an institution that the party refers to as a "public charity that brings us into the future" (USTP 2017, p. 23). Moreover, the USTP postulates the legalization of experimental research for curing disease, testing augmentations and increasing the youthfulness of the human body, whereas the German party proposes that research *per se* should focus on the use of AI (TPD 2017, p.27).

Artificial Intelligence (AI) is also an important subject in both programs. Among others, the parties remark that artificial intellects might soon represent beings that need to be included in ethical and legal reflections as well as in social life. The USTP further states that "intelligent extraterrestrial life forms" are eligible to join their party as "Allied Members" (USTP 2017, p. 3) and held an online vote in 2016 whether "archangels" and "gods" should be included as beings

into the *Transhumanist Bill of Rights* (USTP, 2016). Interestingly, both transhumanist documents make a distinction between AI that should be utilized and AI that has to be treated as a 'living' entity. While the TPD refers to the latter type of AI as "strong artificial intelligences" (TPD 2017, p. 26), a transhumanist, if not Singularitarian notion; the USTP grants this position to sentient and what they call "Level 5 or higher-level artificial intelligences" (USTP 2017, p. 11). Intelligences that can be used are accordingly of lower intelligence – in whatever way 'lower' may be defined – which is why the TPD recommends deploying them for administrative purposes and the USTP states that such AIs "[…] may be utilized as part of the production systems of the future, in a similar manner to machines, algorithms, computer programs, and non-human animals today and based on similar ethical considerations" (USTP 2017, p. 11).

Apart from these main themes, the parties also talk about the legalization of drugs and psychotropic substances, about the right of committing suicide, which the USTP discourages "from a moral standpoint" (USTP 2017, p. 15); about artificial meat products and synthetic milk (indeed, the TPD plans to ban factory farming in the long run), about "asteroid mining" (TPD 2017, p. 24), abolishing civil marriage, and changing the German military to an "efficient, small troop of highly specialized and optimally equipped personnel" (TPD 2017, p. 19); as well as about a new gun tracking system in the U.S. for the "peace of mind of firearm owners" (USTP 2017, p. 22), and many other issues that would be worthy of being discussed in full length. With these plans and claims of the parties in mind and thus in a continuous interim state between *form* and *content* of narratives as explained in *Section 4.2;* I was able to unearth two common sociotechnical visions within the transhumanist party programs that I will delineate in the following sections. First up, the vision of *Paradise (Lost)*.

## 7.2. The Vision of Paradise (Lost)

The first sociotechnical vision I want to describe is the vision of a paradise that was lost but could now be fulfilled and realized through the transhumanist revolution. I use the title *Paradise Lost* in reference to John Milton's identically named epic poem from 1667, a text which among others inspired Mary Shelley's *Frankenstein or The Modern Prometheus* (Ramm, 2017). Therein, Milton retells the story of the war for heaven and the expulsion of humans from the Garden of Eden. His poem is a story about salvation and about a fallen world, sunken and forgotten like Atlantis. I chose this reference because there are promises of technoscientific salvation and biblical connotations at work in the party programs, particularly in the constitution of the U.S. Transhumanist Party. While the parties do not talk about a biblical or Christian paradise *per se*, they establish the sociotechnical vision of a paradise that was lost over time – the age of Enlightenment.

### 7.2.1. Romanticizing the Enlightenment

The period of Enlightenment or "Age of Reason" (1740s to the late 18th century[24]) was a time shaped by deep-reaching sociopolitical and religious changes that gave European cultures, and in further consequence also the New World (Berman, 1992), "a new face" (Barzun 2000, p. 4) and epistemological-mental makeup. The preceding English revolutions, the French revolution and the subsequent processes of secularization, industrialization, bureaucratization, and nationalization radically changed societal orders, morals, and ideas about the human. The Enlightenment was further a time of valuing the individual differently because "the rights of man" (Berman 1992, p. 320) became the focus of politics and law, thereby slowly diminishing the idea of humans as objects of feudal rulership. Thinkers such as Robert Boyle and Isaac Newton pathed the way for the idea that nature could be understood through universal laws, and rationalism, skepticism, and empiricism arose as paradigms within the advancing Scientific Revolution (Walsh & Lentin, 2019). The Enlightenment, in the words of Immanuel Kant, was nothing less than "mankind's final coming of age […] from an immature state of ignorance and error" (cited after Porter 1990, p. 1).

However, the Enlightenment was no clear-cut, immediate decline of religiosity, ritual practice, or 'irrationality'. Much rather it had a "dark side" that is frequently neglected in its depiction, and it was a time enrichened with Renaissance magic, hermetic and occult practices, as well as the ideas and experiments of natural philosophers and alchemists alike (Eyer, 2013).[25] Newton, who is by some seen as the "father of modern science", can in this sense also be referred to as "the last magician" in Western history (Kean 2011, p. 40). Most significantly though, "a pan-European consciousness of tremendous force" (Walsh & Lentin 2019, p. 14) with a strong idea of progress and rationality was created that provided the basis for the 'Age of Progress' and modernization in the 19th century (Yazdani, 2011), and set in motion what Max Weber has called "the disenchantment of the world" (1919/1958, p. 133).

The Enlightenment itself, besides being a historical unit, can be characterized as a cultural and intellectual movement (Walsh & Lentin, 2019). It consisted of artists, politicians, writers, and thinkers who embraced the belief in knowledge, reason, and the scientific method, which they envisioned to cause progress and happiness of humankind. Similar to the

[24] The epochal characterization is differently appointed in the literature (in contrast to Barzun, Walsh and Lentin define the period as set from 1785 to 1824).

[25] Alchemy is often seen as the precursor of chemistry, metallurgy, and medicine (Hauskeller, 2012), and its proponents attempted to understand the behaviour of metals and other substances, among others, to learn how to turn them into gold and with the specific goal of finding ways towards immortality. It was an intellectual practice in between partisanship, magic, and science, and thinkers like Boyle and Newton also engaged in this practice (Nummedal, 2011).

transhumanist movement with its principle of “practical optimism” (More 2013, p. 5); the faith in intellect and reason made the Enlightenment culture optimistic and hopeful (Walsh & Lentin, 2019). The dominant premise was that knowledge, “rational scrutiny and reform” would transform all humans into virtuous beings (Walsh & Lentin 2019, p. 119), and “the very object of government, indeed, was held to be the maximization of pleasure, the greatest happiness of the greatest number […]” (Walsh & Lentin 2019, p. 25) – a utilitarian idea that both transhumanist parties under consideration here share.

### 7.2.2. A Second Age of Reason?

In the documents of the TPD and USTP, the Enlightenment is a tacit point of reference. It is envisioned as an era that could have brought forth a utopia of reason, and it was the missing link for me in the analysis that explains the tension between past and future in the documents, between the parties’ radical progressivism and their simultaneous retrogressivity and conservativeness. The vision of *Paradise (Lost)* is thus not completely forward-looking but reverberates an admiration and nostalgia for a specific past. It relies on a narrative of restoration of human culture to a time of technoscientific hopefulness and “buoyant” light-heartedness (Walsh & Lentin, 2019), namely the period of early modernity and Enlightenment. How the USTP fashions its identity further matches with an archetype of Enlightenment thinkers as outlined by Linda Walsh and Tony Lentin (2019), while the TPD embraces a pedagogic, humanist self-image. More so, comparable to Kant’s view that humanity was ‘coming of age’ in the Enlightenment, a narrative of maturing through knowledge and reason is omnipresent in the transhumanist programs.

Substantially, the sociotechnical vision of *Paradise (Lost)* paints a sociocultural setting in which suffering, pain, and discrimination are replaced by peace, prosperity, and happiness. In the “*new* Age of Reason” (USTP 2017, p. 7; emphasis added); hence the second Age of Reason, humans would be free, pure, and intellectually matured through science and technology thus achieving the “naturalisation of heaven” (David Pearce cited after Hauskeller 2012, p. 40-41) that we can find culturally manifested in myths of the Isles of the Blessed, the Land of Cockaigne or myths about the Golden Age in which humans lived like gods. Because humans would be more than human, they would become reasonable at last, thus able to verify and assess the right morale, ‘the best’ way of conduct – the truth – in every situation. Science and technology are the enablers and foundational stones of this ideal future and arise as admired characters in the two programs. They *can* (they have the ability to)*, should* (they are morally right) and *would* (they are promised to) create paradisal circumstances for human life. Automatization would free humans from undesirable labor, “regenerative technologies” (TPD 2017, p. 20) would repair the damaged planet and reset nature to a habitable state; knowledge

ingested through enhancement drugs and life-long education would make humans reasonable and rational agents, and self-expression and happiness would reach their peak through the ability to technologically modify the body to one's preferred appearance and shape.

Society would be orderly, fairly and efficiently organized – through and through "civilized" (USTP 2017, p. 10); and "subjectively perceived offense" (USTP 2017, p. 13) would not get in the way of peace and prosperity. A scientifically proven, technologically supported government would be installed, that respects and involves its population in the democratic process. Justice and virtuousness would be trained into all people through a somewhat bourgeois culture, and science and technology would reveal the "true beauty" (Stolyarov II. 2004, p. 129) of the universe as well as the possibility of human transcendence. Greed, aggression, and corruption would seize to exist, and all individuals would be equal, autonomous, and personally fulfilled. In this vision, the role of transhumanists, specifically of transhumanist political parties, is one of guardianship to and within this land of milk and honey. See, for example, this quote from the TPD:

> "[…] We cannot take over the wheel, nor can we build a new ship. But we can already talk about the sea and show what and which course is possible. In this way, we can politically pave the way for advanced modernity, rationality, technology and research – the only factors that will give us a future that will allow all people to obtain freedom, personal development and a healthy, long life." (TPD 2017, p. 7)

Rather than rulers of the future, the transhumanist party arises here as prophet and visionary that speaks with certainty about the future, which is, as metaphorically expressed in this quote, vast and limitless like "the sea". The modesty of envisioning themselves as guardians instead of leaders is however not innocent. Firstly, it reveals the humanist commitments of transhumanism, and secondly, it is a political rhetoric for gaining the trust of a respective audience. The role of transhumanist parties is to guide the human species towards "the sea", a future setting that transhumanists can see, predict, and envision in contrast to other political actors and movements. Due to their superior vanguard knowledge, the parties are enabled to lead the way; they can outline the course for humanity to reach a paradise that they envision as a paradise for all. Progress will be perpetual and indefinite, life will be eternal, and we will reach "the *highest* reaches of intellectual activity" (USTP 2017, p. 7; emphasis added) by restoring and extending the vanished culture of the Enlightenment in a transhumanist sense. Just like the term *Enlightenment* refers to "[…] the emergence of light and the dispersion of the clouds" (Walsh & Lentin, 2019), the clouds of insecurity and ambiguity that characterize our contemporary era will be dissolved in the light of science and technology, and the sky will be clear again.

## 7.3. Construction of the Vision

The sociotechnical vision of *Paradise (Lost)* that I have described in the last pages is rooted in several features of the transhumanist party programs: (1) a tension between past and future (2) narratives of restoration and purification (3) an understanding of culture as "high culture" (Cohen, 2012) (4) a rhetoric of superlatives and narratives of salvation (5) and an understanding of science and technology as problem-solving devices. While the first three elements are important for my argument that the parties envision an Enlightenment paradise because they establish nostalgic links to a bygone time by mirroring the cultural taste and self-imaginations of the parties, the last two elements are responsible for creating the idealism and utopianism that are necessary for establishing a paradisal vision in the first place. In the following, I outline the effects of these features and how they come to be.

### 7.3.1. Nostalgic Linkages to the Past

The tension between past and future, retrogressivity and progressivity, within the documents emerges from the break and a going back and forth between, what I call, 'technoscientific language' and 'anachronistic language'. For most of their programs, both parties use a rationalized, formal language; a language that mobilizes the "superior rationality" (Sheppard & Johnston, 1982) of scientific knowledge and language that is efficient, non-human, and unemotional like technology is sometimes framed. One might read this in line with Jacques Ellul, who proposed a shift from a technologically shaped society to a technology society in which, what he calls, *technique* – "the totality of methods, rationally arrived at and having absolute efficiency" – dominates every realm of human activity (cited after Shoffstall 2010, p. 294). Technoscientific language, *technique* dominating *language*, is in this sense a technicalized and sanitized language that enacts the officiality and objectivity of the parties and is established through the following practices: the referencing of science; calculation- and formula-like arguments; universal, absolute, and certain wordings; and passive, bureaucratic-legalistic writing techniques. Before diving into the effects of anachronistic language, the next sub-section serves the discussion of these features of technoscientific language.

#### 7.3.1.1. Technoscientific Language

In the programs of the US and German transhumanist party, science is not only discussed thematically, but it is summoned as a tool of legitimization and for the enactment and

performance of knowledgeability and sobriety. Not unlike the social, and scientific, practice of 'name-dropping', scientific references are made to impress and to objectify the parties. Borrowing from science becomes a rhetorical technique, a way of persuading the reader of the legitimacy of the parties and their visions. The document of the German transhumanist party, for instance, features notions of fields such as informatics, ecology, cybernetics, biotechnology, astronomy, biology, electronics, law, economics, agriculture, neural engineering, as well as open and citizen science. While the usage of respective terminologies is sometimes simply owed to the discussion of transhumanist goals, some fulfil performative and legitimizing functions. When the TPD demands flexible teaching periods in schools for instance, they legitimize this plan by stating it was correspondent with "recent medical-psychological insights" (2017, p. 20). Whereas this is further an example of the scientific determinism/ scientism of the party (everything can and should be shaped according to or verified by science), the authority of science, in this case of medical and psychological research, lends support to the planning of the education system of the future.

