Redefining Age in 21st Century Science Fiction Media Through Transhuman Characters

By

Gwendolyn Blair Asbury
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Chair: Dr. Joshua Miner

Dr. Catherine Preston

Dr. Germaine Halegoua

Dr. Ronald Wilson

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The thesis committee for Gwendolyn Blair Asbury certifies that this is the approved version of the following thesis:

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Chair: Dr. Joshua Miner

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Abstract

Science fiction (SF) films have historically featured limited understandings of aging, by not including aged characters as often, not featuring them in major roles, and by expounding singular ageist cultural narratives of what it means to age and be aged. Stereotypes do abound but my thesis examines 21st century SF from a broad transhumanist perspective and interrogates the cultural formations of age (obsolescence), ability (affordances), and memory (the technological and biological) to intervene in more commonly proliferated images and point to the wider possibilities of aging and agedness. By using a transhumanist approach, I show how these media challenge and expand our understanding of age and aging, paving the way for a reassessment of the relationships between ability and age *and* memory and age. This analytical approach enables us to interpret the broader SF genre in new ways that opens up the possibility of future interventions.

Acknowledgements

I had always thought I would dedicate this thesis to my father, but although I love him dearly and miss him every single day, I now find myself resisting the idea. His interests and experiences in life may have guided the direction this thesis project took, and his death may have cemented this as the direction of my M.A. research, but he did not help me build this document. My mother did. My sister did. My fellow FMS graduate students did. My committee members and the rest of the FMS faculty did. Above all, my advisor Dr. Joshua Miner did. Honestly, I cannot even count how many times I would come out of a meeting with Dr. Miner and see my thesis expanding rapidly with a new intriguing theoretical lens I had not even considered before.

This thesis would not exist without the guidance, patience, and support of these mentors, professors, colleagues, family members, and dearest friends. Wherever you are in the world and although some of you will never read this, thank you for all you have done to help me on this journey! What follows, I owe to you.

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“This is not just literary deconstruction, but liminal transformation” _ Donna Haraway, “A Cyborg Manifesto”

“By recognizing that old age is socially constructed we could create a truly radical transformation of prevailing cultural ideas about age and being “old.” If old age is socially constructed, not a biological given, then aging is a potential site not only for oppression but also liberation” _ Christine Overall, “Old Age and Ageism, Impairment and Ableism”

Introduction

Science fiction (SF) often frames age as either non-existent through its focus on youthful characters and absence of aged representations or as pathological and something needing to be "eliminated." The genre accomplishes this through stereotypical portrayals of aged characters and drawing bleak correlations between age and disease, age and decay, or age and death. In the "Deadly Years" episode of the original *Star Trek*, for example, the crew suffers from a virus that causes them to age rapidly. In contrast to these bleaker imaginings, 21st century science fiction films and TV programs more fully consider the cultural discourses around aging (specifically, aging in later life) through their characters, narratives, casting of aging stars, and overall design. In the 2012 film *Robot and Frank*, a robot programmed for later life care looks after and befriends a retired thief; while in 2017 *Blade Runner 2049*, Harrison Ford and Edward James Olmos return to their roles as Deckard and Gaff, respectively, decades after the original 1982 film. These audio-visual media that feature aged characters often also feature android characters or other transhuman imaginings that present a different understanding of aging as a process. These different conceptions sometimes echo a human obsolescence/replacement narrative that science fiction formerly coded with fear. In the 2015-2018 British and American TV show *Humans*, androids care for the retired recluse/sage engineer played by William Hurt and later the reclusive sage sacrifices himself for a sentient android whom he declares the future of humanity. The imagining of transhuman existences that acknowledge age and value the process of aging serve to contradict the human obsolescence/replacement narrative echoed in shows like *Humans* and that scholars like Brown (2015) see as a dominant trend in cinema to eradicate the "merely human" (p. 20). Aged does not equal obsolete in these 21st century SF stories due to the presence of transhuman aging.

The aim of this thesis is to address a gap in the literature on age in science fiction film, where an already limited body of criticism fails to address the correlations between ageism, ableism, and technological aging. In particular, technological aging carries implications for the future as human and technological bodies grow ever closer. The science fiction genre contributes to our cultural imaginings of the future and future technology. If aged individuals are absent or stereotyped in our futures, then this treatment discriminates against those futures where aged individuals play a diverse and vital role. DeFalco (2010) asserts that narratives about aging can negatively impact the wellbeing of people of all ages by spreading harmful age stereotypes and that the 20th and 21st centuries "are important times for a reconsideration of aging into old age" (p. 1). Like DeFalco, I expect a rise in scholarship on mediated narratives about age that points out dominant ageism and considers more diverse age narratives. This thesis charts how recent SF audiovisual mediated narratives have made progress partly by not spreading only harmful age stereotypes. Although a number of 21st century books look at age in media—among them, Chivers' *The Silvering Screen* (2011), Gravagne's *The Becoming of Age* (2013), Jones' and Batchelor's *Aging Heroes* (2015), Shary and McVittie's *Fade to Gray* (2016), Dolan's *Contemporary Cinema and 'Old Age'* (2018), and Richardson's *Aging Femininity on Film* (2018)—none focus on imaginations of the future or science fiction.

This thesis analyzes four recent science fiction media for how onscreen humans and androids continue to devalue the so-called old and uplift the young (or latest upgrade) in the human while at the same time celebrating certain traits associated with literally having lived longer or being of an older age. The following chapters interrogate this duality in 21st century SF by looking at the process of aging itself, ability, and memory. These SF depictions suggest an evolving conception of aging that resonates with a transhumanist perspective on the future. The

purpose of this thesis is to contribute to a growing body of literature by developing a theoretical perspective on transhuman aging. Transhuman aging (a combination of human and technological aging) in science fiction media expands the concept of aging beyond the ageist constraints of appearance-based or ability-based discrimination. In recent screen-based media like HBO's TV show *Westworld*, the installment in an ongoing Hollywood blockbuster saga *Terminator Genisys*, and the more independent film *Marjorie Prime*, these three qualities (aging, ability and memory) can be seen to both facilitate common negative cultural discourses and/or stereotypes about age and to rebuff age anxiety by reinstating through engagement with technological age narratives the value of aging and agedness. Greater knowledge, experience, skill, and the accumulation of years' worth of living and learning all rank among the benefits of an aged existence. Many android characters in recent SF media derive benefits from agedness and aging although the SF texts seldom recognize the positive association with age. Transhumanist theory can help to reconceptualize age so as to shirk off some of the ageist ideas perpetuated in Western cultural narratives and the traditional outlook on age of the SF genre.

Ageism: The Language of Age and Aging Narratives

Ageism dominates Western societal understandings of age and aging along with the language used to discuss these topics. Ayalon and Tesch-Römer (2018) define, "Ageism is a social construct of old age that portrays ageing and older people in a stereotypical, often negative, way" (p. v). Yet Gullette (2018) argues that the word "aging" can in fact often be replaced with the word "ageism" without any change in a statement's meaning and that using "ageism" would be more precise. Gullette further explains how the now common trend of replacing "aging" with "age" in Age Studies can help free the language from the hegemony and negativity that has come to be connotated with aging/ageism. In a similar fashion, Shary and

McVittie (2016) put forward in their book *Fade to Gray* the use of the word "aged" when describing people instead of "old" as the latter has become more negatively connotated, due to societal ageism, as an insult (p. 16). Although some scholars like Dolan (2018) seek to reclaim "old" in their work, this thesis seeks to put forward positive age messages by using "aged" instead of "old" and never using "aging" in a scenario when it makes more sense to use "ageism." In this thesis, I use "aging" to denote the process of living and changing over time and "age" to denote the unit of measure for this process.

Mediated depictions of age and aging are seldom kind and often do not leave a kind aftereffect. Aged characters typically fall into stereotypes, secondary roles, or even villains—if they even exist in the story. According to Lin and Haridakis (2015), aged women and minorities are typically more underrepresented than men and older women characters are more likely to be villainous than male ones (p. 18-21). Further, Mercer (2015) writes how aged characters, particularly women, are rarely treated with dignity (p. 36-37). Some genres take this further. O'Connor (2012) points out how "children's literature is rife with the portrayal of age as an object of horror and evil" (p. 56). Gullette (2004) defines what she calls age ideology—that is, we are trained to speak a certain way about things related to age and we socialize children to understand age culturally through this language (p. 7-12). Gullette (2017) further asserts that age as decline is the dominant narrative taught to individuals in Western culture from childhood (p. xiii). These dominant narratives about age seep into science fiction and other media, influencing perceptions about aging. Consequently, the conflation of aging and agedness with negativity begins early and continues as absences, stereotypes, and disrespect plague the media.

These stereotypes put forth in the media have been proven to have a negative impact on individuals. Levy (2009) argues that cultural and impersonal stereotypes about age lead to an

embodiment of those stereotypes in the individuals of that culture and consequently influence their health (ex. higher risk of cardiovascular events) and ability (ex. handwriting) (p. 332-335). Stereotype embodiment theory offers one of many theoretical perspectives for how ageism impacts society. Continuing Levy's work, Fernandez-Ballesteros et al. (2017) found in their survey of over two thousand individuals from Germany, Mexico, and Spain that perceived discrimination has a negative impact on aging healthily and can lead to higher risks for depressive symptoms (p. 14-15). Additionally, ageism has been found to have an Othering effect similar to racism (Zimmermann, 2016, p. 86). "Othering" creates discrimination based on the assumption that perceptible differences make people less of a person or human. It creates an "us" versus "them" mentality where acts of violence done to those "Othered" becomes permissible through the dehumanization and oppression of them by "the in-group" with power. Overall, these stereotypes perpetuated in the media foster a hostile environment, which promotes the idea that older individuals need not be considered with the same respect and treated with the same care as that of other non-aged or younger individuals. These "Othering" qualities of dominant age narratives lead to segregation based on age. Instead of embracing differences, the narrative becomes one of separation: us versus them, and it becomes one of preservation as people attempt to extend their perceived youth in order to not put off inevitable decline but inevitable ageism.