The USTP similarly draws on scientific disciplines. Notions from physics, biology, philosophy, agriculture, informatics, medicine, law, mathematics, psychology, and economics appear in their constitution. In discussing nuclear energy, for example, the party recites a concept from physics, the so-called "thorium fuel cycle", to claim that nuclear energy could be "a safe and nearly limitless energy source" (USTP 2017, p. 9). The underlying narrative in regard to technology here is that it has to be used and produced in the right way and that the party knows – in contrast to others – how to do so because of their scientific literacy. Whether or not such ideas would make education or nuclear energy better or not, my point is that the recitation of scientific concepts is a way of profiting from the objectivity-label that is sociohistorically associated with science, particularly the natural sciences, and that this has effects for the reader of the programs. Arguments are black-boxed so that they are not comprehensible for a broad readership, and an imagery of knowledgeability in relation to the parties is provoked. In contrast to laypersons and other political rulers who yet need to be enlightened by science and reason, the parties arise as informed, almost omniscient entities that can be trusted with national affairs and ultimately with the future.

The utilization of calculation-like arguments is another part of technoscientific language. It is a feature that might reflect an affinity or familiarity of the parties with natural science thinking since the USTP specifically states that more politicians "should possess training in mathematics, engineering, and the physical and biological sciences" (2017, p. 13) and the TPD (2017, p. 12) recommends to extend MINT (mathematics, informatics, natural sciences and

technology) classes in school.[26] The following quotes of the German document are illustrative of such calculation-like reasoning:

> "Because innovation and progress in **ever** shorter periods of time entail **ever** more far-reaching changes, we determine the focus and necessity of political decisions in part through a backward-looking analysis of the actual and the intended: what must we do today in order to be prepared for tomorrow? And what do we, as society, have to do today so that the future will become as we all wish it to be? " (TPD 2017, p. 3; emphasis added)

> "Personal and social security is **always** jeopardized when the lack of transparency and hidden action by organizations – or by individuals – create spaces for abuse, violence and fear." (TPD 2017, p. 32; emphasis added)

Through using the words *ever* and *always* (German: immer), the party establishes principles; formulas of how progress and innovation or security work. When C happens, D is inevitable. Their assumptions and observations of reality become natural laws, unspecified in terms of time and space, and implicitly promise that the party will solve these problems. Statements of opinion become statements of fact, and the premise is that the future can be prepared and assessed, and that if humanity follows the plan outlined by the party "the future will become as we **all** wish it to be" (emphasis added). This plan, as Michael Hauskeller (2012, p. 44) but also Eduard Kaeser (2013) have shown, is a "conditional promise", a passive-aggressive threat within transhumanist rhetoric that utopia will come only if the rest of humanity cooperates. There is one 'good' future, and all of humanity is generalized as having the same wishes for it in the two transhumanist documents. Mind also the following statement:

> "Without science, research and development, there would be no modern technology and innovation." (TPD 2017, p. 44)

The logic here is that without A (science), B (modern technology) would not be possible. This gives us a glimpse into the TPD's understanding of science and technology. Technology and innovation are not only seen as something self-evidently good, but science, research, and development are painted as the origins of modern technology. Through such as universal fashioned statements science and technology are normalized and embedded in a specific reading of human history, and the position of the party is normalized in making natural laws about them. There is no sense of doubt, ambiguity, or uncertainty here, time and space are absent, and facts are retold in a hybrid mode of delivering a lecture and a political speech. Whereas the

[26] The party also recommends strengthening ethics and philosophy classes in school (TPD 2017, p. 12).

mode of lecturing entails a didactic tone, that of the political speech adds the pathos of an announcement to the statement and fashions the party in a position of authority.

The USTP likewise deploys calculations as ways of reasoning and argumentation, as can be observed in the following quotes.

> "To ensure a reasonable timeframe is proportional to the number of pages of a proposed bill, a time period per each specified amount of pages could be adopted. For example, and without committing to specific numerical magnitudes, a 24-hour period within a working week per every 20 pages could be adopted to ensure all members of Congress involved have sufficient time to read through and study a proposed bill's implications." (USTP 2017, p. 34)

> "Reducing military spending would free up money for more important goals, such as curing disease, which collectively kills many more people than military conflict or war by an exponential degree." (USTP 2017, p. 40)

> "The United States Transhumanist Party supports the rights of children to exercise liberty in proportion to their rational faculties and capacity for autonomous judgement." (USTP 2017, p. 15)

> "The United States has upheld basic education since the American Revolution. The United States Transhumanist Party believes, in keeping with what basic education was in the 1700s, relative to the state of technology given the advancement in society at the time, that 'basic' education should be defined as college, and that a key part of our agenda is to help encourage a more successful generation by paying for a 'basic' education up to and including college degrees." (USTP 2017, p. 12)

The USTP applies a mathematical logic here, mirrored in expressions such as "proportional" or "by an exponential degree". In the first quote, only a specific timeframe for a certain number of pages is termed "reasonable". In the second quote, the statement is made that disease is deadlier than war "by an exponential degree". Whereas firstly a prediction is made that this proposed statistic will steadily increase in the future, the perspective from which the party is speaking is crucial. In the U.S. and the Western world, such a statement might be accurate, other regions of the world might think differently about this. The third quote states that children are considered as free individuals "in proportion to their rational faculties and capacity for autonomous judgement". The party attempts here to set something in relation to mathematical measurement and description that is resistant to the very same due to its sociocultural interpretive flexibility.

The third characteristic of technoscientific language are universality, absoluteness, and certainty. They are also part of the "epistemic values" that Monika Walczak (1998) attributed to an understanding of "classical rationality" in science. While generalizations and the absence of context create universality within the party programs; words such as *is*, *was* and *will* are indicators of absolute and certain language. They convey facticity and are normative. Whereas *is* and *was* make order of the manifold stories of present and past to create the as factual-believed version of reality of the parties, *will* indicates predictions that are absolutely certain, as for instance the prediction that technology will dispense the need for human labor (USTP 2017, p. 8; TPD 2017, p. 9). In the following quote of the TPD, I have marked such absolute and certain wordings:

> "We stand for a liberal policy in which the state does not expect itself to make far-reaching decisions for its citizens and governs into their private lives. **Clearly**, implementing this **requires rational** and **fact-based** politics. Decision-making processes **must be** transparent and comprehensible. Science and technological progress **must be** promoted, and new findings freely communicated. **Only in this way** can we minimize rumors and postfactual influences and conduct an **unbiased** and **truth-based** discussion." (TPD 2017, p. 12/13)

Through the assertive language of this quote determination and confidence of the party are transmitted, and an imperative is created. Words such as "clearly" convey logicality and contend the evidentness of the argument. As is nicely observable in this quote absoluteness comes with one-sidedness and a sense of intransigency ("only in this way"). Employing the words "rational and fact-based" or "unbiased and truth-based" further demonstrates that the party assumes that respective concepts exist and that the settings for sociopolitical discussion and circulating knowledges can be rectified – purified from "rumors and postfactual influences". Characteristic for the TPD is further that they contemplate and talk about "the society" (singular, e.g. TPD 2017, p. 12) and universalize their goals for all of humanity (e.g. "self-realization of all humans"; TPD 2017, p. 11). The USTP also embraces absolute wordings that indicate totality such as *never, all, any, regardless of, impossible, elimination, complete, abolishment, inherently,* and *exclusively*. See for example Section XVII of the constitution:

> "The United States Transhumanist Party supports work to use science and technology to be able to **eliminate all** disabilities in humans who have them." (USTP 2017, p. 13)

The absolute wording is again accompanied by a lack of setting, an assumed universality and timelessness of the argument. All disabilities (no matter how or by whom they are categorized as such) must be 'eliminated'. Disabilities are a villain in this quote; they are an enemy that

can and should be destroyed. The wording is of significance here. The party speaks of "disabilities *in* humans who have them" (emphasis added), which frames disabilities as something that intrudes the otherwise pure human, something that exists independently from the "humans who *have* them" (emphasis added). Disabilities are thus envisioned as something that can be found and eliminated without affecting the person in question, which reproduces the over-evaluation of the mind over the body in humanism and transhumanism, and what David-Jack Fletcher (2014) has called ideas of "genetic hygiene".

The word *eliminated* was additionally coded by me as an expression that is *somatic*, so a form of wording that is linked to the body, physicality, and embodied experiences. To eliminate something is a quite physical concept usually linked to aggression and conflict, in the definition of the word even implying extinction. The term resembles the metaphors of warfare and the militarization of language that Emily Martin (1990) found in her analysis of how immunology talks about the body as a nation-state that is at war against 'invading' pathogens. When the USTP (2017) talks about "stand[ing] up to rational scrutiny", "eliminating", "combating" or "shielding" citizens from harm, or when they "embrace" values, "uphold" traditions, "stand" for something, or "forge" new ideas, they avail phrasings that resonate with our embodied conceptions of language. The TPD uses somatic vocabulary for instance when they talk about "the largely ideology-free humanistic *embracing* of human beings" (TPD 2017, p. 2; emphasis added) or their ideal of a societal "discussion *freed* of ideological influences" (TPD 2017, p. 10; emphasis added). Already here, we can see national differences in the parties' self-imaginations: while the USTP emanates strength and determination, the German somatic phrasings are softer, more relative, and pedagogic.

In both party programs, somatic language is employed, and my hunch is that this is owed to an imaginary of physical strength and power, but also to the concept of enmity and competition in politics and society. Even though I do not conceptualize somatic language as a characteristic of technoscientific language, it is an interesting side-finding, because it seems to me that it is a crucial part of contemporary political speech practices and might be linked to the boom of populist ideologies around the globe. The latter might be owed to the fact that somatic language is ideal for creating accentuations in an utterance and for "securitizing", so to make something a threat (Williams, 2003). The notions I marked in the following quote are negative somatic expressions, all of which describe physical distress and oppression, which significantly influences the reader's emotional state while reading and, in my theoretical understanding, is embedded in and partially created by a sociohistorical web of collective emotions.

> "The ideal of a democratic, liberal, emancipated, tolerant and open society in Europe is more **at risk** than **ever**. This is expressed in a general feeling of **faint [helplessness]** towards political

> developments. For many citizens it seems that the social market economy is **sacrificed** to the interests of a few corporations. At the same time, both individuals and entire states come **under pressure** from technological progress, while their freedom of action is **restricted** by unbridled concentration of power in a few organizations. The **strong** influence of companies on political decisions, the increasing tendency to **sacrifice** civil liberties to a **strong** and inflated security-political **control** state, **the turning away** from the European idea in favor of nation-states, the political extremism of left and right and religious fundamentalism **threaten** the open society and its further development. At the same time, many politicians show a lack of understanding of social and economic disruptions, for example through developments in the fields of medicine, automation, artificial intelligence, bioengineering or genetic research, and risk further social distortions and the exclusion of large sections of the population through their ignorance. All this **blocks** the view of the enormous opportunities that digital transformation, automation, technologization, individualization and globalization can bring for the freedom and self-realization of all human beings. For this reason, it is important for us to reduce widespread skepticism about technology, to point out perspectives and make them possible, and to actively help shape the accelerated change in all areas of life." (TPD 2017, p. 6)

Finally, the last feature of technoscientific language that I want to explicate is concerning the formal, bureaucratic-legalistic writing techniques and expressions of the US and German transhumanist party. Respective expressions and techniques are largely responsible for masking the parties' humanness, for creating officiality and selling the parties' subjectivity as their objectivity (Haraway, 1996). A linguistic technique of the USTP to do so is its use of the third-person narrator. This means that the story of the constitution is told from the perspective of *He/She/It*. The party refers to itself with its title throughout the whole program. Even though it is apparent that the party is author, narrator, and main character of the constitution (since it is their program), they objectify themselves to an *it*. I coded this as the 'hidden first person'. See the following examples:

> "**The United States Transhumanist Party** supports the involvement of intelligent laypersons in the political process to counteract and neutralize the influence of politically connected special interests and their paid representatives. **The United States Transhumanist Party** supports all electronic and other technologies that can inform and empower intelligent laypersons to monitor and contribute to political discussions and decisions." (USTP 2017, p. 12)

> "**The United States Transhumanist Party** supports an end to the costly drug war, which is often an infringement upon the lives and liberties of innocent citizens who do not use drugs but fall victim to militant enforcement of drug prohibitions. **The United States Transhumanist Party** supports legalization of mild recreational drugs such as marijuana." (USTP 2017, p. 12)

By using its title instead of the first-person perspective (e.g. *We* support the legalization of marijuana), the USTP is creating an impersonal, disembodied voice – what Roland Barthes has called a "paper being" (cited after Morreall, 1994) – for their constitution and emphasizes its authority as an institution. A unified voice is created that disguises the fact that the party consists of single human individuals. Indeed, third-person narration is commonly referred to as a passive, indirect writing technique precisely because it creates a seemingly neutral, sometimes omniscient narrator (Margolin, 2012). For this reason, it is often utilized in official, legal, and bureaucratic contexts as well as in academic writing (Morreall, 1994).

Through this repetition of the title in almost every sentence and paragraph, rhythmicity is created within the USTPs document. This repetitiveness induced me to additionally note in the association diary, that an imagery of the party as royalty arose in my mind's eye: an invisible herald was announcing the party's visions for the world, not 'your majesty' (the party) themselves. Whereas the party does not make use of the royal 'We' (*pluralis majestatis)*, a rhetoric used by kings and other dignitaries to elucidate power in speaking for their subjects (Stepanek, 2005), the USTP enacts the *text* of the constitution as an announcer through speaking about itself in the third person.[27] The rhythmicity created through this constant self-invocation combined with the use of bureaucratic-legalistic expressions (e.g. in the second quote "infringement") gives the constitution the character of a mechanical sermon. Other legalistic expressions in the document are concepts such as "the offender", to "ratify" or "mandate" (USTP 2017, p. 38); talk about an "affidavit" (USTP 2017, p. 29), "credentialing" (USTP 2017, p. 11), "negligence" and "misdemeanors" (USTP 2017, p. 32), or that the party states that positions within their constitution "should not be construed […]" (USTP 2017, p. 28) instead of the more usual expression that they 'should not be constructed' towards a specific end.

In contrast to the US party, the German party embraces the point of view of a first-person (We-narration), which fulfils its own purpose: to come across as congenial, active, and motivational. Nevertheless, the TPD also employs passive writing techniques such as the utilization of lists, that function as means of abstraction to create an ostensible "anti-narrative" (Ayelet, 2005), instead of writing in full sentences. In the German document, lists were comprised of policy suggestions in the form of bullet points – a simple choice of layout and disconnected writing which produced the impression of a prosaic professionality of the party, which made it seem as if there were a logical checklist for political action to achieve a better world and future.

[27] Interestingly, a study of populist discourse of the 2016 US elections by Joel Pearce (2018) showed that Donald Trump's rhetoric is also marked by an extensive use of the third person.

#### 7.3.1.2. Anachronistic Language and High Culture

The second type of language important for creating the vision of *Paradise (Lost)* is anachronistic language. By that I mean language that is utilized outside of its original timely context or that seemed somehow old and displaced in contrast to the otherwise sober, technoscientific language within the documents. In the majority of cases, anachronistic language is characterized through archaic, untimely, pictorial or literary expressions, what Jerome J. McGann (1993) called "thickly materialized" language, that reverberates with some sense of historical prestige and venerability, which enacts the parties as dignified, sophisticated beings next to their knowledgeability produced through technoscientific language. Ben Jonson, in his own archaic words, defines archaisms as the following:

> "Words borrow'd of Antiquity, doe lend a kind of Majesty to style, and are not without their delight sometimes. For they have the Authority of yeares, and out of their intermission doe win to themselves a kind of grace-like newnesse." (cited after Traxel 2012, p. 43)

Archaisms have been studied by linguistic scholars from the Renaissance onwards, and Oliver M. Traxel (2012) argues that they play an important part in how societal ideas about the past are formed. In his study about pseudo-archaic English, he examines how different groups, from scholars to bloggers, construct texts that look and feel archaic through mimicking (primarily medieval) past discourse as disseminated in the popular media where archaisms and pseudo-archaisms are used to create a "past atmosphere" (Traxel 2012, p. 44). In particular, Traxel (2012) stresses the influence of the King James Bible, film depictions of Shakespeare, and Arthurian novels that have gotten caught in the dominant cultural memory.

While the parties do not re-construct or invent medieval and pseudo-archaic expressions as conceptualized by Traxel, they use unusually dramatic and outdated vocabularies over more popular, contemporary ones. Following Pierre Bourdieu (1984) who emphasized the relation of cultural consumption and identity, I interpret this as a performance of cultural taste and class. This has two consequences, firstly the parties' understanding of culture becomes visible and secondly, discourses from different times are stirred up that create a sense of nostalgia and retrogressivity within the documents as well as a sense of prestige and meaningfulness. By choosing, accidentally or consciously, the rather pompous, artful, and unusual term or phrasing over simpler, more contemporary expressions, the parties enact their social status through presenting their cultural capital (Bourdieu, 1984), an enactment and

performance that is crucial for constructing the self-imaginations of the parties, as I will illustrate in *Section 7.5.*[28]

One example of anachronistic language is the usage of the modal auxiliary *shall* in the document of the US party, whose employment is quite fascinating due to its predestined resonance and the fact that it is not part of common English parlance anymore (Beach Bradley, 1911). While *shall* was formerly used to designate moral obligations for which nowadays the softer *should* is employed, it is also a "prophetic utterance" (Beach Bradley 1911, p. 16) which can be found in the English Bible (e.g. Thou shall not kill), but also in the writings of William Shakespeare, John Milton, and Geoffrey Chaucer (Beach Bradley, 1911). When I gave the document to one of the native speakers, it is thus not surprising that he handed it back to me with the here paraphrased words 'it feels as if they took a Shakespeare class in High School'. Today, *shall* is used in bureaucratic texts, "contract prose" and legal statutes because of its capability of expressing an obligation or imperative in the future (Adams, 2007), but, personally, it reminded me of the US constitution from 1787, a document which John G. Gunnell (1982, p. 410) has shown to be influenced by technocratic thought such as the idea that "[…] an applied science of politics could devise and implement a rational political society". See the following examples regarding the use of shall by the American transhumanist party:

> "The Transhumanist Party **shall** not condone and **shall** necessarily and automatically disavow all violent criminal acts." (USTP 2017, p. 2; emphasis added)

> "United States Members **shall** be those individuals who lawfully reside within the United States and are eligible to vote in United States elections." (USTP 2017, p. 3; emphasis added)

> "Any such sentient entities, including new kinds of sentient entities that may be discovered or developed in the future, **shall** be considered to be autonomous beings with full rights, and **shall** not be made subservient to humans, unless they as individuals pose direct, empirically evident threats to the lives of others. The protections of full individual rights **shall** extend to Level 5 or higher-level artificial intelligences." (USTP 2017, p. 11; emphasis added)

The first quote resembles an oath given by the party. The USTP speaks as a sovereign here, that swears itself into office from a third person perspective. The phrase that they "shall not *condone"* (forgive, excuse), as well as the usage of *may*, implies the USTP's imagined position

[28] As already mentioned, I consulted with two native speakers to countercheck whether my classifications, particularly of anachronistic language in the case of the US document, were justifiable. While some of my hunches got ruled out this way, other phrasings and word combinations caused reactions such as 'no one would say this', which supported my intuition that this language, especially in a political program, was peculiar.

as a governing entity, an entity that has the power to punish and discipline, to speak judgement or grant allowance for certain behaviors. The quote is also a flashforward into the future of transhumanist government in which the imagery is made that the party would rule with peaceful means and be "automatically", a mechanical concept, disassociated from violence. The second quote makes the membership in the USTP sound like an act of honor, whereas the third one prewrites the righteous treatment of future entities, yet only those having a specific level of intelligence, through an instruction over who or what is to be considered worthy of having or not having rights. *Shall* is thus an expression heavy with meaning and adds a divine note to these examples.

Other anachronistic expressions in the American document include "conscience" (USTP 2017, p. 16 and 33) over consciousness, "disavow" (USTP 2017, p. 2) over excuse, reject, or refuse; "defrauded" (USTP 2017, p. 10) instead of deceived, "incarcerated" (USTP 2017, p. 13) over jailed, "morally unconscionable" (German: sittenwidrig) over unjustified (USTP 2017, p. 41) or "*esthetic* enlightenment" (USTP 2017, p. 11/12) over the more common notation *aesthetic*. Phrases such as "redress[ing] a moral travesty" (USTP 2017, p. 42), or people "hastening their end" (USTP 2017, p. 27) when the party talks about their rejection of suicide, are lyrical and poetic, indeed Shakespearean. Dramatic is further the expression that "a person's rights cannot be *assailed* without consequences" (USTP 2017, p. 40), while talk of the "real-world advent of indefinite life extension" (USTP 2017, p. 42) is Biblical sounding. Quite unusual, according to my native speakers, are the expressions "anti-religious philosophical *espousal*" (USTP 2017, p. 14; emphasis added) [espousal: betrothal/wedding, or act of supporting a cause, a belief or an idea (Online Etymology Dictionary, n.d.)] and the expression "petty improprieties" (USTP 2017, p. 24).

These linguistic particularities enact the constitution of the USTP as an epic speech, whereby anachronistic language mobilizes the emotions and imaginative capacities of the audience through invoking the past and the therewith associated meaning and order. The parties go back and forth between the desire to create "advanced modernity" (TPD 2017, p. 7) and their legacy to continue "secularization processes in the sense of humanistic enlightenment" (TPD 2017, p. 13), and link their programs to a different time of Western culture and intellectualism that is underpinned by, what cultural studies call, an understanding of culture as "high culture" (Cohen, 2012).

#### 7.1.1.3. Referencing High Culture Through Anachronistic Language

Anachronistic language is one of the major means within the political programs that reveals the personalities of their authors. The parties therewith establish references to elitist culture and position themselves within it. An understanding of culture as high culture can be understood as a view that only values those artefacts created and/or consumed by educated elites and the upper class as 'culture'. High culture is imagined as existing in a dichotomy with "low culture" such as 'barbarian' or mass-produced, popular culture (Cohen, 2012), and it is a conceptualization that often comes with a specific taste for cultural products, such as a fondness for classical music and opera (Montalban-Anderssen, 2015) – a preference we can find in transhumanist writings when Nick Bostrom (2008a, p. 112) for instance imagines how enhanced individuals would create "[…] music that is to Mozart what Mozart is to bad Muzak".

In their programs, the US and German transhumanist parties employ wordings that symbolically set them apart from the masses, enacting themselves as sophisticated and tasteful high culture beings. Knowledge in the sense of language as knowledge is very literally power here and, what Susan Gal and Kathryn A. Woolard (1995) have called, "linguistic ideology" helps the parties in establishing authority. That the parties endorse this high understanding of culture is crucial for my argument that the vision of *Paradise (Lost)* reveals the imagination of a perfect society as a somewhat conservative, bourgeois, and orderly society, clean, dignified, and in control.

Further indicating a conceptualization of culture as high culture is talk about the great achievements of human civilization, which inevitably comes with a selective reading of history. As we have seen in previous sections, transhumanist theorists often attempt to link their movement and theories to thought traditions associated with scientific glory, antiquity, and genius, which enjoy a particular status and reputation in the scientific community and in societal consciousness (Porter, 2017). Eduard Kaeser (2013) has conceptualized this as a practice of "science kitsch", in specific as "theory kitsch", where an entity looting from theories that enjoy credibility and prestige justifies the respectability and legitimacy of its own body of thought. An example of these great achievements, in the USTP's document, is the American constitution from 1787. The party borrows for instance the constitutions' vocabulary, when they write about "renouncing all violence" or "secur[ing] the bounty of liberty" (USTP 2017, p. 3 & p. 7). They also express the goal to readjust the role of political appointments in the U.S. according to how they were "originally conceived by the framers of the U.S. Constitution" (USTP 2017, p. 14), and by using the word *conceived* it seems as if the constitution was not crafted by humans but as if it was a divine afflatus conceived externally.

#### 7.1.1.4. Narratives of Restoration and Purification

The U.S. constitution, the founding fathers and tales of independency play a very specific role in the imagined community and the national myths of the U.S. (Paul, 2014). In the USTP's document, the constitution from 1787 is an example in which a narrative of *restoration* is established, that is accompanied by a narrative of *purification*. Narratives of restoration tell the following story: In human history, there have been powerful, mainly Western, ideas and values (such as justice, democracy, or equality) and cultural artefacts (like the American constitution, the "scientific method" or technology) that are inherently good (TPD 2017, p. 25). Yet, in the meantime society and politics have lost their way, so that the original quality of these ideas – constructs which were remarkably shaped by Enlightenment culture or, at least, connected to the time and societies of the 17th and 18th century – has been polluted. Humanity consequently needs to restore and return to the right way of implementing and interpreting such ideas and values, and narratives of purification exemplify this further.

Narratives of purification are narratives of cleaning up bodies, nature, society as well as culture through intelligent leadership and with the means of science and technology.[29] In the party programs, corruption, for instance, can be fought by reducing "economic privileges and protections" (USTP 2017, p. 14) and by "depoliticiz[ing] the appointment of Supreme Court Justices" (USTP 2017, p. 25); disease and death can be fought by a redistribution of research funds towards more funding for medical research; pollution and war through regenerative and "protective technologies" (USTP 2017, p. 11), and the killing of animals and therewith associated unethicalness and impurity of humans can be avoided by producing artificial, "biologically identical meat products" (USTP 2017, p. 9).[30] The purification and restoration of nature is hereby particularly interesting in both documents.

While natural catastrophes, which Enlightenment thinkers rejected as "wild nature" (Walsh & Lentin, 2019), are condemned and need to be technoscientifically prevented, eliminated or controlled – the USTP calls this the "unaltered 'natural' circumstances" (USTP 2017, p. 18) – technologies are envisioned as striping nature of unpleasant features and restoring it to a state in which it is clean, enjoyable, and productively fruit-bearing for humans. On the one hand, this invoked the imagery of a light-filled, idyllic, impressionistic depiction of nature in me. On the other hand, I had to think about artificialized, manipulated, and simulated nature as in movies or video games. In a similar manner, restoration and purification narratives

[29] Narratives of purification can also be found in the transhumanist literature, for instance when Aubrey de Grey talks about cleaning up mitochondria with the help of nanobots (Babich, 2017).

[30] Interesting is that only 'intelligent' animals that are "non-contagious, non-aggressive" such as "dogs, cats, dolphins, whales, elephants, horses, tortoises, parrots, and primates" (USTP 2017, p. 15) should be protected from being killed by humans.

behave in relation to the body, which we have seen shortly regarding the USTP's linguistic treatment of disabilities. Disease, pollution or other 'abnormalities' are envisioned as merely thin layers over the 'normal' and 'healthy' body or over nature that can easily be removed, which is however not seen as potentially violent technoscientific intervention, for the German party still stresses the goal to live "in harmony with nature" (TPD 2017, p. 38).

Narratives of restoration and purification are necessarily past-oriented. They assume and idealize a bygone (societal, natural, bodily, cultural) situation or state that is imagined as better than the status quo, and they rely on imaginations of simplicity in a two-fold sense as well as on a mechanical-engineering logic. On the one hand, the restoration or repairment of past discourse and the purification of current discourse is framed and envisioned as an easy task for rational, reasonable agents like the USTP and TPD. On the other hand, the strived-for ideals *themselves* are envisioned as being simple – they are straightforward, do not have multiple meanings and are implemented just by invoking them. There is only one form of justice, of equality, of democracy and ultimately of life that is scientifically correct. It is in this sense not surprising, that we can observe an annoyance with, what the USTP calls, the "post-truth culture of deception" in Article XXIV of the USTP's *Bill of Rights* (Version 3.0, 2018) as well as in the transhumanist literature.