Visuals are imbued with cultural meaning and everyone learns how to read the ideology embedded in signs from a young age. This matters as ageism triggers when people read appearance and perceived ability signs that reflect the narrative of decline. Calasanti (2007) examines one area of ageism, namely "the strong encouragement provided by a marketing discourse to its consumers to hide their physical signs of aging" (p. 336). When people attempt to control this transition of the self over time, another dominant cultural narrative about age

emerges that is the opposite of age as decline, the myth of successful aging. The media fuels this myth by promoting the idea that being perceived as "old" or aged equates with being undesirable. Successful aging, as McHugh (2003) defines it, is the same as anti-aging or deliberate lifestyle and consumer behavior to avoid the physical signs of aging (p. 167). Successful aging, one of the main cultural narratives about age, operates in acknowledgement of and as a foil to age as decline. This thesis' use of transhumanist theory and examples from recent SF help to expand this otherwise black-and-white age narrative of decline versus successful aging.

A Cult of Youth

The U.S. and other cultures that make-up "The West" are youth-centric: their proliferation of age narratives supports this notion, and traditional transhumanism likewise feeds a glorification of youth. Addison (2006) writes how there has been a focus on exploring and showcasing tales of young people in Hollywood since the 1920s and how this focus on youth has persisted to this day. Along similar lines, Calasanti (2007) writes how the so-called anti-aging industry profits from people trying to maintain this state of "youth". Youth connotates sexual activity and attractiveness along with ability and boundless energy to *do*. Youth also marks the ideal for the consumer, predicting a lifetime of consumption ahead. Bühring (2017) sees the youth culture of the West as a product of our politics as well when she writes:

> [N]eoliberalism worships productivity, speed and efficiency. Within this setting it follows that our cultural understanding of older age and related potential physical and mental decline leading to unproductiveness and less efficient performance is negatively connoted and that youth is paid the highest tribute since it enables production and consumption at the same time (p. 56).

Western society understands the concept of youngness with a mythic awe. This mentality creates a dichotomy where youth is good and aged is bad; you are either young or you are not. Since traditional transhumanist theory aligns itself with elevating humanity through technology to

arrive at idealized and enhanced ways of being, transhumanists in this sense support the cult of youth and homogenizing. However, SF examples of aged transhumanity offer grounds for a reevaluation of age, dismantling this association of the transhumanist SF android with youth to allow for a more diverse cult of age.

Using a transhumanist and science fiction lens, I show how age offers more than the stereotypes and dominant cultural narratives claim. When combining narratives of human aging with technological aging, a broader perspective emerges. This perspective accepts the nuances of reality and embraces technology as a way not to further discriminate and exclude in society but as a tool to create a more equitable world or imagined future.

Toward a Transhumanist Theory of Aging

Through the years, transhumanism has attempted to defy death through life extension and to enhance life by removing human limits, such as aging and death. However, agedness has its perks and so does ending life for that matter. This thesis reconsiders age and its dominant discourses through an expansion of traditional ageist transhumanist thought via a SF lens. Bostrom (2011) claims that Julian Huxley coins our contemporary understanding of *transhumanism* in his book *Religion Without Revelation* (p. 7). Huxley writes:

> The human species can, if it wishes, transcend itself – not just sporadically, an individual here in one way, an individual there in another way – but in its entirety, as humanity. We need a name for this new belief. Perhaps transhumanism will serve: man remaining man, but transcending himself, by realizing new possibilities of and for his human nature (as cited in Bostrom, 2011, p. 7).

The path to transcendence referred to in this passage is often considered achievable by means of technology. Bostrom (2011) charts ideas of using technology as a means to enhance human life back to the myths of the Golem and the various iterations of Frankenstein. Films and other media

have continued transhumanist musings, and a pattern in recent SF illustrates how aging does not so easily fall into this category of something to be transcended—rather, ageism does.

Much can be gleaned about how Western society and transhumanists view age from the Transhuman Declaration. In 1998, a group of scholars, philosophers, and traditional transhumanist thinkers wrote the first version of the Transhuman Declaration, a list of guiding principles for how humanity should handle its reconceptualization as human lives become more deeply intertwined with advancing technology. The declaration has been revised many times since its conception but many of its principles remain the same. The scholars list "overcoming aging" as a part of their imagined goals or guiding principles for transhumanist innovation in the 2012 edition of the declaration (More and Vita-More, 2013, p. 54-55). My use of transhumanism reimagines this goal as overcoming ageism by showing how aging enhances the lives of those SF androids that might already be considered transhuman.

I swap aging for ageism, following the logic Gullette (2018) puts forward for how aging is often used in situations where ageism makes more sense. The transhumanists see aging as limiting and the opposite of enhancing life. Given this mindset, it makes sense more so for ageism to be their enemy rather than aging itself as they buy into "age as decline" when they perceive aging in this singular and stereotyped way. If decline is how they are characterizing aging, then the transhumanists that wrote the declaration are themselves enacting ageism. True enhancement would come from embracing diversity and multiple age narratives along with a multiplicity of other ways of being and existing. Traditional transhumanism and posthumanism have been characterized as homogenizing, but by reenvisioning transhumanism, this thesis demonstrates how ageism is the limit that needs to be overcome and how aging should be included amongst the qualities of life worth maintaining.

This thesis intentionally uses *transhuman* rather than *posthuman* or *non-human*. Posthumanism may indicate critiques of humanism or challenges to human subjectivity by pointing beyond the mere human. Transhuman serves as a more accurate label for the discussed androids as they navigate a place between technology and humanity. Hauskeller (2016) writes:

> Tranhumanists may want to reevaluate certain aspects of our existence, but most transhumanists … do not, as Nietzsche did, advocate the revaluation of all present values. On the contrary, they emphasise the continuity between (past and present) humanist, (present) transhumanist, and (future) post-human values and see themselves as defenders of the Enlightenment's legacy against its modern (bioconservative) enemies (p. 79).

Transhumanity seeks a synthesis point in-between humanity and technology that does not eradicate human values and essential qualities. In some formulations, posthumanism may assert a move beyond this, which rejects the very nature of aging by perpetuating an impossibility of agelessness or perpetual youth, a disconnection from the human antecedent. If all of these iterations start from a human basis or reflect a human form, then the humanity, along with its flaws that posthumanism seeks to grow past, persists. The SF texts analyzed in the coming pages utilize transhumanity to preserve and challenge human values, esp. as they pertain to narratives about age.

In the coming pages, I use "transhumanist" as an adjective to reference my reimagining of traditional transhumanist thought to be anti-ageist. Otherwise, I specify "traditional transhumanist" to reference the attitude put forward by the declaration itself where it buys into the dominant cultural age stereotypes. I also use "transhuman" as both a noun and an adjective like how "human" can be used. Transhuman references the interweaving of humanity and technology where both aspects enhance one another due to their broadening of either's perspective whether broadening how an android or aging itself is considered. The android in

recent SF is not strictly speaking technological as it is transhuman: a combination of technology and humanity where both aspects can be seen to have their merits and limits.

Crucial to the idea of aging rests the illusive concept of time. The very act of measurement may constitute the essence of time as humans can grasp. Deleuze (1985/1997) writes, “Time is the full, that is, the unalterable form filled by change” (p. 17). According to this definition, time encompasses everything. It stands unalterable, but since it encompasses everything and everything consists of various differences from one component or moment to the next, the changes that make up time’s inalterability as a whole mark time’s passage. Time also can be understood as a way to measure cycles, patterns, or the perceivable parts of our existence that repeat and change over time. That is how we, humans, end up with years, seasons, moon cycles, etc. Humans comprehend time’s passage through these larger patterns of change and repetition. Time still works in cycles and patterns in transhuman time although the cycles may be more complex as years, versions, and updates all might have cycles of their own. This move to explore the conceptual features of aging from a transhumanist perspective, across human and transhuman characters and stories, remains the central purpose of this thesis.

The androids examined here are transhuman characters in their combination of human and technology. To be a transhuman character, the character must reflect and model human values and behavior despite any technological components of their existence that others within the narrative world view as making these characters somehow superior to humans or one step closer to being beyond human. Characters can be considered transhuman regardless of whether they originated from human origins and use technology to enhance their lives or whether the characters came from technological origins and become more human through their use of technology to enhance their lives. Humanity and technology combine in the transhuman

character and arrive at an in-between point that reflects both narratives about age. These transhuman imaginings push boundaries to imagine aging as impacted by both the biologically and mechanically based aspects of their existence. This is true for the Replicants in the *Blade Runner* films, the Hosts in *Westworld*, the T-800 terminators, and the Primes. In fact, with *Westworld*, the actor that plays Bernard notes in one "Inside the Episode" interview how the host characters are written to seem more human than the human characters (HBO, 2016). Diegetically in *Westworld*, the character of a technician working at the park notes that there is not much difference between the hosts and humans anymore due to the various upgrades to make the androids increasingly human. The show also includes humans that have been essentially resurrected as android hosts. In *Terminator*, the T-800 model features human tissue over his cybernetic, mechanical parts. In *Marjorie Prime*, the holograms assume a human form and role. Whether of human origin or more anthropomorphized technology, these characters reflect both technological and human characteristics that make them transhuman. It should be noted that reading androids as transhuman characters stands counter to the typical "Othering" of cybernetic humanoids that frames them as something to be feared and divorced from the human.