In the last pages we have seen how the back and forth between technoscientific and anachronistic language, the hereby enacted cultural nobility (Bourdieu, 1984) of the TPD and USTP, as well as narratives of restoration and purification, enact a sense of nostalgia for a past that is adapted and transformed to become a paradisal vision of life in the future. Indeed, the path to the future often seems to lead back to the past (Barbrook & Cameron, 1996). Although I am not claiming it is a historically coherent past the parties refer to, speaking from what we know about transhumanism – their theoretical emphasis on and lineage-making to Enlightenment humanism for instance – it is fair to assume that this unspoken past refers to the Enlightenment era and its respective culture.

### 7.2.3. Superlatives and Narratives of Salvation

In order to create an idealist and utopian rhetoric, a rhetoric that is able to establish a paradisal vision, both transhumanist parties rely on exaggerations in their documents. These exaggerations take the form of superlatives and of narratives of salvation. Superlatives are hereby particularly normative, and emanate a sense of ultimacy, wholeness, and unity. They furthermore convey the imagination of an end or final point, a state of perfection (such as a paradise in which nothing needs to be improved anymore) that symbolizes the ultimate fulfilment of a goal; and reflects, in my reading, a linear thinking of the parties. Indeed, the utilization of superlatives might be interpreted as the translation of the transhumanist motto to

become ‘better than well’ (Porter, 2017), their credo “more is better” (Loh, 2018) as well as of the hedonistic tendencies of the movement (Tirosh-Samuelson, 2010) into linguistic practice. It expresses a desire for clear, normative boundaries, but also the strive for ultimate experience, for “[…] music more deeply soul-stirring, sex more exquisitely erotic, mystical epiphanies more awe-inspiring, and love more profoundly intense than anything we can now properly comprehend” (*Transhumanist Declaration* cited after Hauskeller 2016, p. 41).

As a rhetorical means, superlatives further have a persuasive function. Similar to universal, absolute, and certain wordings, which I have described as part of technoscientific language, superlatives are determinant language, assuming the authority of the speaking entity to know what is best and what is worst. They further reassure the reader, for instance, through promising nothing less than “the strongest safeguards” (USTP 2017, p. 18-19), “the best possible work” (USTP 2017, p. 20), “maximum freedom” (TPD 2017, p. 12), “complete/absolute personal development” (TPD 2017, p. 8), the “application of the most advanced biotechnologies” (TPD 2017, p. 9) or “the maximization of prosperity of society as a whole” (TPD 2017, p. 42). Such expressions, although hollow, allow readers to fill in the blanks individually, according to their respective understanding of good and evil or their political stances. Who, for instance, is “the worst of the nominees” (USTP 2017, p. 18) in an election from the US party’s viewpoint, or who should rule “the highest echelons of power” (USTP 2017, p. 24), is left open for interpretation. Whereas superlatives are, among others, a typical linguistic tool in hypermodern society, applied in the media and in advertisements (Gottschalk, 2009), perpetual growth in the form of transcendental narratives of ‘going beyond’, of superseding limits, and ‘being the best one can be’ are not only interpretable as a desire for something ultimate and final, but are shaping individuals enrolled in the programs of self-governance in capitalist society, which transhumanists accept without question (Hayles, 2010).

Finally, narratives of salvation stretch over both transhumanist documents and touch upon psycho-social desires such as being freed of disease and disability, stigma and discrimination, of environmental catastrophe, the necessity of work, financial distress, and even death and losing loved ones through it. Science and technology can lift these burdens of the human, promises transhumanism without telling us anything about how the world *is* instead of how it *should* be (Hauskeller, 2012). The rhetoric of superlatives and the narratives of salvation embraced by the parties are not only idealistic, but they radically simplify complex problems within the transhumanist programs. Thereby, they elucidate how transhumanism does neither require subjects to work on themselves or to undertake changes in value systems, but merely demands an unconditional trust in technology – technology that represents and consists of “pure promise” (Babich 2017, p. 120).

## 7.3. The Vision of Technology = Magic

As I have shown in the first sociotechnical vision within the US and German transhumanist party programs, technology, together with science, is a fundament of and within the sociotechnical vision of (re)creating a transhumanist paradise of reason. In this section, I examine the second sociotechnical vision within the documents, the vision of *Technology = Magic,* or *Technology equals Magic*, which enables, among others, the vision of *Paradise (Lost)*. Thereby, I show how this vision relies on one major group of narratives and one major linguistic technique: narratives of technological fixes and the usage of technology as, what Uwe Poerksen (1995) has called, a "plastic word".

Technology is a cathartic, ethereal entity in both political programs. It preserves and augments the human mind and body; it repairs and extends the species as well as its habitat from earth to other planets. Through science and technology, humans are enabled and emancipated to discover the world with curiosity and spiritedness, and to "boldly go where no man has gone before" (Delahunty & Dignen, 2010). With the fascinating, mystical powers of technology, there is nothing the human species cannot accomplish. The *raison d'être* of technology, its reason of existence, is to ease and simplify life and to fix human problems, therewith escaping all kinds of inconveniences and experiencing merely the positive, the happy, and the beautiful. Technology is a bridge to meaning, to transcendence, to the divine, and as it was the logic of alchemists in the late middle ages and early Enlightenment, an *external* entity, a tool, is needed for the fulfilment of respective human longings. Technology does not only 'naturally' and indefinitely grow and accelerate, but it is also an independently existing, almost personified force that needs to be unleashed and has allowed for human civilization and culture to take place in the first place. It is natural in the sense that it is said to always having been around in and supportive of human development.

As a gift of the scientifically working mind, technology sets the human and its culture apart from and above other entities. It makes human life easier, faster, better, and more efficient, thereby disciplining nature and society to behave in appropriate ways. Technology can cure disease and stop aging, it provides humans with vitality, brightness, and beauty, and it can eliminate poverty should it finally be liberated from its restraints to determine the economy. It can enable safe governmental decisions and prevent from harm, for instance through an Artificial Intelligence (AI) system that measures risks and negative impacts of legislations (USTP, 2017); and technology provides us with the ability to create an ultimate society and make the incredible, the unimaginable, possible: "We just have to take our chances!" (TPD 2017, p. 7). In the parties' documents, technology was thus not only framed as the logical opposite to an as chaotic, incalculable, and despotic understood nature, but technology is the highest form of human culture, it is supernatural – magical.

While science in the documents fulfils the task to rationalize life, to understand human behavior and societally and naturally occurring threats and injustices – a task previously occupied by religion – technology implicates a sense of wonder, fascination, and unlimited potential for both parties. Essentially, it resembles a *laterna magica* (magic lantern), a device, which "[…] is in some ways similar to Prometheus' fire. We stole what belongs to the Gods" (The Forest Dark, 2016). Technology is thus looked at with playful, childlike amazement, and excitement, and it is conceptualized as pleasurable and fascinating, because 'it makes things dance' (Faulkner & Kleif, 2003). At the same time, parental wordings regarding technology are embraced by the parties with a gaze that patronizes these newly hatching entities and grants them only the same rights as humans if they achieve a certain level of intelligence.

Almost autonomously from the mind that is taking part in creating technology, technology is conceived through rational thinking in moments of enlightenment and artistic-inventive genius, and like a magical spell or incantation, it can be summoned to solve all sorts of dilemmas with the spellcaster holding some disciplining power over it. Science provides the basis, the spell-book, from which such technological magic can be learned and cast. Technology is the "lifeblood […] of civilization" (Stolyarov II. 2005/2013, p. 105) and a means through which humans have expressed their "will to power" (Tirosh-Samuelson 2010, p. 34). Yet, technology does not dehumanize, but the human essence as proposed in humanism remains untouched if it does not even increase in humanness within the resulting transhumanist superhuman. Essentially, technology functions as the postmodern equivalent to the alchemical technologies of the elixir of life and the philosopher's stone, promising eternal life, and human perfection (Delgado et al., 2012) – it is the means through which paradise on earth can be achieved. While desires such as strength, beauty, wealth, superspeed etc. are nothing new, but mythologically rooted in many different sociocultural contexts (Hauskeller, 2012; Ihde, 2010); what is new with transhumanism is that the magic and wonder that realizes such desires is no more rooted in nature, animals, or gods, but in technology.

The sociotechnical vision of *Technology* = *Magic*, I argue, indeed comes close to many people's experiences with technology and adds an element of wonder to something that, according to the USTP and TPD, is falsely feared and revolted against by humans. From the stance of the parties, technology is erroneously discriminated against because citizens fear technology; a skepticism that only exists because their capabilities for rational thinking are not on an adequate level. Most individuals however do not have the chance to deal with the composition of technology, and in many ways, we do not know the ingredients of the potion, so to say, we merely witness the outcomes and effects of technologies. This circumstance is crucial for the vision of *Technology* = *Magic*, which works exactly because there is little known about these new technologies the USTP and TPD are talking about (Hauskeller, 2012), because they are in a limbo between fact and fiction, science and magic. It is this in-between

status which makes such technologies well-suited for the mobilization of imaginative capacities, creative, hopeful, and fantastical thinking. The vision of *Technology* = *Magic* is hence possible within the party programs, on the one hand, because of the lack of knowledge that exists in regard to transhumanist technologies and their unclear status between fact and fiction; and on the other hand, because the parties mystify technology, envisioning it as a tool of civilization and culturalization that embodies the right choices and values for all of humanity.

## 7.4. Construction of the Vision

### 7.4.1. Narratives of Technological Fixes

The temptation to solve psycho-social, historical, and cultural problems with technological fixes and short-cuts is hardly a new phenomenon in our world. Subsequently, narratives of technological fixes can be found not only in innovation discourse, politics and science, but cultural products and commercials alike. For the emergence of these narratives within the documents, formula- and calculation-like reasoning and the usage of anachronistic language, which gave the documents their fatefulness and venerability, were crucial and went hand in hand with the employment of technology as a "plastic word" (Poerksen, 1995).

The embrace of formula- and calculation-like argumentation, which I have already explained as a feature of technoscientific language, is comprised of a mathematical logic and within the documents it does not only produce an image of simple problem-solving for the reader but, in thematic combination with technology, appears as a sort of technological spell-casting. This means that short statements are made, in which technology is positioned as an essential component of solving a problem (e.g. technology + economy = prosperity for all). The respective problems are thereby conceptually reduced and simplified to be solvable by technology, which reversely is conceptualized as neutral, impartial, and non-ideological. Narratives of technological fixes thus ignore risks and unintended consequences or disguise them, which is one of the reasons why technology can be treated as a magical force that creates paradisal circumstances.

In the USTP's document, technology is, for instance, often proposed whenever the human is deemed not reliable because it may be politically or in another manner biased. This is the case in the proposition to use an AI system to assess the risk of legislation but also when the party talks about redrawing voting districts, which should "[…] be left to an automated system such as an artificial intelligence (AI) designed for this task" (USTP 2017, p. 37). There is no awareness here that the imagined technology could be non-neutral, but rather the condition that such an AI would be "designed for this task" strengthens the expertness of the

automated system instead of revealing its entanglement with and mutual dependency on decision-making humans. The produced character of human fetishes, here technology, is forgotten, and the fetish-object (technology) is enabled to project an autonomy it does not have (Latour, 2010). Even when the party acknowledges that there are risks stemming from "certain technologies" and "unaltered 'natural' circumstances", safeguarding humanity is as simple as developing "protective technologies that empower rational and moral beings" (USTP 2017, p. 18/19), with the word *protective* having more of a therapeutic-rhetorical function for the reader rather than a concrete conceptual meaning. Yet, sometimes such technological fixes contradict values of the party, as for example when the USTP states that law enforcement officials should be required to wear body cameras "continuously monitoring their activities" (2017, p. 19), when a few pages before the party opposes all forms of state surveillance.

Likewise, the TPD embraces narratives of technological fixes, for example when the party states that: "We, as humanity, can be confident that we can also solve the major problems of the 21st century with the help of new technologies – millions of researchers and inventors are already working on them today" (TPD 2017, p. 24/25). Whereas it is not clear here what the major problems of the 21st century are specifically, the logic once again is that technology can only make things better, and the category of "new technologies" remains blurry and black-boxed. That some problems within modern societies exist due to or in close relation with technologies seems to have no significance in the historical consciousness and perception of the party. The same is the case when the TPD demands the embrace of "new technologies to solve energy and environmental problems" (2017, p. 36), or promotes the "[…] use of artificial wombs, especially for the medical care of premature babies, but also for the solution of social problems and ethical dilemmas regarding abortion" (2017, p. 39). In the last quote, even sociocultural and religious discussions are framed as resolvable, or avoidable, by technology.

### 7.4.2. Technology as "Plastic Word" and Panacea

In the material, the sociotechnical vision of *Technology* = *Magic* comes into being by the parties use of the word *technology* in many contexts and problem-eras of human inquiry. Technology can fix as well as control humans, nature, politics, society, and the future. Yet, both transhumanist parties almost never exemplify *what* kind of technology they are talking about, even though both have an affinity for artificial intelligences; or *how* technology would solve a respective problem; but employ the word as a filler word, as what Uwe Poerksen (1995) has called a "plastic word". This practice of using the word *technology* often supports the creation of narratives of technological fixes and constructs technology as a panacea.

Plastic words as outlined by Poerksen (1995, p. 99) are “context-autonomous” terms that lack definitions which significantly deprives them of their meaning and nuance. They are words that “taste of nothing”, empty signifiers, yet common concepts of societal thinking that are perceived to be independent of history, time, and space; and which are shaped by their close relationship with experts and often circulate on an international level (Poerksen 1995, p. 93). Working as metaphors without being metaphors and filling silences within a spoken or written utterance, such notions are efficient propaganda tools, going hand in hand with the increasing mathematization of language (Poerksen, 1995), the latter of which can be read in line with my finding that transhumanist reasoning and argumentation regularly takes the shape of calculations and formulas.

Based on nine thematic categories[31], Poerksen (1995) illuminates what his notion of the plastic word entails, and many of the characteristics he describes are mirrored in the utilization of the word *technology*, the according plural *technologies* or *new technologies* as well as the adjective *technological* of the USTP and TPD. First of all, technology is employed in every possible context in the party programs, seen as the key to everything which frames technology as a panacea, because the generality with which the word is employed “[…] provide[s] an experience of counterfeit enlightenment” (Poerksen 1995, p. 101). Through a lack of context as well as the reduction of meaning and transmitted content, plastic words are ideal for creating the impression of “insight” which frames them as solutions, often in the form of futuristic imperatives (Poerksen, 1995). According to Poerksen (1995, p. 101), they resemble in this aspect early “concepts of postclassical physics: purely imaginary, meaningless, self-referential, and functioning only as stackable poker chips.”

Further crucial is that plastic words have a “powerful aura of associations” (Poerksen 1995, p. 102) which, in my interpretation, stems from their ability to fill silences and, due to the lack of definition, their ability to leave open spaces for interpretation and imagination that can be used flexibly by the reader or listener. Politically speaking, this can be used as a linguistic evasion maneuver since a broader audience can be targeted, and through being unspecific or vague more people might identify with transhumanist issues. Societally speaking, the word *technology* is carved into the consciousness in the transhumanist rhetoric, and according to what we know about technologies, how we perceive and how we envision them, we can read respective statements differently, associate, and project different things into these political texts. The combination of dreamy, pictorial, anachronistic language with the continuous

[31] Origin and usage, scope, content, history as nature, power of connotation and function, general function, social and economic usefulness, time and place of dissemination, and connection to making oneself understood without words (Poerksen, 1995)

recitation of the word *technology* without really discussing technology but rather societal issues, the parties mystify, almost fetishize, technology.

See the following examples from the material and mind how in the first quote a series of plastic words is used (life, science, technology, medicine) and how in the second quote the USTP is othering, 'calling out' bad practices of the *National Security Agency* (NSA) and other US institutions while they do not name the 'good' technologies whose development they state to encourage.

> "We strongly advocate the increase and redirection of research funds to conduct research and experiments and to explore life, science, technology, medicine, and extraterrestrial realms to improve all sentient entities." (USTP 2017, p. 7)

> "The United States Transhumanist Party holds that the vast majority of technologies are beneficial to human well-being and should be enthusiastically advocated for and developed further. However, a minority of technologies could be detrimental to human well-being and, as such, their application, when it results in detrimental consequences, should be opposed. Examples of such detrimental technologies include nuclear, chemical, and biological weapons, mass-surveillance systems such as those deployed by the National Security Agency in the United States, and backscatter X-ray full-body scanners such as those used until 2013 by the Transportation Security Administration in the United States." (USTP 2017, p. 6)

> "The Transhumanist Party supports efforts to use science, technology, and rational discourse to reduce and eliminate various existential risks to the human species." (USTP 2017, p. 1)

> "The US Transhumanist Party supports efforts to significantly reduce the massive incarcerated population in America by using innovative technologies to monitor criminals outside of prison." (USTP 2017, p. 13)

All of these instances in the material are not only very generic and non-specified terms and categories such as "existential risks" or "all sentient entities" are employed, but technology is framed as a solution for manifold global and American problems, without however having any explicit meaning as a word and concept. Technology is a catchword here, and again we see a reduced understanding of complex problems, as for instance in the last quote when the problem of a "massive incarcerated population" is boiled down to the solution of "innovative technologies" in order to re-materialize the physical bars of the prison into technological ones that monitor behavior.

In the German document, the use of technology as plastic word becomes even more apparent because of the fragmentary sentences the party uses due to its embrace of lists; a

technique that creates a demanding tone throughout the German transhumanist program. See the following quotes:

> “Abolition of the obligation to purchase water connection and development of concepts for decentralized water and hygiene supply as well as promotion of appropriate technologies.” (TPD 2017, p. 36/37)

> “Strategic government support for products and future technologies that are socially and environmentally beneficial but not necessarily (directly) financially profitable.“ (TPD 2017, p. 42)

> “Extensive promotion of research into environmentally friendly future technologies for energy supply and energy storage.” (TPD 2017, p. 37)

> “Such a ‘more scientific science’ can enable man to become even more human by rationally solving problems in a comprehensively funded research process by means of rational, intelligent use of knowledge and technology." (TPD 2017, p. 44)

> “Where it is no longer possible for biology to maintain health by its own efforts, technology can be used to maintain life and vitality". (TPD 2017, p. 28)

Technology in these quotes remains an unspecified category, a projection surface, an empty shell, a blank word, and details are lacking. It is through this purified conception of technology, technology that is strictly separated from human biases and emotion, that technology attains a magical quality within the documents, which is strengthened by the simultaneous embrace of a culturally concentrated, anachronistic language that frames the transhumanist world-view as predestined. The non-knowledge of the reader in regard to how specific technologies should, for example, solve the climate crisis, and if such technologies do or can exist at all or not, is an advantage for pushing the visions and policies of the parties, who depend on enactment alone rather than argumentation. Interactive dreaming becomes possible through the many silences within the documents that are covered by the plastic word *technology* and that create space for the reader to paint their own personal visions, a possible reason for why so many different ideologically and religiously opposed groups are in equal measure attracted to the transhumanist movement.

Through embracing technology as a plastic word, the parties also embrace a narration of “Panacea kitsch”, which has a comforting, edifying psychological effect because problems are solvable by an overvalued imagined entity or discourse, a universal remedy, that embodies the holy grail to everything and is immune to critique (Kaeser, 2013). The sociotechnical vision of *Technology = Magic* thus expresses an intense fascination with technology of the two

transhumanist parties, visualizing the “pastoral power of technology” (Nygren & Gidlund 2012, p. 515) in pushing “one-dimensional thought” (Marcuse, 1964) that satisfies the need for psycho-social closure through the construction of simplicity and a salvific panacea, incorporating the hope for control, indeed conquest (Keeling, 2012), over self and nature, and, in the end, expressing a strive for ultimacy.

## 7.5. Transhumanist Selves: Envisioned Roles of the Parties

Language is, among others, a means for humans to express identity and demonstrate identification. This empirical section engages with how the US and German transhumanist parties enact and envision themselves within their party programs, which roles they attribute to themselves and how they implicitly and explicitly characterize themselves through their linguistic practices. During the analysis, the parties arose as two figures, or as mimicking two different cultural role models and imaginations of selves – the American party as a hybrid between outlaw and scholar-gentleman (Shapin, 1991), and the German party as a pedagogue. While I do not claim that those characters are identities that members of transhumanist parties take up, I can establish some propositions about traces of identity within the material. These self-imageries are mainly established through the modes of speaking embraced by the parties, the use of anachronistic vocabulary which establishes a bridge to Enlightenment and high culture, through the display of judgements, and narrative-enactments of the parties’ selves and other, an ‘other’ particularly relating to how the USTP and TPD talk about the public. Both characters imply a top-down view onto the public, both embrace “a Renaissance-ideal, aiming at a well-rounded person, having intellectual, artistic, and physical traits” (Ranisch 2014, p. 161), and both envision themselves as avant-garde, like Stephen Hilgartner (2015) has described in his definition of sociotechnical vanguards. The character of the USTP is a bit more complex and corporeal, as generally the American document was richer in peculiarities to explore, among others, because of the TPD’s embrace of lists, but potentially also because transhumanism is a US-centric movement. I start with the German party.

### 7.5.1. The German Pedagogue

In the program of the German transhumanist party, the party enacts a self that resembles the figure of a humanitarian, the public educating pedagogue. This self-characterization comes to life, on the one hand, through the practice and mode of speaking in the form of a lecture, and, on the other hand, through humanist, overly didactic, sometimes parental, terminology and conceptions. Both of these modes of using language reveal an

underlying perception of the citizen/reader as a passive, intellectually 'incomplete' subject that needs to be instructed to develop more "open-mindedness towards new technologies" (TPD 2017, p. 5); a subject that needs to be nurtured, "politically escorted" (TPD 2017, p. 3), empowered to take responsibility for her/his life (cf. TPD 2017, p. 16) and lifted up through the care of a knowledgeable guardian, or, in short: the transhumanist enlighteners. This subject further subsumes the female under the male since throughout the document, the Masculinum (the male form of nouns) for designating the public is utilized. The following quote is illustrative of this subject-understanding of the TPD:

> "One of the most important tasks of the party is to educate/enlighten (German: *aufklären*) and give every human the opportunity to become a mature (German: *mündig*) and reasonable citizen." (TPD 2017, p. 9)

Crucial here is, that in order to enlighten, to help somebody mature or to create a "mature society" (TPD 2017, p. 18), one must assume to be enlightened, mature, and reasonable oneself. As I have mentioned before, talk of being lifted out of immaturity was a prominent Enlightenment metaphor coined by Kant (Walsh & Lentin, 2019), and it is no coincidence that the code 'sheep' for the public appeared in my analysis. The latter goes well with what Michel Foucault has described as the "pastoral power" of the modern state, which understands and governs civil society as a flock that needs to be guarded by its shepherd (the state), led towards salvation from the beginning till the end of their lives (O'Farrell, 2007-2019). Cultural particularity of the infantilized subjects both parties are speaking about is dismissed in both documents, and 'the people', 'the society' and 'humanity' are placeless, flattened out into the global and without identity. Lecturing as a mode of speaking is thus only possible through an assumption of knowledge-superiority and hierarchy. In the German document, it is often intertwined with speech-like features, and hence also pathos:

> "Human dignity, informational self-determination, the free development of the personality, the equal position of the citizen before the law, freedom of opinion and the press, freedom of religion and freedom of association, the secular state, but also the right to life and health are the great democratic achievements of the liberalization of the state. We want to maintain, shape and develop our open society for the benefit of the people." (TPD 2017, p. 7)

We can observe here history-making practices and talk of the achievements of Western societies, but also an admiring recitation of humanist, liberal, and legal values and concepts of "our open society", a society that needs to be preserved but also extended. The mode of lecturing is necessarily a form of storytelling, the telling of a (hi)story that is smoothed out, positioning the listener/reader as the lectured that receives.

The use of the modal auxiliary verb *should*, which is an interesting contrast to the USTP's use of *shall*, further cooperates in creating the TPD's mode of lecturing. While *shall* is, as we have seen, a divine and prophetic utterance that can create or function as an imperative, *should* is a moral utterance, an expression of advice and recommendation. This might be read as reflecting cultural differences between the U.S. and Germany, but also as something that mirrors how the parties envision themselves within their programs. While the USTP is more radical, heroic, and maybe intrusive, the TPD self-fashions itself as a humble, philanthropist educator, that is supporting rational democratic decisions of the people by pushing them softly, like a child, into the right direction.

Yet, even though there is astonishing faith in science and technology, and likewise dreamy, pictorial language in outlining technoscientific advantages, the TPD acknowledges, although never explicitly, potential dangers. For instance, the party speaks of the need to "[…] finally begin to plan and implement what to the best of our knowledge and conscience is the most sensible and best, before we as a society run out of time" (TPD 2017, p. 14). The assumed inevitability of progress thus also creates pressures for the TPD, symbolized here in the embraced narrative of lacking time in the face of a constantly changing, "dynamic environment" (TPD 2017, p. 17). It is such moments of ambivalence in the German party program which make the party's voice humbler, despite of their lecturing patronization.

Humanism is further mentioned more often by the TPD in comparison to the USTP, which shows the TPD's trust in humanism as an orientation point for virtues and identity. More so, the party uses psychological-pedagogical, educational concepts – after all, humanism had a remaining impact on educational philosophy (Edwards & Lewin, 2012) – such as the notion of "intrinsic motivation" (TPD 2017, p. 18), a "rational formation of will" (German: *Willensbildung*; TPD 2017, p. 10), "media competency" (TPD 2017, p. 20), "self-actualization" (TPD 2017, p. 22), the demand for a "modern and comprehensive sex education" (German: *Sexualaufklärung*; TPD 2017, p. 22), or the "expression" (German: *Entfaltung*) of the creative and intellectual potentials of highly gifted individuals (TPD 2017, p. 21). The noun *Förderung* (encouragement, support, aid) and the attendant verb *fördern* are overly present, words that found historical application in the practice of patronage of art and culture and are often used in educational contexts. Mind and body need to be cultivated and educated, which also becomes illustrative in the TPD's aim to create "[…] freely accessible sports activities and cultural events" (TPD 2017, p. 13).

Moreover, bourgeois-conservative notions make an appearance, such as "reliability" (German: *Verlässlichkeit*; TPD 2017, p. 26), "assurance" (also confidence or trust; German: *Zuversicht*; TPD 2017, p. 24), and „vitality" (German: *Vitalität*; TPD 2017, p. 28), and sometimes even a single letter achieves a sense of antiquity, as in the case of the expression "im Geiste", which means "in the spirit of" (TPD 2017, p. 38), where the last letter 'e' stylistically

resembles Old High German and thus invokes a kind of theatricality, remembering the reader of German philosophy with its proneness to poetic language and the therewith associated emotive and rhetorical powers (Smith, 1991).