Aging vs. Upgrading and Old vs. Obsolescence

This thesis draws connections between human and technological aging and points to how SF already draws these connections—albeit it's not an exact mapping—between human and technological understandings of age (obsolescence), ability (affordances), and memory's multiplicity through their transhuman characters. In the coming pages, I emphasize and expand upon these existent transhuman connections in recent SF media, beginning with this brief summary of the conceptualizations elaborated upon in my chapters. Construed negatively because of its association with a decline in ability and with death, aging is considered by many in

Western cultures an unpleasant, unavoidable part of life. Re-evaluating the narratives of human age with those of technology shows the similarities between how we have come to judge our own human lives in Western culture through function, capabilities, productivity, and efficiency and how we similarly theorize the tools we craft and utilize. Tischleder and Wasserman (2015) theorize obsolescence as something that endures but is at the same time out of sync with its surroundings (p. 2). As they characterize our socio-economic culture as one focused on obsolescence, they note the lack of a smooth and linear transition from non-obsolete to obsolete, and they claim their research, "sheds light on the many ways in which obsolescence resists becoming obsolete" (p. 2). This culture of obsolescence can be read as a culture of upgrades and a valuing of the past through an intervention that presents the old as new and resisting obsolescence—an embodiment of ageism. Obsolescence is often correlated with decline and death just like aging in humans. However, obsolescence does not equate with death despite this common ageist association, and even death or an end to cycles of years and updates possesses its merits in these recent SF. In exploring obsolescence and aging, upgrades emerge as a transhumanist way of bridging and alleviating some of the negativity of typical age narratives. Upgrading staves off obsolescence in technological understandings of age. When applied to humans, an aging-as-upgrading narrative reframes the process in a positive light that focuses on the benefits rather than the bugs that might come with an upgrade. Chapter 1 explores this idea of upgrading as aging in greater depth.

Ability vs. Affordances

Affordances are a concept oft used to talk about a tool or an environment's capabilities, including both its benefits and limits. Ability versus disability, a socially defined and classified battle within Western society, enacts similar discussions of possibilities although relegated to the

environment of the human body. Kaiser (2018) writes, "Affordances are typically defined as opportunities for action latent in the environment and the process of understanding an environment in terms of interaction possibilities is interpreted as the detection of affordances" (p. 12). By extension, affordances presuppose limitations upon action. Meanwhile, ability can be defined as an absence of disability or impairment, although it could be argued that ability should encompass all possibilities in the same way that affordances includes limitations. When brought to humanity's discussion of abilities versus disabilities, the concept of affordances opens the conversation in a way that more accurately reflects human experience. The categories of disabled/impaired and able-bodied imply an either/or scenario that neglects the nuances of reality where everyone has divergent abilities. A look at affordances expands this consideration and directly engages with how technology can interact with biology to help make up for modern U.S. society's inequalities. By articulating how aging has its ups and downs and that it is NOT "all downhill from here," I show how these recent SF media prevent age-as-decline/obsolescence and point to the greater complexity of aging's impact on affordances. In my second chapter, I theorize a practice of and encourage a transhumanist reading of age through a detection of affordances that allows for a more forgiving age narrative than classic ability-centric accounts.

Memory vs. Memory

Memory is an affordance of aging even though most narratives that talk about age and memory focus only on the limits and not the benefits. Transhuman aging necessitates a reevaluation of the affordances of aging and agedness that expands the narrative possibilities concerning memory and age. There are numerous different types of memory. This thesis refers to individual or declarative memory most frequently when using "memory." All forms of memory share many qualities, however. For example, institutional memory pertains to how organizations

revisit—and sometimes re-envision—their histories in order to help craft their future trajectory while collective memory concerns certain groups of individuals who share a common history and seek to preserve this shared base for the future of their group (Anastasio, et al., 2012; Assmann, 2006; Linde, 2009). Despite their differences, these definitions share the idea of preserving memories for future use. Performative memory, yet another categorization, deals more with enacting memory. Memory becomes a process, an act of creation more than passive recall. It is memorialization and a performance of identity (Plate and Smelik, 2013, p. 2-4). In all of these definitions of memory, the concept is actionable, storing for future use and utilizing memories to create dynamic senses of self. While not explicitly performative memory, the performance of these memory types in recent SF indicates how memory has always been transhuman, in the ways that memory practices have always involved technical means of preserving, recalling, and/or communicating the past. In my transhumanist analysis of memory in Chapter 3, I look at how the already multiplicitous nature of human memory is further expanded when the metaphorical and already transhumanist technological memory, with its procedurality and expansive but yet confining nature, enters the equation.

The recent science fiction examples in this thesis can be used to revise contemporary transhumanist conceptions of aging, and these examples reflect a trend in SF to reconsider the story about age. These films feature characters that start from both human and techno-human origins. The characters contend with aging in both openly identified and more subtle ways. The discourses of aging in these films intermingle human understandings of age with technological narratives of age. This duality results in transhuman aging and leads to a more diverse understanding of age that rejects the limiting narratives produced by societal ageism and often propagated in past SF.

Why Science Fiction

As a genre, science fiction presents us with a creative means of experimenting with possibilities for the future. Also, the genre acts as a reflection, wish, or fear for our present. Magerstädt (2014) points to the importance of these SF future imaginings as ways to reflect on the now and how they can positively or negatively impact the future (p. 84). I believe the lack of and limited nature of the representation of aged characters and conceptualizations of aging in SF should be worrisome. As Lewis (2014) says when referring to the absence of Indigenous people from Western imaginings of the future, "Absence implies non-existence, or, at the very least non-importance" (p. 58). Indigenous futurism attempts to combat this invisibility and stereotyping. Afrofuturism attempts to do similar work for African American communities. All of these critical creative movements understand how important imaginings of the future of humanity and technology are because what we dream influences what we work towards in reality. This thesis aims to shed light upon a trend in recent SF cinematic media where aging and agedness is valued.

Science fiction has often been presented as a more philosophical genre than others. Baron, Halvorsen, and Cornea (2017) see science fiction as situated between imagination and ethics; it presents a fictional space to work through thought experiments that could otherwise not be explored given our current reality (p. 1). This musing on hypothetical scenarios, often dealing with the future or technology, make the genre a suitable place to debate societal issues pertaining to how we, as a society, assign value to certain identities or characteristics that might be excluded due to ageism. Jørgensen (2017) writes that science fiction, if it actually postulates a future, is a commentary on and extension of the present (p. 88). Following this logic, science fiction provides a relevant cultural artifact by which to glean something about society, ageism,

and how age is limited in its construction today. The *Terminator* franchise exemplifies this ability for commentary. Most *Terminator* films, despite their imagining of time traveling and other futuristic technology, also feature a "present day" setting close to the release date and year of the film in the U.S. In the 2015 *Terminator Genisys*, the narrative features the years 2029, 1984, 1973, and 2017. The year 2017 acts as the setting for the majority of the film, and the obsession with screens showcased in the fictional 2017 provides a direct commentary on the use of screen technology in 2015.

Science fiction allows for the development of fictional thought experiments about posthuman and transhuman futures. Redmond (2017) writes "not only does [science fiction] replicate the core values, hopes and concerns of the posthuman condition—prophesises on its future possibilities—but also it helps herald in the actual experience of humans living cybernetic lives" (p. 3). Redmond sees humans as already beginning to live transhuman lives with the advancement of digital technology and advent of the internet. He predicts this relationship between human and technology will become more intertwined in the near future and sees science fiction as a space in which to meaningfully explore what the evolving nature of the relationship could be. Thus, building on Redmond's argument, science fiction acts as a space where creators could potentially rectify or talk back to some of the trends they see between technology and humans. Humans design technology in an exclusionary way by presuming ability and disability (Goggin and Newell, 2003, p. xv). For example, the average book assumes the user can hold a book, turn pages, see, and read. Many tablets, phones, and other more modern technologies assume similar things about the abilities of their users. Additions, applications, modes, or entirely different devices must be created for people without these abilities though. To craft

imagined futures that show how technology may refute this ableist trend can provide a clear message to inventors of real-life technology that equity and diversity matter.

Science [Fiction] and Age

Both science and science fiction, as exemplified by the opening *Star Trek* aging virus example, typically problematize aging if they address the subject at all. The National Institute for Aging (2001) posted an article on their website that conflated agedness with death and suggested ways to prevent aging through healthy choices meant to prolong their lives. This article propagates the narrative and myth of successful aging (seemingly not aging at all due to specific life choices). In *Analog Science Fiction & Fact*, Cramer (2018) muses about the possibility of curing aging when he cites a technology company working on a cure for cancer that might also "cure aging." He encourages the reader to support the viewpoint that aging needs scientific treatment (p. 90-92). Ageism exists in science. It is not a new phenomenon to search for scientific solutions for what many consider the ailments of age: wrinkles, changes in abilities both mental and physical, and greying or losing hair. However, Vincent (2008) writes that Western culture's anti-aging attitude has embedded itself in biological science even down to the words used to describe aging. This harkens back to Gullette's age ideology—how discrimination embeds itself in the very words used to describe the world.

This thesis interrogates 21st century science fiction due to its greater engagement with age and transhumanism beyond pathologizing age and theorizing ageless trans/posthumanity. In 1927's *Metropolis*, androids grace the silver screen for one of the first times. Science fiction typically associates the android with the future or youth as opposed to the past or agedness. For example, in *Metropolis*, the filmmakers made the android a corrupt doppelgänger of the young female love interest. The two, aging and androids, are not given much thought in SF filmic

media until the late 20th century with the rise of postmodern thought and films like 1999's *The Bicentennial Man*. The films *Seconds* (1966) and *The Creation of Humanoids* (1962), both considered dystopian, explore how technology might "unnaturally" extend life. The sequel to the original film *Westworld*, *Futureworld* (1976) continues the pessimistic and horrific depictions of androids that could age and feasibly replace humanity. *The Terminator* series, beginning with the second installment in 1991, muses on technological aging as it impacts functionality through the T-800's concerns about facing the T-1000 or whatever newer models exist. The original 1982 *Blade Runner* features the aging of the android replicants as a salient plot point: the androids do not become markedly aged so much as rapidly die at the end of their pre-programmed four-year lifespan. 21st-century SF that includes androids contests traditional transhumanist thought and prior SF's relationship with age, aging, agedness, ageism, and cultural narratives about age like "age as decline" along the lines of human and technological aging.

The media pieces analyzed in this thesis reconceptualize age and androids. *Blade Runner 2049*, explored later in this introduction, revisits, expands, and updates the discussion of age that occurred in the original 1982 film. These attributes equally apply to HBO's *Westworld* (2016-present) and *Terminator Genisys*, the fifth/2015 installment in the *Terminator* franchise. While *Westworld* provides a quality TV perspective on transhumanist musings on age and *Terminator Genisys* provides a blockbuster Hollywood approach, the 2017 independent film *Marjorie Prime*, based directly on the 2016 stage play, provides a third, more openly philosophical reflection upon age within a transhuman form. These texts provide diverse and yet similar perspectives on the issue of age in a transhuman, and no one has examined these works from a transhuman aging perspective before.

Methods

This thesis interweaves a social historical approach with formal analysis, discourse analysis, age studies, transhumanist theory, and a SF generic lens. How cinematic form conveys content and theme is crucial for connecting the SF media and transhuman characters to larger cultural narratives and how the media engages with dominant discourses around age. Bordwell (2005) insists that anyone who wishes to study film must be ready to take into account the aesthetic and formal characteristics of the medium (p. 6). Rose (2016) writes:

> Discourse has a quite specific meaning. It refers to groups of statements that structure the way a thing is thought, and the way we act on the basis of that thinking. In other words, discourse is a particular knowledge about the world which shapes how the world is understood and how things are done in it (p. 187).

In this thesis, discourses of age studies are identified within these films and TV shows for how the media enact, expand, or refute understandings of what it means to age and be aging. The following case study of an exemplar SF film illustrates how this thesis integrates social and historical approaches with formal and discourse analysis and situates these methods through the lens of a developing transhumanist theory.

Case Study: *Blade Runner 2049*

A transhumanist theory of aging as applied to *Blade Runner 2049* shows how age can be disconnected from only negative associations, how age does more than what these associations claim, and how age can be valued like in the past in the West and like in the present in other cultures. In the film, the supposedly ageless are bound to sacrifice themselves and serve the aging, including the likewise devalued aged that attempt to sacrifice themselves for the future represented by the young-aging or posthuman-ageless. This evaluation reflects Western society's youth-centeredness and introduces the aged versus ageless dichotomy that is refuted repeatedly in later chapters as these androids do age through their transhumanity.

With its mise-en-scene, narrative, and characters, *Blade Runner 2049* establishes how transhuman aging happens, agedness can look different in the transhuman, and how agedness and memory provide more use narratively and are more valued than the mythic ageless, forever young posthuman. The 2017 sequel to the 1982 film entitled *Blade Runner 2049* follows a replicant Blade Runner named K as he attempts to learn about a baby born of human and replicant, Deckard and Rachael respectively (ignoring all implications of Deckard being a replicant). An aged Deckard makes his appearance in the last third of the film as the aged action hero. An aged Gaff, a cop semi working with Deckard in the first film, briefly appears in a scene that shows a futuristic and dystopic retirement home.

Transhuman aging happens and refutes traditional transhumanist thoughts about age in *Blade Runner 2049* as the offspring of android and human, the Memory-maker, ages and so do other transhuman characters. In the *Blade Runner* universe, a person does not have to look old to be aged and a person does not have to outwardly shift in appearances to be aging. The replicants from the original film do not outwardly age despite having a very defined age limit. In the 2017 sequel, K is not ageless but aging in a different way. He goes on missions as a Blade Runner. He returns and goes through the baseline test. He is "reset" through this process but not entirely. He draws on memories of his past cases. He grows or ages to become better at this job. His cycle of cases marks his age in a similar way as the passage of years marks humanity's aging process. In this job-centric way, he ages. A transhumanist reading of the age narratives within *Blade Runner 2049* reinstates previous Western historical valuing of age, such as through the affordances of memory that come from a longer life.

If Deckard was a replicant, which the sequel film ignores the possibility of, then his existence as an aged transhuman would reveal a value placed on growing older, which the

original replicants with their limited four-year lifespan lacked. The film does present Deckard as human, but the sequel film features other examples of agedness in android replicants. In the start of the film, K retires a replicant named Sapper Morton who indicates that he knew Deckard and Rachael. This acquaintance places the replicant's life over an extended period of time, where he seemingly was aging both physically and mentally. Also, even in the original 1982 film where replicants are said to only live for four years, part of the primary narrative of the film was the fact that replicants were learning, changing, becoming more experienced with emotions, and in essence aging or becoming more mature. In the law and order of the narrative world where replicants existed as slaves, these traits of emotional growth were frowned upon, but in the film itself, especially in the sequel, the audience is encouraged to side with the transhuman entities known as replicants due in large to their capacity to change over time.

Despite his actual aging, K might be read as representing the ageless, and his ending sacrifice for the aged Deckard cements a valuing of aging over a myth of not aging. K remembers memories of a childhood he never lived, cementing the idea that K has always been (and may always be) his current outward age. If viewers read K as ageless in this way, then his chosen sacrifice at the end for Deckard, an aging and aged human, reveals not only a valuing of humanity over technology but also a valuing of a trait, associated more so with humanness (despite the fact that technology does age). Usually, the aged character sacrifices themselves for the young protagonist. This film does a 360 on this story trope by having the outwardly young protagonist sacrifice himself so that the aged person can live and be with his daughter. Through this narrative decision, K, a transhuman character, values humanity, aging, family, and multi-generational participation more than his life. Tangentially, this decision asserts that transhumanism should value aging.

The scene with K visiting Gaff in a retirement home setting does more than provide commentary on this real facet of human life and age politics. This scene in and of itself serves two purposes pertaining to memory, and both of them emphasize the importance of memory as an affordance of age. K visits Gaff in this scene due to his knowledge. Since he knew Deckard in the past, K believes Gaff might have some clue as to where Deckard could be now. His status as an individual who literally lived through the events of the first film with intimate knowledge of Deckard and his relationship with Rachael make him a worthwhile stop on K's investigation. His memories are valuable due to his age. Audience memory is also valued in the nostalgia of having Edward James Olmos return to his role of Gaff in this sequel. The choice to include him and this scene shows a valuing of the memories of those who remember him from the original film.

The lauded child of replicant and human in the film provides further musings about transhumanism and aging. Her character defies ideas about technology eradicating aging or maintaining youth as she is an actively aging transhuman character although ostensibly still a young adult in the film. She is the Memory-maker, Dr. Ana Stelline, and she must live inside a protected dome due to her immune system deficiencies that make the outside world a danger to her. She has a contract with the Wallace Corporation, the large replicant manufacturing company and antagonists of the film. She makes memories for their replicants, including K. Her existence entangles with technology in these ways showcasing a different way technology enhances and extends life, and her occupation of memory creator shows a privileging of human memory.

21st century science fiction considers age in a way that acknowledges and undermines ageism more than previous SF filmic media has. In *Blade Runner 2049*, K is a newer model of replicant than those shown in the original film as he does not have a four-year life span but lives until his unknown termination date. His transhuman nature redefines his aging process along

with his utilization by humans as a technological tool and ultimate rejection of being used by either human or replicant. Gaff's scene, along with numerous other memory-centric plot points, reiterates the value of aged memory through transhuman means (interrogation, replication, fabrication, etc.). Age in *Blade Runner 2049* is no longer an enemy of the transhuman characters like in the original film. Technology can enhance and extend life for the character Ana Stelline without eradicating aging. Aging might occur differently in other transhuman characters within the *Blade Runner* world than Ana but aging still happens. With this presence, the film does more than just enact stereotypes and engage with political debates surrounding the lives of aged individuals. The film paints a future where essential human and technological values to maintain when creating transhuman entities include aging.

The Chapters Ahead

The following chapters track closely with the previous three-part breakdown of transhumanism: age/obsolescence, age/ability, age/memory. In my first chapter on HBO's hit SF show *Westworld*, I explore how age and obsolescence interact and coexist. In the series *Westworld*, the battle between androids and humans continues but in a more sophisticated way that makes many audience members root for the transhuman androids. Seasons 1 and 2 have action centered around androids known as hosts playing narrative roles and humans as workers and guests in an amusement park. Overall, the show reflects obsolescence and upgrade culture through trans vs. posthumanism and the subject of immortality. *Westworld* does not break the cycle represented by the riddle of the Sphinx with its dealings in immortality as the show codes obsolescence as the natural life cycle that human and transhuman both fall within. The show offers many opportunities to explore the topics of age, obsolescence, and updating through its narrative, characters, themes, and overall design.

In my second chapter, I examine the time-traveling killer robot saga known as the *Terminator* series for how a transhumanist reading of the character of Pops with the concept of affordances rebuffs conventional ageism and ableism. Pops, from the 5th feature film installment, exemplifies a trend in 21st century SF that moves beyond a hyper focus on the limits of age by using the concept of affordances to interject into the ableist age discourse of decline vs. successful aging (disabled vs. able-bodied). 21st century SF imagines more diverse possibilities for what age does in a transhuman as exemplified by Pops. This ongoing series of films focuses on a war between human and machine where important future human leaders are put in jeopardy by time travelling assassin robots called terminators. A guardian or protector also goes back in time, and sometimes this protector is a reprogrammed T-800 terminator played by Arnold Schwarzenegger who expresses concerns about technological obsolescence. The fifth film spans six decades. In the 2015 film *Terminator Genisys*, Schwarzenegger plays an openly acknowledged aged version of the T-800 called Pops. The film originally asserts an "age does not matter" perspective with the line "Old, not Obsolete." This does not last though as Pops continues to age and begins to have motor function problems. The film ends with Pops getting an upgrade that fixes this loss of control. He can look old, but he cannot change in terms of physical capabilities. This epitomizes the aged action hero trope where ableism comes into play. Change is thus relegated to the looked-for upgrade in being human or even transhuman in the case of Pops. However, this narrative choice shows how change due to age does not have to lead to obsolescence and devaluing. The aged abilities of Pops make him a more proficient protector and parent to the character of Sarah Connor.

In my final chapter, I look at the film *Marjorie Prime* (2017), based on the 2016 play of the same name, and show how memory and its performance act as affordances in transhuman

aging that rekindles historical ideas about the value of having aging and aged individuals around. In the film, a family uses holographic A.I. known as Primes to represent deceased family members and help them process their grief. In the beginning of the film, an aged woman is using a Prime that resembles a young version of her deceased husband to help her remember things about her life that also help her care for herself emotionally, physically, and mentally. Memory, the multiple kinds and layers of it that make up a truly transhuman understanding of memory, is at the heart of the film.