Most interesting from an STS perspective though is the employment of the term *Erfinder* (inventor) and the adjective *erfinderisch* (inventive), which I see as revealing creative and playful aspects in the TPD's understanding of and love for science. When I asked some German friends about their perceptions of these terms, they told me that while the adjective is still commonly in use, the word *inventor* (e.g. TPD 2017, p. 14) is mostly employed by children for describing the wish to make a career in science. In contrast to the word *researcher*, which is more rationally connotated and boomed in the late 18th and 19th century, the word *inventor* reached its zenith in the 17th century, is more pictorial, and incorporates a sense of wonder because it grazes on notions of tinkering and experimentation (Pfeifer et al., 1993). Science and art are close to one another in the understanding of the TPD, and genius requires the creativity of "artist-engineers" (Barbrook & Cameron 1996, p. 68). Yet, art is seen as something that must be made qualifiable with the TPD demanding "[r]esearch of creative or artistic achievements with the goal of making them scientifically identifiable, measurable, and rateable" (TPD 2017, p. 45-46).

### 7.5.2. The American Outlaw-Gentleman

Whereas the TPD fashions itself as a modest educator, the USTP's enactment of self, despite of having parallels with the TPD, was more direct and heroic. The party tries hard to objectify itself through various rhetorical techniques, and the American document and its language radiates an impalpable sense of arrogance and omniscience.[32] The herewith arising figure of the outlaw-gentleman merges elements from the tale of Robin Hood, a folk hero, and archetypical outlaw (Knight & Ohlgren, 1997) with an image of intellectualism that I see mirrored in Linda Walsh's and Tony Lentin's (2019) characterization of Enlightenment thinkers as well as in what Steven Shapin (1991) has described as the "scholar-gentleman". Narratives of discrimination, that are essential for mimicking the Robin Hood story, might remember us hereby of the definition of social movements by Hess (2005) as mentioned in *Section 3.3*; a definition that theorizes the experience of discrimination, of an outsider-status, as a binding feature of social movements and as crucial for the construction of a collective identity. Speaking of chivalry, virtuousness, "boyish romanticism" (Hauskeller 2016, p. 1), intellectuality,

[32] Because it supports and visualizes my line of argumentation, I will include four pictures for the reader in this sub-section, however without analyzing them in detail.

vigor, cultivation, virtuosity, courage, and cheekiness, the figure of the outlaw-gentleman is so fascinating because it can be read as an interesting narration about masculinity.

In its constitution, the USTP tells, among others, a story about social wrongs and injustice by criticizing the powerful and taking the side of the powerless. They can only achieve this by othering, by distancing themselves from what they perceive as bad. As antagonists (sometimes evil, sometimes only partial, or temporary antagonists) the following characters arose in the analysis: large corporations, governments, religions, animal liberation movements, the death-acceptance movement, eco-primitivists, and ignorance, disease, disability, and death "[…] that wreak havoc" (USTP 2017, p. 7) upon humans. Whereas corporations and governments are seen as inhabiting too much power, of being corrupt, and having strayed from the right path; the USTP is also opposed "[…] to any interpretation of a religious doctrine that results in the rejection of reason, censorship, violation of individual rights, suppression of technological advancement, and attempts to impose religious belief by force and/or legal compulsion" (2017, p. 9). At times, there is even hostility or a sense of mockery, as we have seen, when the party writes about "perceived offensive behavior" (USTP 2017, p. 14) or "*subjectively perceived* offense" (USTP 2017, p. 13; emphasis added), the latter of which is a tautology that lays a double-emphasis on the subjectivity of the experience of injustice or fear of an envisioned public, thus delegitimizing and irrationalizing both.[33] Ignorance, in the sense of non-knowledge or a lack of knowledge, is the ultimate villain of both transhumanist parties, implying ethical underdevelopment and 'savageness', and representing the source of all evils.

In opposition to such antagonists, the rich and powerful to stay within the Robin Hood parable, stand the allies of the party, the poor: the American people and, in the end, the whole of humanity. The USTP both victimizes and infantilizes its imagined subjects, and just like in the tale of Robin Hood, the powerless are not able to get justice on their own – a charitable hero must achieve it for them. The subjects that are spoken about in the document are protect-worthy but immature and unreasonable. Only, what the USTP calls, "intelligent laypersons" (e.g. USTP 2017, p. 12) are valued and should be determinant in shaping society and politics. The party talks about "innocent citizens who do not use drugs" that fall victim to the war on drugs (USTP 2017, p. 7), about "peaceful citizens" that have to deal with police brutality (USTP 2017, p. 9), but they also write about "voters' short memories" (USTP 2017, p. 17) and "the sick" and "those in pain" (USTP 2017, p. 23) that suffer of disease and disability. Through adding specifications like 'innocent' in front of the noun, not only a judgement is made and some people are excluded while others are included, but an emphasis is created that stresses the for the party clearly distinguishable divide of good and bad. Threats and societal nuisances

[33] In the context of the program, it seemed as if these instances were, among others, directed against political correctness culture.

are amplified and contrasted with an as passive perceived other. However, these passive and deficient others can become autonomous and self-responsible: they can be empowered, enabled, and enlightened through science and technology.

Like Robin Hood, the USTP has subsequently no doubt about what is true, just, and righteous, which becomes visible in their embrace of absolute language, as I have demonstrated before. The party further remains at the level of redistributing power and resources, rather than destabilizing, revolutionizing, or overthrowing structural-systemic inequalities. As also Michael Hauskeller (2012) has found, transhumanism devalues the present without critically reflecting present conditions and their manifold intertwined causes, matching the world to their speech acts and not *vice versa*. Money, property, potentially dangerous technologies, the law, and rulership are not problematized in the documents, and when they are, the critique remains vague so as to leave a margin for the individual interpretations and political stances of the USTP's different audiences. The following quote is exemplary of this:

> "The United States Transhumanist Party supports efforts to investigate questionable, but currently legal, actions by law-enforcement agencies that have over time garnered critical attention by the public. The safety of the public could benefit from such actions being revisited or revised to limit abuse and to close legal loopholes." (USTP 2017, p. 31/32)

This quote is not taken out of context; it stands as an own section within the USTP's constitution. What "questionable, but currently legal, actions" mean for the party is not explained. Instead, the message of this section is an enactment of good and evil, with the party locating itself as the ones who limit said abuse of the public.

For most of their document, the USTP emphasizes its adherence to and belief in law, for instance when they speak about "appropriate penalties pursuant to applicable law" or "individuals who lawfully reside within the United States" (USTP 2017, p. 3/4), or when the party swears that it "[…] commits to always pursuing its goals in a civil, law-abiding manner" (USTP 2017, p. 2). Stephen Knight and Thomas Ohlgren (1997) stress this aspect in the figure of Robin Hood, who likewise does not operate outside of the law but merely mocks its wrongful application, in his context, the corrupt medieval clergy. Instead of opposing hierarchy, Robin's resistance to authority is fashioned and read as a form of noble behavior of a "distressed gentleman" in moral and social terms (Knight & Ohlgren, 1997). While Robin possesses the virtuousness of a knight, he triumphs over his opponents by out-smarting them, through being a "calm, witty, well-armed man" (Knight & Ohlgren 1997, p. 20), happy to take risks and be bold – values that are also taught at *Singularity University* where risk is seen as a business opportunity (Hurlbut & Boenig-Liptsin, 2016) – not prevailing by physical dominance alone.

In the USTP's trust in the law and the assumption that it just needs to be in the right hands, we again find narratives of restoration and purification paired with a belief in the big conceptual institutions of modern society and the nation-state. Through establishing a background of social injustice and roles of victim and perpetrator, the USTP arises as a hero within their document, and through displaying discontent, sometimes sarcastic contempt, regarding US authorities or other institutions, the party is framed as somewhat rebellious, something we can also find in the literature, for example, when Paulina Borsook (2000, p. 4) speaks about the "rebel-posturing" within American libertarian high-tech culture.

One instance of the narrative of discrimination spanning over the USTP's document is when the party talks about the rights of children and "in particular […] opposes all forms of bullying, child abuse, and censorship of intellectual self-development by children and teenagers" (2017, p. 9). Mind here how the demands are ranked: bullying is number one of the things that the party opposes, whereas censorship of the intellectual self-development of children and teenagers is a quite specific demand. Importantly, this quote must be read on the background that the party establishes a narrative of discrimination concerning intelligence and technology more broadly. Technology, as well as intelligent humans, are misunderstood, underestimated, suppressed, bullied by an irrational, amoral society. Skepticism in regard to technology is a form of discrimination against technology, and technologies need to be freed and liberated under "a system of unfettered market competition and innovation" (USTP 2017, p. 22). Likewise, intelligent individuals are societally held back of their true potential. Through positioning intelligence and technology, two constructs transhumanists adore and, most likely, identify with, in a position of discrimination, the personal experiences and biases of the party members shine through.

Whereas the party often talks about wronged individuals, it is the details in their language, often specifications in the form of a single word, that reveal an emotional distancing, positioning, or attachment. When the USTP for instance speaks about "unacceptable practices" such as "male and female genital mutilation" (2017, p. 33), they specifically refer to both sexes rather than none. Or in the case of the legalization of prostitution, the party states that it condemns "any manner of human trafficking, child exploitation, and other abuse that involves a violation of the autonomy and consent of any individual" (USTP 2017, p. 35/36). The word rape is avoided here, and in the subsequent discussion it becomes clear that economic factors are a reason for proposing this legalization, whilst the fact that sex workers are often female is disguised by objectifying them as "employees in this industry" who "chose this profession voluntarily" (USTP 2017, p. 36).

While the USTP envisions itself as cheeky, nosy adventurers – for instance when they talk about space exploration in the "spirit of adventure" (2017, p. 13) – and embrace the underdog-status that enables bonding with their audiences; they simultaneously enact

themselves as critical and noble gentlemen, a self-narration that comes to be through the usage of anachronistic and technoscientific language. We have seen how anachronistic language fashions the party as a subject of high culture, lending prestige to their moral righteousness and class position, and how technoscientific language fashions the party as superior in knowledge and reason. The USTP is thus able to present itself as elegantly 'mischievous', which is fascinatingly similar to how Walsh and Lentin (2019) describe Françoise Voltaire as the personification of Enlightenment thinkers. Voltaire is depicted as passionate, energetic, and as possessing a strong sense of justice. His style was "[…] pointedly ironic, forceful, mischievous, malicious and funny" (Walsh & Lentin 2019, p. 14). While always remaining elegant and self-controlled, he and other Enlightenment thinkers showed a "biting wit", detachedness, and dark sometimes wicked humor (Walsh & Lentin 2019, p. 15). The word *wit* was particularly interesting here, since authors like Nick Bostrom (2003, p. 498) employ it in describing transhumanist goals, namely, reaching a new cultural level of humanity through becoming "healthier, wittier, happier".

The Enlightenment ideal outlined here is hence built on a delicate balance between almost child-like boldness, critical rebel spirit, and decadent libertinage of the early modern period (Denton, 2019) as well as the bourgeoise righteousness, integrity, and guardianship of gentlemen. See *Figure 2* which illustrates this gentlemanly dignity on the example of transhumanist Aubrey de Grey. In a classical pose, de Grey sits on a cardinal red, velvet chair and gazes at the viewer of the picture, which is taken from a three-quarter perspective. Indeed, his posture and gaze are astonishingly similar to oil paintings of savants as depicted in *Figure 3* – an oil painting of Sir Isaac Newton.

*Figure 2: Aubrey de Grey*

*Figure 3: Sir Isaac Newton*

Highly interesting in regard to the USTP's imagination of self is further Steven Shapin's (1991) character of the "gentleman-scholar". Based on an analysis of courtesy literature in the context of 17th century England, Shapin (1991) demonstrates how the Scientific Revolution initiated a tension between the identities of and social imageries about gentlemen and

scholars. Particularly during the Middle Ages and the 16th century, knowledge and learning were seen as making men less warlike which was why gentlemen should not pursue it, while scholars, mostly stemming from the poor clergy, were considered socially indecent and pedantic due to the "withdrawn and depressive persona" associated with their intellectualism (Shapin 1991, p. 290). Whereas gentlemen stood for harmony and social order, scholars were seen as disruptive. Through political changes and the involvement of humanists at universities, the nobility required of gentlemen was slowly re-fashioned into a virtue not only of morality and piety but of technical skills and knowledge, however not without adjusting the forms of learning and knowledge to the role of gentlemen.

> "Such a new form of learning would produce a scholar who suffered from none of the vices of the pedant – a virtuous scholar whose pursuit of knowledge was a civic act, bringing civic benefits. It would, that is, fashion a gentleman-scholar, fit to live in, and to benefit, the polis." (Shapin 1991, p. 294)

In this redefinition, the utility of scholars for the community and civil society, in further consequence the state, is stressed, and the dreamy, melancholic, with the ungracefulness of "the most frivolous tittle-tattle woman" associated scholar is "[…] remedied by a new and purified form of intellectual practice" (Shapin 1991, p. 304 & p. 295). This humanist-Baconian ideal of the gentleman-scholar was then adopted in the famous *Royal Society of London* where natural knowledge was promoted as a way to fulfil England's destiny of imperial rulership, seen as knowledge that ennobles man, and knowledge that is objectified through the good manners and conduct of its genteel thinkers (Shapin, 1991).

See *Figure 4* in this context, which depicts the logo of Gennady Stolyarov II.'s online journal *The Rational Argumentator* – a top hat with a yellow emblem. The top hat is an interesting symbol here because, historically, it was not only worn by rebels during the French Revolution (Frasch, 2011) but grew to be a signifier of elite masculinity in the 19th century (Beaujot, 2014). Indeed, the "black, erect topper" stood for the rationality of the male sex, and the taller and stiffer it was the more it was representative of "[…] formality, engagement with certain guilds, moral uprightness, professionalism, orthodoxy, and the bourgeois" (Beaujot 2014, p. 67), which makes its usage as a transhumanist logo quite fitting in relation to the figure of the outlaw-gentleman.