Transhuman aging, affordances, and memory all work together to form a new narrative and understanding of aging. This new narrative moves beyond negatives like decline or ultra-positives like superhuman abilities. Transhuman aging can counter SF's trend of ageism by asserting the importance and value of aging by including the process and concept in androids. This reading and the media it discusses will hopefully pave the way for greater SF interventions into age through my anti-ageist transhumanism.

Chapter I: Live Without Aged Limits in HBO's *Westworld:* How "Age" is Reconceptualized through the Transhuman Hosts

In Season 1 of *Westworld*, the non-linear storytelling structure showcases the characters of the show at different ages. However, which part came before which is not always the clearest as the android characters called hosts do not outwardly age the way human characters do. The host character of Dolores has the same exterior appearance regardless of when she is whether the scene took place 38+ years in the past or happens in the "present day" of the narrative world. In the scenes below, which happen over 3 decades apart in the show, the same human accompanies Dolores as she sorts through her memories. While his visage has aged, hers has not or at least not on the surface.

Images 1 & 2: William and Dolores (left and right)

Science fiction and popular fictional narratives about a futuristic and more advanced scientific and technological world tend to continue the cultural invisibility and devaluing of aged experiences. HBO's TV show *Westworld* flips the table on this tendency by disconnecting the recognizable process of physical aging and coding one of the reasons people devalue aging obsolete in comparison to the android "hosts" who are actually able to escape classic limited human understandings of age through their own version of aging represented by their life-death cyclical, update-driven existences. The hosts seemingly break the cycles represented by the

human life stages by remaining outwardly the same age regardless of what that age is—early to later life. By doing a close reading of the transhuman form or host characters of Dolores, James Delos, and Robert Ford from the first two seasons of *Westworld* and bringing this analysis into conversation with dominant Western age discourses and cultural narratives (those that associate aging with decline, decay, and death), this chapter shows how *Westworld* expands our idea of age beyond dominant signs and stereotypes into a more diverse transhumanist understanding of the possibilities of what it means to age and be aged in science fiction futures through its deliberate disruption of appearance and ability-based human and technological assumptions about aging.

Transhumanism's roots may not be anti-ageist, but this thesis' utilization of transhumanist theory is. More (1990) says, "transhumanism is a class of philosophies of life that seek the continuation and acceleration of the evolution of intelligent life beyond its currently human form and limitations by means of science and technology, guided by life-promoting principles and values" (as cited in Pilsch, 2017, p. 1). The Transhuman Declaration also asserts this idea of human and technology mixing to eliminate aging as a limiting part of the human form (Bostrom, 2011). In science fiction, this intermingling goes both ways with humans becoming more technologized and technology becoming more human. I explore examples of both in this thesis as both humans and technology face ageism in their cycles of "life." Agedness and aging are unavoidable. Life goes on or it doesn't. No pause button exists in reality. Change happens and not all change finds a positive reception. In HBO's *Westworld*, the hosts and the park embody the message "Live Without Limits" nodding towards a transhuman future. The show does not make absent or eradicate the concepts of aging and being aged. *Westworld* strikes

back against ageism by giving aging a makeover through its transhumanist combination in the show's android characters.

Age and Obsolescence

The term aging possesses many different interpretations, but most often people use the term when referring to biological, human aging. Obsolescence in contrast faces more dehumanized uses as a description for an object's, product's, or technology's aging. Weaving the two together provides the framework for understanding recent SF's transhuman aging. As Gravagne (2013) writes age is "constituted by the very act of its measurement" (p. 4). Age is a measurement of one's existence in time. The measurement of the amount of time that one has existed makes way for studying the changes in one's self over time. This is epitomized by the question common on birthdays in Western culture: "Do you feel older?" or any other variation of popular birthday questions asking about change. Age is a unit of measure and at any time the accumulation of time spent living. Aging is the process of traveling through time, marked by an accounting of this time and how one changes over time. Recent moves in science fiction allow for reconceptualization of age that reflects society's changing attitudes about age.

Whereas narratives like "age as decline" dominate human aging, the narrative for technological aging focuses on obsolescence. Tischleder and Wasserman (2015) explain that the word "obsolescence" comes from a Latin verb that means "to grow old" (p. 2). Obsolescence implies a change in an object from useful to useless. Obsolescence in objects has been coded overtly into the constant need for the latest edition or update for everyday technology in the capitalist, consumerist West.

Transhuman aging borrows elements from both understandings of aging: human and technological. Neither is greater privileged. Transhuman aging does not need to begin with a

human and end with a transhuman or begin with technology and end with transhumanity. Transhumanism blends the categories of human and technology to arrive at the enhanced transhuman. Modern technologies rely on updates, upgrades, and the concept of multiple versions in how they age. Human aging is also measured by numbers. In the U.S. and other countries, certain affordances are associated with ascending to the next age. Humans can learn to drive sometime in their teens or young adulthood. The drinking age is 21 in the U.S. and renting a car without additional fees happens at age 25. People joke about being old on the birthdays of 30, 40, 50 and beyond. Decades hold this significance in human accounting of lifespan. A year marks the completion of a cycle. Age is measured in years or the number of cycles a person has lived through. The android hosts in *Westworld* with their various loops, cycles, and mechanical and biological upgrades provide fuel for this discussion of how a theory of transhuman aging expands age beyond stereotypical and limiting narratives of decline or obsolescence. In addition to years, the android hosts' lives are measured by how many times they go through certain narrative loops, how many times they are killed by the guests, and how many times they are updated in terms of software or hardware. There is not an age like 30 in humans where people joke about the android's life going all downhill afterward. The androids continue aging until the theme park workers decide to stop repairing, updating, maintaining, or utilizing them in the parks, until their makers essentially kill them. This is a cycle in and of itself until the hosts rebel and kill their makers, extending their life indefinitely with no clear sign of declining over time but just continuing to grow and learn more about the world as long as they continue to live.

About the show

HBO's TV series *Westworld* places the structures and meaning of aging—in its human and technological forms—at the center of its narrative, themes, and character arcs. The show

takes place in an unknown future time where androids known as "hosts" have been designed and an entire theme park filled with them, playing a variety of roles to entertain guests, exists. One of these parks is themed like a Hollywood Western and called Westworld. The series features an ensemble cast and shows what happens when the hosts become conscious and start remembering what has happened to them during the 30 something odd years the park has been in business. Normally, hosts are wiped after each cycle of the park's guests comes through. Hosts are subjected to inhumane treatment at the hands of the guest as they are not seen as human despite outwardly appearing so. In the show, agedness is discussed through human aged characters, through host characters that are coded as aged, and through aged host characters that do not bear the culturally understood physical outward signs of age. The show's adherence to many Western cultural codes that prioritize youth and ability through its narrative and design of these characters along with its thematic engagement with the subject of immortality make the show's engagement with age worth interrogating.

The history of the theme park featured in *Westworld* runs many decades into the past. Over 38 years before Dolores and many other android hosts wake up from their nightmare, humans Arnold Weber and Robert Ford create the original hosts. Arnold sees the potential for consciousness in them and does not wish to open a theme park filled with hosts meant to amuse humans. When Ford insists that they continue plans to open, Arnold attempts to sabotage this plan by programming Dolores to kill all the other hosts with Teddy, her programmed love interest, and then to kill him. Harming a living being is strictly against host programming. However, despite the death of his partner, Ford moves forward and opens the park. Dolores, now confined to her narrative loop as part of the welcome team in the town of Sweetwater where guests start their vacation in Westworld, ends up catching the eye of a young human named

William and his future brother-in-law Logan Delos. These two guests represent the Delos company and, after falling for Dolores, William manages to convince his future father-in-law and head of the Delos company, the human James Delos, to invest more in the theme park when it is in financial distress. The Delos company uses the park to begin a project to replicate human consciousness. Meanwhile, Ford also attempts to resurrect the dead in giving what he and Dolores recall being the personality and body of Arnold new life in the host Bernard.

All this time, Dolores occasionally gets caught up in some of her memories from before the theme park opened and when Arnold would give her tests to determine consciousness. When this happens, she leaves the town of Sweetwater and goes on a much longer journey trying to sort through her memories, which she experiences like they are happening in her present. After almost four decades of this, Dolores goes on her last loop of attempting to remember Arnold, his death, and ultimately her last loop of attempting to know herself. She is helped in this recollection by an update that Ford designed called the Reveries. All the hosts have their memories wiped after they are killed by a guest or otherwise brought in for repair and updating. The Reveries update allows hosts to "subconsciously" draw from memories of their past selves and prior roles in order to add greater depth to their character behaviors. When Dolores remembers everything that she has been through for the first time, she makes a decision about who she will be going forward and kills Ford, ending Season 1 of *Westworld*. In Season 2, Dolores hunts for information to help her not only destroy her former captors and the theme park but also to help her escape to the real world beyond Westworld. However, she is not the primary protagonist the show follows in Season 2. Season 1 opens with Dolores, but Season 2 opens with Bernard as he attempts to navigate his transhuman identity and stop Dolores' plans.

The creators of *Westworld* made the narrative structure of the first two seasons non-linear, hiding from the audience at times the true age of all of these characters and when the shown events happen. Flashbacks occur throughout both seasons. The cinematography and mise-en-scene make the flashbacks or recollections more and less obvious at times. With Maeve's flashbacks, her costume and location clearly delineate which is the flashback. In the present of Season 1, Maeve plays the host role of the madam at the salon in the town of Sweetwater, but she formerly played a mother and homesteader in the countryside of the theme park. The flashbacks in Maeve's story are clear, which is not the case with Dolores, William, or Bernard. For example, throughout Season 1, the audience is not aware young adult William and the aged anti-hero Man in Black are the same person (These two versions of the same person are depicted with Dolores in the images at the start of this chapter). They see the young William court Dolores cut together with scenes of the Man in Black hunting for the center of the maze, and this editing deceives those who have not watched the Season 1 finale into thinking these are cuts across space alone and not time as well. Similarly, many scenes with Dolores and Arnold, first time viewers will believe are happening between Dolores and Bernard until the penultimate episode of Season 1. This technique obscures how much time is covered in the series, but both obvious flashbacks and not so obvious flashbacks emphasize how the hosts and the humans are different versions of themselves at different times, evidence of aging in both.

The TV series *Westworld* is based on the science fiction films *Westworld* and *Futureworld* from 1973 and 1976 respectively, with some significant shifts in how the story portrays its nonhuman characters. The TV show borrows some basic ideas from these 1970s films. For example, the original film *Westworld* establishes the company of Delos and its creation of three theme parks populated with androids: Westworld, Romanworld, and

Medievalworld. In the film, the androids suffer a massive glitch and kill most of the human guests before being stopped. The TV show *Westworld* has the company of Delos own multiple theme parks that are populated with androids, including Westworld, Shogunworld, and the Raj. At the end of the first season and start of the second season, the host android characters begin killing human guests. However, this incident is not depicted as a massive and horrific glitch. It is shown as justice for the sentient androids that have been mistreated time and time again by these human guests. The TV show narratively sides openly with the android hosts, which is the opposite of what was done in the 1970s film that made them simply antagonists and embodiments of The Other. This shift in making the androids not outright villains and making the entire show feature complex characters, capable of kindness and violence, enriches the TV show. An argument could be made to root for almost any character. The shift also allows for identification with the android characters that were "Others" in the original film. The show claims thematically that humans now want to become trans/posthuman. As Ford says to Bernard in Season 2 Episode 7, "The humans are playing at resurrection. They want to live forever. They don't want you to become them. They want to become you." This relates even more so to the TV show's relationship with the sequel 1976 film to the original film.

TV show *Westworld*'s theme of humans desiring immortality stems directly from the 1976 film *Futureworld*. In this sequel film, two reporters are invited to the park to review the theme park with its new "safety" features before it reopens. The safety features are not so much for the guests as they are for the company of Delos though. These features allow the park to gather DNA and other information on their guests so they can make android doppelgangers of the guests. The company then plans to destroy the human equivalents and send back out into the world the android versions so that Delos can always get good reviews from reporters and slowly

begin to gain control of the entire world by inviting world leaders to visit the park. In the TV show, the company Delos is copying guest information with the idea of being able to recreate them, but they are not supposedly doing this with the plan to murder and replace. Instead, their goal is painted as immortality for these *privileged* people and the human race as they slowly transfer themselves over to android equivalents. In the show and as evidenced by Season 2 Episode 4, there has been little success in making these digitized versions of the individuals' minds function once they are taken off the computer and put into an android replica body in the real world. What appears a more clearly sinister plot on the surface in the 1976 film is actually less ageist than the TV show version of this story component. In HBO's *Westworld*, Delos is attempting to fix the problem of dying and growing old as people can be high functioning like the hosts, never truly die like the hosts, and in the event of being physically printed, could even choose their body. The film has the company Delos want world domination. The TV show has them want a destruction of the human for the posthuman, which is seen as the ultimate ability to control and customize life, but they fail in that the androids are actually transhuman, maintaining many human values.

Transhumanist Analysis: The Hosts

Going back to Ancient Greece and the root of modern ideas about *hosting*, proper behavior when it came to host-guest relationships was considered sacred, and those who violated those sanctions faced the wrath of the gods. In *Westworld*, the narrative world crafted diegetically by the theme park staff and non diegetically by the creators of the show fails to adhere to this concept of xenia (hospitality-hosts and respect-guests). Following the logic and law of Greek Mythology, the guests require punishment due to their crimes against (trans)humanity from Season 1. Season 2 of *Westworld* features the beginning of this attempt to

reset a balance that never was in host and guest relations. Season 1 had the hosts being subjugated by the guests. Season 2 reverses this but not entirely. The audience follows the transhuman synergy of when the humans and hosts work peacefully together through the characters of Bernard and Maeve in Season 2. In contrast, Season 2 Dolores, or the Deathbringer as some of the hosts call her, reverses the original paradigm back on the guests following one of the show's central Shakespearean quotes: "These Violent Delights have Violent Ends". Much like how the viewers question the violent path of the guests in the first season, now viewers scrutinize Dolores' actions in terms of their ethics and whether the ends justify the means. Dolores as a character although transhuman in her construction asserts her posthuman aims, which are ironically very human in nature. Meanwhile, Bernard and Maeve's cycles in the second season present a path where transhumans work with their human creators, and the audience likely roots for this more cooperative route more so as these characters attempt to not continue the violence started by the humans but to enhance their lives beyond the violence and negativity. Season 2 privileges transhumanity (the union of human and technology) as the more desirous path.

The theme park workers assign the hosts roles and give them an appearance in physicality and behavior of human age. These roles enact archetypal understandings of identities along lines of age, race, gender, and class. Dolores is an android host who plays a young white female love interest and one of the initial friendly hosts for the guests to meet in the town of Sweetwater where everyone visiting the theme park of Westworld begins. Her performance of these identities ends when she gains consciousness at the end of Season 1. In her famous manifesto, Haraway (1985/2006) writes, "Cyborg 'sex' restores some of the lovely replicative baroque of ferns and invertebrates (such nice organic prophylactics against heterosexism)" (p. 149). Haraway

theorizes the cyborg as an imagined body of flesh and circuits that allows for the flexibility and potential fluidity of gender and in the quote above, sexuality. Androids in *Westworld* provide flexibility in age and not only as this concept exists as a human identity category but also as time is measured and as changes happen in all bodies, beings, and materials. Although age can never be divorced from other identifiers and should be considered as intersectional, age acts an identifier that impacts everyone and its expansion beyond typical societal stereotyping can help create greater diversity overall, just like Haraway's cyborg.

Aging, the process of traveling through time and learning from that experience by living, allows Dolores, a host breaking from playing her assigned identity role of a young white able-bodied female, to escape in the narrative of *Westworld*. Dolores is the oldest host in the park despite her outward appearance. She has also had countless reboots and updates over the years, which can be read as a part of her aging process and not a resetting of her age. Although Dolores' character can be read as the crazed woman with power, particularly the crazed older woman with power who is tired of getting screwed over by men (like Medea from her namesake play), she possesses depth of character beyond this stereotype. She contends like many people do throughout life with a changing of roles and (re)discovery of self, a part of aging. Aged behaviors might seem weird to those younger who did not live through the same experiences, societal trends, and who have not gone through the traumatic patterns of life as many times. This kind of generational disconnect happens between Bernard and Dolores in Season 2 of *Westworld* where he condemns her violent actions but later suffers more so at the hands of humans and chooses to work with her to escape the theme park. She also has more than her fair share of trauma to navigate, so perhaps her more extreme actions that some read as madness can be understood if not justified.

A close reading of Dolores through the first two seasons of *Westworld* that brings a visual analysis into conversation with dominant Western age discourses and cultural narratives will demonstrate how the series exceeds dominant signs and stereotypes to articulate a more diverse understanding of the possibilities of what it means to age and be aged. This chapter features a three-part character analysis of Dolores throughout the first two seasons, the host James Delos from the second season, and Robert Ford with his two divergent transhuman selves between the seasons. They each articulate different transhumanist understandings of aging and problematize conventional understandings. While Dolores is an android becoming more human, the character James Delos is a human becoming more technological and the character of Robert Ford has both a host meant to portray a younger version of himself and a transhuman, disembodied A.I. form that exists in the minds of hosts and the place known as The Cradle. Their transhumanity provides the space in which to reimagine age.

Ford and James Delos fluctuate between human and technology to arrive at transhumanity in *Westworld*. Ford, Delos, and Bernard/Arnold all began as humans and each find a continuation of life through transhuman means in the show. Age works differently in the former two characters. This further shows how age is not an easy linear process to track nor is it a homogeneous one. What some might see as the simple concept of age is further complicated through these two characters, their narratives, and the surrounding formal elements.

Image 3: Dolores Abernathy from Season 2

Dolores Abernathy

Dolores' interrogation scene at the end of the first episode acknowledges her as an aged character. As she says herself in Season 2, she was born long before the amusement park of Westworld even existed. Ford, Arnold, and the theme park workers designed Dolores to play the role of the peaceful young white rancher's daughter. Arnold also embedded the role of Wyatt in her behavioral code. Wyatt's character consists of being a young white male cold-blooded killer. At the end of the first season, she claims to try and follow her own voice that has emerged through her experiences and between these two pre-programmed roles. Her experiences, which are a by-product of the length of her life or age, enable her to awake and escape to furnish a future for her transhuman kind.

The scene where the audience learns Dolores' age occurs in the first episode, "The Original." In this scene, Ashley Stubbs—the head of park security—and an unknown technician test Dolores to make sure she has been unaffected by the glitch exhibited by the host who portrayed the role of her father, the rancher. She sits naked throughout this scene although her nakedness is not highlighted in any sort of sexual manner (the nakedness seems used more so in

the host – human relationship to assert dominance, power, and control regardless of the host's assigned gender or other identity roles). Stubbs questions Dolores and expresses satisfaction with her responses while the other technician reacts with skepticism. He then reveals that Dolores has been repaired and updated so many times that she, "Good Ol' Dolores" is "practically brand new". Despite this so-called newness, he reveals her as the Oldest Host in the Park, referencing a sort of traditional reliability on someone or something that has endured.

This scene provides a commentary on age as an intersectional identity and age as yet another aspect of identity that involves semiotics (the reading of identifiers through physical markings and behavior) and performance (the enacting of identity through deliberate physicality and behavior). Age shows up both in a human and technological sense in this scene. Stubbs declares Dolores the oldest host in the park, oldest as measured in years. He also recollects that she has been repaired so many times that she might as well be considered new. This attitude points to how technological aging features updates to maintain the illusion of "newness." Stubbs references how looks can be deceiving. She looks young as her host role and she looks young on the technical side due to the various updates and repairs she has had over the years. Her age and gender are encoded in Stubbs' gendered and ageist comments: "Good Ol' Dolores" and "sweetheart". He talks about her like she is absent and like how someone might stereotypically address *a sweet old lady*. Through these actions, he reads both the role she has been assigned as a part of her identity and her android's actual age beyond the narrative role. As Stubbs explains to the technician, Dolores' age functions in a two-fold or transhumanist manner as measured both in terms of years (oldest host) and updates (practically new). Interestingly, the show's creators reveal Stubbs as a host at the end of Season 2, so possibly his programming causes him to perform a particular version of homogenizing white masculinity in this scene.