*Figure 4: The Rational Argumentator*

Donna Haraway (1996, p. 23) has written about this gentleman-scholar and the corresponding construction of masculine reason in another sense, yet the same timely context, calling it the “modest witness” whose subjectivity was fashioned as his objectivity through clinging to the “illusion of self-invisibility” to produce credibility and fact- and truth-speaking power. This self-invisibility is reflected in the transhumanist conviction of being “post- or meta-ideological” (Benedikter & Siepmann 2016, p. 4), of being independent of external influences, dogma and religion. Transhumanists only depend on themselves and true to the gentleman-motto “nil admirari”, they always keep their countenance and are surprised by nothing (Shapin 1991, p. 283) as is expressed also in the following quote of the US transhumanist party:

> “The United States Transhumanist Party places no reliance upon any individual, organization, or belief system that intentionally distorts empirically verifiable evidence, including but not limited to scientific and historical evidence, to serve its own agenda. The United States Transhumanist Party places no reliance upon any position or belief system that contains arguments built upon logical fallacies (with exemption granted to arguments containing both fallacious and logically defensible premises).” (USTP 2017, p. 9/10)

Because there is no reliance on specific sources of knowledge, a kind of lone-fighter-mentality arises from the American document which might correlate with the longstanding myth of the “self-made man” in the national framework of the United States (Paul, 2014). Seen in this context, it further makes sense that the figure of the polymath is embraced in the self-descriptions of transhumanists like Stolyarov II., as we have seen in *Section 2* – if there is no trust in others, merely pride in independent knowing, one has to become one's own super expert. As a character, the outlaw-gentleman is thus always self-restrained and in control, he is well-mannered yet determined, he is decent and tidily coiffed yet resolutely looking into the future as a revolutionary, as Zoltan Istvan does in *Figure 5*.

*Figure 5: Zoltan Istvan*

The outlaw-gentleman is consequently not a traditional alpha male as one may see embodied in the character of Superman, who stands not only for values like patriotism and a strong sense of justice and duty, but combines elements of fatherhood, hypermasculinity, and conservativeness (Lund, 2016). While the outlaw-gentleman strives for an immortal body of steel, it is his intelligence that lifts him above others. As also Boenig-Liptsin and Hurlbut (2016, p. 256) found at *Singularity University*, "innovator-entrepreneurs" position themselves in a savior-role towards the public, perceiving their intellectuality as exceptional, difficult, and unintuitive. The scholar-gentleman thus makes fun about the small-mindedness of the world. He is aware of problems such as race or gender, yet ignoring or subsuming them nevertheless, as for instance transhumanist Gennady Stolyarov II. does, under the label of the "Western Man" who stands for the "noblest aspirations of Western civilization", describing "an archetypical representative of humankind" and thus, so argues Stolyarov II., includes women (The Rational Argumentator, 2016).

As during the original Enlightenment and the Western civilization process more broadly, values of equality, justice, and truth are praised while women are subsumed under the male, and a character of a feminist-yet-not-feminist man arises.[34] The outlaw-gentleman is above rulership or domination because he, as a gentleman, is well-balanced and classy thus incapable of injustice and irrationality, and he, as an outlaw, seems to be critical in regard to the dominant discourse, unaffected by the 'brainwashing of the masses' as New Agers would call it (Aupers & Houtman, 2010). As a figure of guardianship, the outlaw-gentleman 'peacefully criticizes' (USTP 2017, p. 5) and represents an individual who knows of his strengths but chooses to remain a guide and guru. The radical self-promotion and the charismatic leadership qualities we can find in accounts of famous transhumanists, however, visualize how and why this as harmless framed self-characterization, which still is a hypermasculine, Western one (Keeling, 2012), in combination with the outlaw-gentleman's superior rationality is problematic.

[34] Indeed, in my opinion, transhumanism is one of the last straws for the white male to escape the post-truth discourse with all its ambiguity, loss of supremacy, and lack of linearity.

## 7.6. Transhumanism: A Cult of Technoscience?

At last, there remains one of the sub-questions outlined in *Section 5* to be answered, namely, whether transhumanism can be conceptualized as, what I have called, a 'cult of technoscience'. This is an analytical question that goes beyond the scope of my empirical data, yet kept suggesting itself during my engagement with the party programs and the online research on popular transhumanists and the organization of transhumanism.

Transhumanism has been frequently linked and compared to religion. Among others, because the movement approaches subjects like transcendence, salvation, and immortality from a secular stance, hence fusing spirituality and technology (Schussler, 2019); but also, because science and technology, particularly technology, are positioned as something sublime (Winyard, 2016) and salvific in transhumanism, as also the vision of *Technology = Magic* illustrates. Although there are religious notions present in transhumanist theory and rhetoric, I suggest that the notion of a cult is more appropriate for describing the movement's dynamic rather than a conceptualization as a "techno-religion" (Schussler, 2019). This proposition is rooted in several observations I made during this research, which I will discuss in the following, and was additionally strengthened by Babette Babich's (2017, p. 120) reference to transhumanism as a cult, the circumstance that Ayn Rand's libertarian objectivism, which inspires much transhumanist writing (Benedikter & Siepmann, 2016), turned out to have a cult-like followership comparable to *Scientology* (Walker, 1999), as well as by the circumstance that Barbrook and Cameron (1996, p. 62) mention "Extropian cult fantasies" in their work on the Californian ideology. Firstly though, a contextualization of the concept of cults is needed.

When we talk about cults, there are two dominant meanings of the word that come to mind – cult as in, for instance, 'a cult of youth' or the cult around a celebrity; or cult as in a spiritual or religious, often very persuasive, group of people (American Heritage Dictionary, 2011).[35] In popular usage as well as in academia, the term *cult* has been regularly employed as a "social weapon" against non-mainstream religious groups (Richardson 1993, p. 352) that were treated as social dangers and marked as deviant and 'inauthentic' in regard to officially recognized, established religions (Kirby & Cusack, 2014). Although the concept has been problematized by sociologists of religion due to its negative reputation and confusion with the concept of sects (Barker, 2010)[36], to me, the term *cult* is still relevant and useful, because I see it in its relatedness to the terms *culture* and *cultus* (Ellis, 2008), not necessarily as religious *per se* (Lalich, 2017) but rather as describing a belief community with specific dynamics, ideologies, functions and persuasive characteristics.

[35] According to social psychologist Kelton Rhoads, cults can be divided in religious, psychological/ Enlightenment, commercial and political cults, to the latter of which also Nazism is counted (Rhoads, 1997-2012).

[36] Indeed, the concepts of cult and sect seem to have reversed meanings in English and German.

According to Karl Thompson (2018), cults – as belief communities – are diffuse, lack strict rules, and often do not have one fixed religious or spiritual doctrine and are thus less sealed off from society than sects. In contrast to sects, they have a more positive attitude towards the world (Marty, 1960). Fundamentally based on individualism and mysticism, members of cults sometimes adopt the role of customers, which is also the case for many New Age and esoteric movements of the 21st century (Thompson, 2018; Aupers & Houtman, 2010), where people choose and select different lines of thought, lifestyles and (self)narratives that they want to apply to their lives. Cult leaders further often enact themselves as entities that can see *beyond*, behind the false reality of society – they receive visions from an external source which frames them as chosen characters with prophetic qualities. In addition, the term *cult* also implies something obsessive, and describes an excessive veneration of something (DWDS, n.d.).

It is in this sense of excessive adoration of science and technology, the strong belief in themselves as intellectual leaders and vanguards into a new age, but also the excessive devotion to the self as a project of perfection, that I see transhumanism as a cult in a two-fold sense. Firstly, in that it represents a discourse that glorifies, is devoted to and obsessed with science and technology and thus promotes and is part of a 'cult of technoscience'; and secondly, as a conceptualization that designates transhumanism as a belief community with specific practices and internal dynamics. The latter of those two claims requires additional fieldwork to be undertaken since I only engaged with a small fraction of transhumanists, the (opinion) leaders of this cult so to say; but the following observations provoked it.

While engaging with the organization of and actors within the transhumanist movement, self-promotional roles as "philosopher-prophets" (Tirosh-Samuelson 2010, p. 43) of popular transhumanists and their "messianic mode" in proclaiming what future is desirable and just (Boenig-Liptsin & Hurlbut 2016, p. 264) became observable. In the same sense, there was a transhumanist omniscience present in both documents, as we have seen in *Section 7.3.1.1.*; and speculations about the future are made in the absence of doubts and uncertainty, inducing promises and implying a position of interpretational sovereignty of the parties. The public is perceived as incompetent, yet protect-worthy herd-like entity, that needs to be taught how to think, feel and live rationally, objectively and reasonably; whereas governments are perceived as incapable of dealing with and comprehending technoscientific progress (TPD 2017, p. 6). Transhumanists are the *only* ones who can guarantee a good future for all of humanity, they know how to approach the future and how to make order in a world that is deceived by the lies of post-truth society, by "rumors and postfactual influences" (TPD 2017, p. 12/13; USTP, 2018). Transhumanists thus arise from the two political documents as enlightened gurus because of their privileged position as innovators and sociotechnical vanguards.

The opaqueness of the movement and its ideological adaptability to diverse sociocultural, political and religious contexts, as well as the movements apparent immunity to critique (Hayles, 2010), are further interesting features of transhumanism in regard to the notion of cults. Especially the latter point is interesting, demonstrating the persistency of, what Bruno Latour (2010) called, the "modern cult of the Factish gods" and is also exemplified in the narratives of discrimination that are embraced in both documents as well as in the transhumanist literature which tends to evade criticism.[37] Moreover, there exists a search for transhumanist symbols (stretching over suggestions to adopt the Old-Egyptian ankh that was prominent in the goth subculture and hermeticism, to the symbol of a transhumanist wolf, an animal often mobilized by right-wing cultures), and there is a practice of changing one's name within the movement (see also Edwards & Lewin, 2012) that could be read as an indicator of the significance of the movement for its members, or as a symbolic-ritualistic practice that emphasizes the devotion to the ideas of transformation, absolute autonomy, and self-control.

Apart from that, transhumanism claims to belong to "a long tradition of wisdom or practice of which it is the current manifestation", which Robert Ellwood (cited after Richardson 1993, p. 353) understands as a characteristic of cults. Transhumanists, we have further seen, engage in a practice of publishing speculative popular science books, ask for donations online, recruit new members (e.g. TPD 2017, p.15), and actively encourage members to invoke and embrace technoscientific change because of the assumption that the implications of such change can be understood once humans have technologically upgraded and medically supported brains (Loh, 2018). Moreover, there exists a tension between the open and sensational promotion of transhumanism and a simultaneous lack of knowledge and transparency in regard to the movement, its practices and members, forms of organization but also its relations to companies such as Apple, Google, and Microsoft (Istvan, 2020). Lastly, transhumanism is a problem-solving ideology and promises salvation from all kinds of different problems, from anxieties to systemic-structural issues, through technoscience.

*What use is it however to refer to transhumanism as a cult of technoscience as I propose?* Within this thesis one reason is to draw attention to transhumanism and its "infectious optimism" (Barbrook & Cameron 1996, p. 45); and to take it more seriously in science, society as well as activism. Designating transhumanism as a cult of technoscience calls attention to the radical, pervasive and excessive aspects of transhumanism and stresses that it is not 'meta-ideological'. Other reasons are the specific practices of transhumanist advocates, the self-aggrandizement of the USTP and TPD, and the movements' obsessive veneration of, and

[37] Nick Bostrom (2005, p. 22) for instance claims that the philosophical critique of transhumanism is not accurate because ethical considerations about transhumanist technologies are often of technical nature and thus "[...] they are not widely understood."

thus blindness regarding, technoscience. The term *cultus* from which cult is derived, indeed describes "[c]are directed to the refinement of life (opp. to a state of nature), i. e. arrangements for living, style, manner of life, culture, cultivation, elegance, polish, civilization, refinement […]" (Lewis & Short, 1879), which resonates well with the understanding of culture as high culture of the two transhumanist parties, their envisioned mission to civilize humanity, and the USTP's self-enactment in which references to upper-class life and gentlemen identity are present.

Most importantly though, the imagery of a glorious promised land, hopes for salvation and relief of the absurd internal and external pressures (Elias, 1939) that individuals face within capitalist societies, as well as the problem-solving rhetoric and engineering logic employed within transhumanist reasoning might speak, I think, to many people, particularly to male audiences.[38] Relating to the latter point that transhumanism might be specifically attractive for men, N. Katherine Hayles (2010, p. 215) stated that "[t]ranshumanism for me is like a relationship with an obsessive and very neurotic lover". What makes transhumanism dangerous in this sense is not only the insistence of transhumanists on being non-ideological, merely good and virtuous; the savior-positions its advocates assume and the naiveté in thinking about technoscientific as well as social change, but the movement's potential for broad discipleship, especially in a post-Corona world. Because it is both radically futuristic, yet familiarly conservative in that it promotes an upper-class, bourgeois lifestyle and values, transhumanism – like the technologies it promotes – is a "genie-in-the-bottle" cult (de Saille 2014, p. 14), a projection surface for manifold audiences with manifold fears about and wishes for the future.

[38] It is fascinating in this regard, that transhumanists like Zoltan Istvan and Robert Ettinger both have war experiences (Shoffstall, 2010). It would not be surprising if the physical violence against male bodies in patriarchal societies and the pressures such societies establish for men, produces a desire for the invulnerable 'tank bodies', the "military-industrial bodies" (Jeffrey 2011, p. 5) that transhumanism seems to offer, therewith enabling "greater capacity for violence as a way to protect against anxieties of performance" (Keeling 2012, p. 141).

## 8. Conclusion

> "When the real no longer is what it used to be, nostalgia assumes its full meaning." (Baudrillard 1984, p. 257)

This thesis has dealt with the linguistic design and narrative enactment of sociotechnical visions in two transhumanist political documents. We have seen how a sense of nostalgia produces the vision of a lost Enlightenment paradise: a clean, automatized, purified future-past in which every human is upper class due to the civilizing effect of science, technology, reason, and the "cultural nobility" and knowledge superiority of the USTP and TPD (Bourdieu, 1984). Science is imagined to make all humans reasonable and objective, while technology is assumed to make the body less vulnerable, the brain faster, the environment cleaner and the economy flourishing. In the sociotechnical vision of *Paradise (Lost)*, Enlightenment values, identities, and thoughts are restored, and a sterilized future enrichened by the experimental curiosity and creativity of heroic innovator-entrepreneurs, populated by high-tech, and adorned by the classiness of high culture artefacts is imagined.[39] This future wakes imageries of the salon-culture of the 17th and 18th century, producing a societal setting in which "intellectual acuity" (USTP 2017, p. 11) is not only a moral duty, equated with happiness, and determinant of the civilizational status of a person, but a sign of spiritedness, individual worth, and character.

This vision came to be in the data through a going back and forth between, what I have called, technoscientific and anachronistic language, which establishes nostalgic linkages to a specific past. While the former enacts the parties as rational intellectuals and objectifies the content of the party programs through specific rhetorical techniques such as the mentioning of scientific concepts, the use of absolute wordings and legalistic-bureaucratic writing techniques; the latter was responsible for achieving references to an imagined past and enacting the parties as cultured, classy subjects. Narratives of restoration and purification spanned over both documents pushing the premise of the parties that contemporary sociopolitical problems could either be solved by restoring a former state of society or by purifying the current state through the employment of science and technology. The use of superlatives and narratives of salvation thereby created the idealism and enthusiasm that enabled a vision of a paradise.

Moreover, we have seen how the use of technology as a "plastic word" and narratives of technological fixes enable the sociotechnical vision that technology is a supernatural, magical force. In both documents, technology is ascribed the role of a universal remedy and a

[39] High culture artefacts such as Greek columns, for instance, which Stolyarov II. chose for one of the episodes of the *Virtual Enlightenment Salon* as a background image: https://www.youtube.com/watch?v=cYx7py19vlQ (accessed 05.10.2020)

sense of wonder, excitement and fascination emanates from how the parties write about it. Technology can save humanity from climate change, poverty, sickness, disability, injustice and bias, even discrimination and death – it is a force that symbolizes pure happiness and well-being. Through leaving unexplained how technologies solve respective problems however, technology is black-boxed as well as mystified in both transhumanist documents and through this mystification technology gains a magical quality.

This has, among others, to do with the character of the "'edgy' and barely comprehensible technologies" (Zandbergen 2010, p. 173) humans deal with today, but also with the fact that transhumanists enact speculative technologies as real, thereby generally ignoring the materiality and ambiguity of technologies, their co-production with the human and social, and that technologies "bite back" (Tenner, 1996). The hype of techno-fantasies, as also Don Ihde (2010, p. 126) concludes, "[…] is the current code for magic". Yet, the idea of technology as magic can be found in discourses around computing and digital technologies (Finn, 2017) and within the New Edge movement of the 1990s in Silicon Valley (Zandbergen, 2010); the latter of which could stand in a "lineage of visions" with the vision of *Technology = Magic* which transcends the digital (Hilgartner 2015, p. 39). The sociotechnical vision of *Technology = Magic* is, in my opinion, a very persuasive vision in a culture in which many people are alienated by technology and excluded from its production process; a culture in which corporate actors arrange almost ritualistic technology spectacles that emphasize the playful and fantastic aspects of technologies. It would be an interesting question to pursue in this regard, whether the vision of *Technology = Magic* incorporates the possibility for and desire of transhumanists to re-enchant society through technoscience and the meaningfulness associated with Enlightenment culture.

Beside these two visions, I have further elaborated on transhumanist selves that are envisioned and performed in the material. Here differences between the two transhumanist parties became visible, differences that might be interpreted as revealing the varying national communities and imaginaries the parties are part of. Whereas the German transhumanist party envisions itself as a humanist, philanthropic pedagogue; the US transhumanist party envisions itself as, what I have called, an outlaw-gentleman. In the narration of the outlaw-gentleman, we have seen that values such as risk-taking, boldness and independency are crucial; traits that are encouraged in American culture. At the same time there is a sense of 'Englishness' that comes to be through the USTP's use of anachronistic language that has a Shakespearean feel to it. The noblesse in the, at times theatrical, enactment of the outlaw-gentleman could indeed be seen as embodying influences of the English colonialization, since Shakespeare was the most popular playwright before the American Revolution and was integrated into

American folklore (Levine 1984, p. 40).[40] Indeed, the masculinity that is constructed in the USTP's narrative of self might refer to "[...] an older model of manliness associated with the Founding Fathers and [...] with a kind of subdued, quiet, earnest, hard-working, sober English manliness" (Elton & Shapiro, 2020).

Further underlying in the US party's document is the widespread imaginary that the U.S. constitution from 1787, whose original meaning the USTP (2017) wants to restore, embodies the promise of political justice (Guinier & Torres, 2012). By contrast, the German party was more relative, yet lecturing and didactic in its rhetoric and seemed at times pressured by the prospect of radical technological development, which they assumed to be inevitable. Transhumanist solutions to deal with technoscience were thus promoted under the banner of values such as foresight and preparedness. The figures of the German pedagogue and the American outlaw-gentleman are in equal measure vanguard identities and both self-enactments champion the humanist ideal of a "well-rounded person" (Bostrom 2005, p. 2), which fashions the transhumanist parties as decent and reasonable revolutionaries, neither too right nor too left on the political spectrum.

It has further become clear, that transhumanism does not question the classifications it introduces – between healthy and not-healthy, rational and irrational, happy and unhappy, subjective and objective – nor the societal norms that undermine these classifications. Much rather, transhumanism restores and extends well-established thought traditions and modern myths such as capitalism, patriarchal body culture, the objectivity of natural and experimental knowledge, and anthropocentric ideas about the power and control of civilizing men, that are unfortunately very persistent. Instead of representing a third way of politics, as transhumanists such as Zoltan Istvan contend (Benedikter & Siepmann, 2016), transhumanist ideology is a contradictory hybrid of right and left assumptions and ideas, which is one of the reasons why many of its ideas of social justice are condemned to failure right from the start (Ferrando, 2013). What we see with the rise of transhumanist politics is hence not the emergence of a charitable movement that establishes a paradise for all, but a revival and strengthening of Western ideologies as well as a competition between states over who owns the future.[41]

Through positioning themselves in enlightened vanguard roles, a sense of arrogance, if not megalomania, further arose from the documents. This "self-deifying momentum" (Kaeser 2013, p. 564) and "deep self-obsession" (Barbrook & Cameron 1996, p. 62) lies at the root of the transhumanist ideology that is built on "ultra-humanism" (Ferrand 2013, p. 27) and an extreme individualism that can be read in line with the value of egocentrism as defended by

[40] Indeed, in 1843 the *St. Charles Theatre* in New Orleans "[...] depicted Shakespeare in a halo of light being borne aloft on the wings of the American eagle" (Levine 1984, p. 42).

[41] As Istvan (2020) remarks in one of his blogposts on Medium: "Whoever owns transhumanism […] — will own the future. Vladimir Putin has said as much".

Ayn Rand. Future research could ask in this regard whether transhumanist reasoning and rhetoric are justified by and within “hypermodern” culture that pushes individual desires for omnipotence, ultimate experience, and the superlatives of life (Gottschalk, 2009; Lipovetsky, 2005). Whereas many of the inequalities and psycho-social pressures the parties point to are tightly interwoven with capitalism, transhumanists try to overcome such problems by *fulfilling* the capitalist fantasy of an efficient, indestructible superhuman. Rather than reflecting narratives about beauty and eternal youth in Western lifestyle culture, the efficiency regime of capitalist competition and the conditions of living, working, and feeling it produces; or the, indeed very earthly, imaginaries of strength, success, prosperity, and happiness; transhumanism attempts to turn everyone into a superhero(ine). Subsuming transhumanism under the posthuman paradigm is thus inadequate because transhumanism does neither question the human nor its construction, but praises the human genius and its "mind children” (Moravec, 1988) – science and technology – thereby referring to an elitist culture that is imagined as a desirable and dignified state of living for all humans.

While there are manifold issues to be explored in regard to the transhumanist movement – from the underlying emotions of transhumanist politics, the identification of followers with transhumanist ideology, to the relation of transhumanism to the tradition of labelling bodies and nature as female and thus negative (Lerner, 1986; Ortner, 1974) – this thesis has contributed to the debate about transhumanism by examining how narratives and rhetorical practices are employed by two transhumanist parties to design sociotechnical visions. Further, I have discussed how a specific way of utilizing language reveals transhumanist understandings of culture and suggested that the notion of a cult could be suitable for the movement in a two-fold sense – as a notion that designates the transhumanist discourse as a cult of technoscience, and as a conceptualization that might be able to capture the character and dynamics of the transhumanist belief community.

As a discipline, that is critical of technoscience as well as concerned with social justice, STS needs to engage with the question of how the rise of transhumanist politics and the tempting concomitant narratives and visions, relate to other phenomena of our time and what they mean on a broader level. The political climate and sociocultural situation for transhumanism could certainly not be better, and I think we need to actively take a stance to participate in shaping these discourses about the human future. Whereas transhumanism relentlessly pushes the search for objective truth, I am convinced there might be something to gain if we would search for wisdom and humbleness as a species instead, embracing multiplicity and the instability of truth value (Marres, 2018) rather than avoiding it, thereby remembering that, as Theodor W. Adorno and Max Horkheimer (1947, p. 4) have put it: “Enlightenment is totalitarian.”

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## Illustrations

Figure 1: Graphic is made by the author of this thesis.

Figure 2: Aubrey de Grey. https://www.christiantranshumanism.org/podcast/36?fbclid=IwAR3-dKTjcnZGamzU0QhzApdrKQ-dBCZdzn7dg3dnK69OKLtQtZZG-ZxXNQE (accessed 09.09.2020)

Figure 3: Sir Isaac Newton, oil on canvas by M. Keynes. https://supernova.eso.org/germany/exhibition/images/isaac-newton-cc/?fbclid=IwAR3OF9OrFWtsY_d3L_SiFiWmnFjo0N-ixyFpra5EgSsKzDC_5RL5IJXqbNo (accessed 05.10.2020)

Figure 4: Logo of the online magazine *The Rational Argumentator* by Gennady Stolyarov II. http://www.rationalargumentator.com/index/ (accessed 02.09.2019)

Figure 5: Profile picture of Zoltan Istvan on the blogger platform *Medium*. https://medium.com/@zoltanistvan (accessed 09.09.2020)

# *Appendix*

## Abstract (English)

*In the last decade, the world has seen an increasing prominence of the transhumanist movement. Whereas Silicon Valley has proven to be a center for the movement's visionaries, transhumanist political parties have risen as a global trend. As a philosophy that promotes the technoscientific transformation of the human, transhumanism strives to go beyond the limits of nature. While frequently criticized on a theoretical level, case studies about transhumanism are rare within and outside of Science and Technology Studies. The research at hand approaches this gap by focusing on the linguistic production of sociotechnical visions in two transhumanist documents: the constitution of the U.S. Transhumanist Party and the party program of the German Transhumanist Party. Two sociotechnical visions became visible: the vision of Technology = Magic and the vision of Paradise (Lost). While a proneness for prestigious culture and a romanticization of the Enlightenment era produced the vision of a paradise that was lost in a different time, technology was mystified as a magical fix and universal remedy for solving human problems. On the background of these findings, this thesis does not only elaborate on transhumanist understandings of culture – rather than nature – but also proposes that transhumanism can be conceptualized as a 'cult of technoscience'.*

## Abstract (German)

*In den letzten Jahren hat der sogenannte Transhumanismus weltweit an Bedeutung gewonnen. Silicon Valley hat sich hierbei als Zentrum für transhumanistische Visionäre erwiesen und transhumanistische Parteien haben sich zu einem globalen politischen Trend entwickelt. Als Philosophie strebt der Transhumanismus die technologisch-wissenschaftliche Transformation des Menschen an, um die Grenzen der Natur, sowie den als obszön empfundenen Tod, zu überwinden. Obwohl eine kritische Auseinandersetzung mit dem Transhumanismus auf theoretischer Ebene stattfindet, fehlt es an empirischen Untersuchungen dieser technoprogressiven Bewegung. Die vorliegende Arbeit nähert sich dieser Forschungslücke an, indem sie sich auf die sprachliche Produktion soziotechnischer Visionen in zwei transhumanistischen Dokumenten konzentriert: der Verfassung der transhumanistischen Partei der Vereinigten Staaten von Amerika und das Parteiprogramm der Transhumanen Partei Deutschlands. In der Analyse wurden zwei Visionen sichtbar: die Vision von Technologie = Magie und die Vision von dem (verlorenen) Paradies. Während eine Neigung zu prestigeträchtiger Kultur und ein romantischer Blick auf die Epoche der Aufklärung die Vision eines verlorenen Paradieses hervorbrachte, wurde Technologie in den Dokumenten mystifiziert und als magische Lösung für die Probleme der menschlichen Spezies konstruiert. Auf dem Hintergrund dieser Ergebnisse wird das Kulturverständnis der transhumanistischen Parteien diskutiert und argumentiert, dass der Transhumanismus als techno-wissenschaftlicher Kult konzeptualisiert werden kann.*