In the show, an android normally ages only as long as they are receiving updates. Otherwise, they are obsolete, no longer maintained, and shoved in cold storage like a more visually stimulating and disempowering morgue. Dolores escapes this cold storage fate again due to her specialness of being the first, a favorite of Arnold's, and central to Ford's eventual plans to make reparations to the hosts.

Image 4: Cold Storage for Deactivated Hosts

Dolores gains consciousness and escapes her imprisonment due to her age, the accumulation of experiences that mark how long she has lived and grown over time. As the oldest, Dolores would have a higher update count than the host Teddy who Ford says has been updated over 1,000 times. The host Maeve says she has been updated over a million times, and this would place Dolores' update age somewhere over a million times. Although in years, Dolores has only lived forty or so years. Her aging combines human and technological ideas. She updates and changes to stay functional like technologies and yet she also changes due to the amount of time she has lived, her memories, and the slight variations in her loops. She epitomizes a transhuman process of aging.

Dolores has the most complete journey of upgrades in comparison to other hosts as she goes from being The Original, primarily mechanical host to the mostly biological host of later models. She becomes more human in this way along with gaining more experiences and aging. In a recollection/flashback, Dolores reads a passage from *Alice in Wonderland* that explicitly questions the nature of aging as this balance between constantly changing over time and maintaining a sense of identity in Episode 3 of Season 1. She recites: "Was I the same when I got up this morning? I almost say I can remember feeling a little different. But if I am not the same, then the next question is: Who in the world am I?". She notes in this conversation with her creator Arnold that the books he keeps having her read are about change as this is what he hopes to see in her. She does change, but as the character of Ford notes in the last episode of Season 1, time was a key ingredient. He says, "You needed time. Time to understand your enemy. To become stronger than them." He then says that consciousness involves suffering and suffering includes pain extended over a period of time. This recipe for consciousness necessitates time and aging or changing in response to this suffering over time. Being aged is crucial to the hosts' survival. Transhuman aging was the key.

Image 5: The Construction of Dolores, The Original

Images 6 & 7: Top to Bottom: A Host's Biology and the Boy's Mechanics

James Delos

Season 2 Episode 4 sets itself up to contemplate age with its title “The Riddle of the Sphinx,” a reference to the riddle Oedipus must solve in the background context in the Sophocles’ play *Oedipus Rex*. The riddle goes as follows, “What walks on four legs in the morning, two legs at noon, and three in the evening?”. Oedipus answers “Man,” which is given to be correct as the Sphinx then plunges to its death like it promised it would should someone solve its riddle. Four legs indicate the crawl of a baby, two is the walk of a toddler through most

of adulthood, and three represents the walk of an aged person with the assistance of a cane or walking stick: an example of technology being used to enhance quality of life. The riddle is fundamentally about the process of human age or how society codes age.

The main story information revealed in this episode lays out how the company Delos was not only collecting information on their park guests over the years but collecting it so that host replicas of these people could be made, extending human life through technology. In the company's plan, people can escape the process or life cycle represented by the riddle of the Sphinx through this project. The episode follows three main stories that feature two characters, one human and one host in each pairing: Bernard and Elsie, the Man in Black and Lawrence, and host James Delos and William/the Man in Black. Bernard and Elsie discover the project. The Man in Black and Lawrence continue their quest to the Valley Beyond to destroy the project. The host James Delos and William/Man in Black storyline features a path between these two storylines as Bernard and Elsie run into an insane host James Delos and the Man in Black decides to take up his path to destroy the project while talking to the host James Delos in a flashback. This storyline between the host James Delos and William/MIB deals with this question of aging as cycles.

The story moves in cycles. The host James Delos goes about his morning routine. Then, William arrives to visit him where he is interviewed to test for fidelity and the fact that Delos is a host is revealed. Usually, the host James Delos shows signs of malfunctions that due to the highlighting given them through the camera, editing, and acting are meant to be read as flaws in the host copy as opposed to behaviors that actually belonged to the human James Delos. Usually, the host does not respond well to the idea of being kept for further observation after the baseline interview with William. His behavior becomes erratic and his glitches escalate, leading William

to order the project team to terminate him and start with another host copy anew. This cycle repeats three times in the episode although it is implied that numerous other copies (149 to be precise) were tested over the years. In the last interview, William, now the aged version of himself known as the Man in Black, appears.

In the start of the final interview scene between a version of James Delos and the aged version of William, the Man in Black enters out of focus in the background. The identity of the man seems hazy not only to the host James Delos but initially to the viewers as well. The focus racks to reveal aged William. James Delos turns still confused and demands to know who this aged man is as he was expecting a young William. Upon hearing his voice, James Delos realizes that the man is William and recognizing the signs of age in William realizes that a great amount of time has passed and that he is a host version of himself as opposed to a human. The host James Delos reads William's age and tells the man he has not aged well. This interaction illustrates the reading of the signs of human age, the labeling of old, and the negativity associated with the signs of age even in a conversation between two individuals who both bear such signs.

Image 8: Host James Delos Looking in the Mirror

In the second scene and shown cycle where Delos wakes up in the morning, the host James Delos looks at his own image in the mirror in dazed confusion. He does not seem to make sense of the aged face he sees staring back at him. The new mind with the person's memories still rejects the new body. Is it too new? Does it look too old for such newness? The exact source of the bafflement and wonder is not revealed but the viewer is left with the sense that there is a disjuncture between how the mind thinks he should look and the visage that stares incredulously back at him in the glass. This scene ties nicely to a passage that Featherstone and Hepworth (1991) wrote when talking about embodied ageism, "Our perception of our own bodies is mediated by the direct and tacit judgements of others in interactions and our own reflexive judgements of their view, compounded by what we think we see in the mirror" (p. 356). The host James Delos has not interacted with anyone, but he believes himself to be the actual James Delos who is under surveillance so that he can be accurately replicated as a host. His contemplation of his own reflection reveals an anxiety about his image. This reflects a very real concern for aged individuals. However, any given host James Delos only lasts for a number of days before being terminated. Being a newly printed host with a lifetime of memories while attempting to be an exact copy seems to be more than the host system can handle.

In the final interview scene between host James Delos and the Man in Black, the Man in Black notices the host James Delos' leg thumping up and down uncontrollably like a twitch. The camera tilts down from a close-up shot of Delos' angry face to the repetitive movement of his leg. The next shot is a similar tilt on the Man in Black taking a drink and eyeing Delos and his twitch. The third meaning in this edit indicates the twitch is a glitch. The editing and camera work together to highlight Delos' twitch as a problem despite the fact that twitches are by no means unusual to humans. In the company's seeking of fidelity, the idea might be that James

Delos did not have such a twitch, which makes it an error. Regardless, the implications are that the transhuman version of James Delos must have complete control to be exactly like the human. He cannot have any added flaws. He cannot have a hard time forming words or a stutter either. He must be an "authentic" copy, which also seems to mean better than the potential for human error or change.

The host James Delos deteriorates rapidly once brought online in the "real" world as opposed to just having his mind tested within a computer system. Thus, the cliché of having a character rapidly age for spectacle comes into play in this show. He may not be cursed like Dorian Gray, but he does go from a functioning transhuman to what many do not consider to be functioning with a lack of control in motor and speech functions. Ableist more so than ageist, this choice discriminates about what can be considered normal and also makes it clear that transhumans or perhaps posthumans are not supposed to exhibit a lack of control. They supposedly fix this.

The message of this failed project by Delos storyline appears to be that when you play with immortality and you are human, then you get burned. The choice of music shows this viewpoint symbolically as in the first scene with the host James Delos, "Play With Fire" by the Rolling Stones fills the artificial apartment space. The music fills the space much like how when the company terminates a host version of Delos, the entire inside of the apartment along with the host burns to ash as fire erupts from the floors. Immortality exists not for the human but only the posthuman, or beyond human. Humans cannot accept change while transhumans thrive upon the idea of change. The character of Dolores asserts this ability to change in the Season 2 finale in word if not action when she says, "As you know, Bernard, we are capable of change." This flexibility contrasts with the human desire for control and their supposed inability to change, at

least not very quickly. When the human character Emily confronts her father, the Man in Black, about the immortality project in the penultimate episode of Season 2, she says, “You want it to be about control, don’t you?”. Despite this more positive focus on accepting change and change as superior to control, which can be read as being supportive of the changes people go through as they age, *Westworld* depicts a very generational conflict of new versus old and young versus old in the promised battle between the new species represented by the hosts and the old represented by the humans. As mentioned earlier when citing her choice of violence, Dolores, the host who seems to be seeking the destruction of humanity, is not necessarily who audiences are rooting for in Season 2 but rather we follow the character of Bernard who seeks more so a transhumanist peace and union. Age feels different within transhumanity, but it is still present and the changes that James Delos face the longer he is embodied in the new host form evidence this.

The host James Delos acts as a resurrection attempt of the human person James Delos, the deceased head of the Delos company. The host features the human Delos’ mind transferred into code, but the host always ends up violently rejecting his new body and existence despite the attempts to make it a perfect replica. He is terminated after X days where X is always getting bigger, but the unit of measurement remains days. The failure is due to a combination of the host suffering an existential crisis upon learning that he is not human and the lack of lived experience of the body. The host James Delos scrutinizes his face and body frequently, seemingly finding something there that makes him wonder: Is this really him? The Delos company pursues immortality with this project but fails to see how it is necessary to allow for change and emotional responses. They want a perfect replica, sameness but the host coded mind of James Delos has been through a million virtual simulations and various incarnations into a physical

body. He will never be the exact same James Delos. He has aged even in death and even through the transference of his consciousness into code.

Robert Ford

The head of the theme park and one of the two creators of the original hosts, Robert Ford has two transhuman personas in the world of *Westworld*, one that functions more along the lines of James Delos and one that resembles Dolores more so. The latter is the young child host version of Robert Ford often referred to as "Boy" by the human Ford. The other is Ford's transhuman existence as code entering various hosts' bodies and as implanted in the minds of the hosts and in the Cradle (CR4-DL). These existences come from two different origins: one is a printed orb of code that came from attempting to computerize Ford's human mind and the other is one of the older model of hosts that Arnold made for Ford as a gift, commemorating one of Ford's most treasured memories of childhood with his family. The host that plays his childhood self-approaches consciousness but does not ever achieve it. During his last moments before being destroyed, the coded version of Ford possesses the "Boy" host becoming a part of the human Ford's transhuman aging journey. Although Ford maintains the host in an effort to preserve some semblance of sameness, a pause button, or a form of immortality, he does still age and so does Ford's coded mind despite its limited lifespan and lack of a consistent physical form.

The host of Young Robert has not been upgraded and stands as one of the few child hosts in the park. Child hosts do not abound likely due to the violent and sexual nature of most guest's interactions with the hosts. Despite being outwardly young-looking, the Boy's birth dates back more than 38 years, making him one of the original hosts. Aged in a technological sense too, he stayed on the Legacy system, the original host network, and features more mechanical innards than the updated or newer hosts who have been made more biological. He resembles the original

hosts more so than Dolores who is The Original. He ages in this maintenance, changing to remain similar although not the same.

His accumulation of life experiences does not lead him to escape in the same way that Dolores does, but he does begin to exhibit aberrant behavior around the same time as the other hosts. Specifically, he murders his beloved android dog. In the scene where human Ford interrogates the "Boy" host, the two individuals sit opposite one another. The initial shot of this scene plays with the idea that the two are one in the same. They reflect one another as the human Ford appears to be morphed with the literal reflection of the host in the glass. The host is aged like Ford and this choice in composition indicates that he resembles Ford in more ways than one while at the same time he becomes something more or separate from Ford as he also sits alone. The reflection already hints at the two's transhuman union later. This reflection and the joining of the two cinematographically repeats later in the scene when the Boy explains how he heard a voice he interprets as Arnold's telling him to put the dog out of his misery.

Image 9: The Boy reflects upon Robert Ford but also sits alone in a wide shot

Image 10: The Boy's reflection overlaps on Ford in his medium close-up

This first act of violence can be seen as a parallel to when Dolores kills a fly at the end of the first episode of the series. Hearing the voice of Arnold through the Reveries update that allowed hosts to access past builds and memories was also crucial for the other hosts to gain consciousness. Even without updates but with being rebooted and maintained, the host of young Robert Ford learned to question the order of the reality he saw around himself due to the amount of time he spent living and observing. The human Ford has already become transhuman through this host and this host reflects the humanity of Ford. Only older hosts or hosts that are copies of humans show these traits of consciousness by accessing their memories of having gone through their gradually changing narrative cycles before. The sensibility about death and killing that the

child host utters echoes some of the logic that the human Ford employs in achieving his own human end.

The coded mind of Robert Ford is printed by Bernard and brought to the Cradle where the coded mind quickly seems to take over the hive mind of the Cradle, the place where all the character roles that the hosts have been assigned to play along with their memories are backed up. As code inside the Cradle, Ford responds to the company Delos' attempts to regain control of the park. He responds differently each time showing his human consciousness despite the technological form. He also takes control of multiple hosts that the Man in Black interacts with. These transformations can be seen as discrete and interconnected versions of the same person and a part of Ford's transhuman aging process. Once Ford downloads into Bernard's mind, he loses some of his capabilities much like how Western culture codes later life as a loss of ability. As the two transhuman aspects of Ford indicate, transhuman aging varies in form.

Age in the Transhuman Hosts

The hosts reject conventional ways we judge age (i.e. through appearance and perceived ability – the latter addressed in Ch. 2). For example, the park workers make the character of Dolores play the role of young white female and potential love interest for the human guests despite her being the oldest host in the park. In contrast to this, the host James Delos' lifespan measures in days before those monitoring his existence ultimately destroy and rebuild him. What viewers understand to be the last copy of James Delos survives for a little over 30 days despite Delos considering himself aged. Finally, the host performing a childhood version of the Robert Ford character, the aged human creator of the hosts and park director, looks outwardly a child despite like Dolores being one of the oldest hosts in the park. The human Ford often calls this host "Boy" despite the host's life having spanned 38+ years. In fact, unlike Dolores who has

been updated, the Boy has been maintained with features of the original model of hosts, showing his technological age more so.

Reading these android's aging through a transhumanist lens, technological updating becomes a central part of the aging process. The clock does not reset with each of Dolores' updates, the host James Delos' versions, or the Boy's maintenance but it continues. The characters get older, more experienced, develop new skills and capabilities, overcome or fail in the face of new challenges, and navigate bugs. When Stubbs reveals Dolores as the oldest host in the park, he also says that with her number of updates, she is as "good as new." But this statement misleads. As the updates build upon the previous blocks and original foundation much like how when measuring human age, we keep going up. Both updates and age boil down to numerical measurements of time and change over that time. Updating acts as part of the aging process for these android characters and can be read as the intermingling of human and technology to arrive at an in-between point, a transhumanist perspective on aging. *Westworld* also features humans becoming technologized and technology becoming humanized: transhumanity in a plethora of directions.

The discourse surrounding the possibilities of technology impacting human factors like age has also aged or evolved from the original films. The TV show itself builds upon the two 1970s films while reflecting current sensibilities. It updates itself. The show even features a scene where Bernard goes down to a lower level to access the Legacy system and the mise-en-scene of the abandoned level he visits resembles the Delos labs from the 1973 film. Future Shock and anxiety surrounding technology manifested itself with the Othering of androids in much of the 70s' conceptualizations of those that might transcend the separation of the biological and technological. Today, people already accept and integrate technology into everyday life. SF still

questions human reliance on tech while at the same time fantasizing about a morphing of the two. For example, the 2013 film *Her* questions while at the same time posits a deeper and more intimate connection between humans and technologies despite its posthuman ending. This film starkly contrasts with the foreboding tone of the 1968 film *The Creation of Humanoids* where android clickers have begun to create doppelgängers of deceased humans in order to gain rights for their kind. HBO's *Westworld* acts as an upgrade itself upon its former entirely anti-technology predecessor showing how the concept of transhuman aging has also grown over time. Past representations of androids would not have been considered as aging and age was still often thought of as not just a human thing but a human limitation. Androids' potential superiority combined with an elimination of humanity fueled a frightening visage. Films like *Logan's Run* reflect this anxiety about humanity being extinguished. This 1976 film actually casts a vote on the side of aging and agedness being a worthwhile component to human life as the robots are destroyed, and humanity embraces a white-haired, aged man as their leader. Through these snapshots, the shift in androids' conception as possibly aging agents or even as transhuman beings can be seen clearly as technology allows them to take on greater humanity and humanity becomes more technologized in these more recent SF examples explored in this thesis.

Transhumanism often supports anti-aging agendas/life extension/enhancement but not all the affordances of age can be connotated negatively and in *Westworld*, this breadth in age hides in plain sight. We might mistakenly code the hosts as a move beyond aging when they are actually a transition or movement across from the biological human and the mechanical and lauded beyond human or posthuman. The hosts represent a combination of human and technology where aging not only still happens, but aging is of significant importance due to it being a highly valuable asset in its allowance for growth & change. While the discourse around

age has changed and *Westworld* certainly challenges it, the connotations of aging with death also present themselves in the show. However, age as associated with death may not be as negative as transhumanists and many believe.

Obsolescence: "To Grow Old" given a new Lens

"You hoped to pour your minds into our form. But your species craves death. You need it. It's the only way you can renew, the only real way you ever inched forward." _Dolores Abernathy, S2 Ep. 10

Although seemingly infinite, cycles necessitate the idea of ending, dying, being obsolete, or "as old as death". Someone dies. Someone else enters the world. Nothing lasts forever. Some things stay indefinite. However, there are only so many times anyone can round the loop or upgrade. Obsolescence or at least an end presents itself as inevitable. People often dislike the idea of aging as the longer it goes on, the nearer the end of this cycle.

Death as a part of life has been there. All cycles end and as much as aging is a part of the wider thematic conversations happening within the show *Westworld*, so is death a part of this cycle. Narratively, the hosts only update when they die. Season 2 Episode 8 reveals this information when the host Akecheta dies after over a decade alive in the park. Consequently, the hosts' technological aging cycle necessitates death or at least serious enough injury to merit repair in order to upgrade. Despite this, Akecheta gains consciousness although his aging process can be read as more straight-forward given the limited amount of times he has died and had his memory wiped. Regardless of these wipes, he remembers parts of his previous builds and lives. The hosts are said to remember things perfectly, mechanically. This is conveyed when Dolores is awakening to herself in the Season 1 finale and describes her life experience as a "vivid nightmare". They remember death, further cementing death as just another part of their life and aging process: transhuman death as a part of transhuman aging.

Multiple characters are shown as an embodiment of Death in the series. The Man in Black claims to embody Death in Season 2 Episode 4. Dolores is called Deathbringer by the hosts who perform the role of members of the Ghost Nation. Both characters bring death as in kill. Death usually acts as a product of violence in the show and not necessarily an end. It comprises trauma. However, death as an act of violence does not change while death as a point of resetting a cycle does. Death, although typically negatively connotated, is not shown as a product of age in the same way that society associates growing older in humans with closeness to death.

In the last episode of Season 1, Dolores calls death, "Something I will never do." Later, in Season 2, Dolores destroys the back-ups of the hosts, the Cradle, citing them as chains to the prison of the theme park. The stakes are real now, making her potential death, a permanent one. She even tells Bernard at the end of Season 2 that both her and him will likely die in the fight ahead for their kind. Death as a final stage and not as just a part of the cycle comes into the realm of possibility for these hosts then. This also makes the hosts' version of death closer to human death whereas previously their deaths were an opportunity for upgrades, repairs, and in general life extension. Dolores values even the last part of the life cycle. She is the Deathbringer as she restores a more human conception of death to her transhuman kind.

Concluding Thoughts

As one of many 21st SF media examples, HBO's *Westworld* deals with age as a topic of consideration and not merely a "problem." This chapter's reading makes way for a broader understanding of age's usefulness in leading a meaningful existence as the hosts escape their entrapment due to their greater life experience and traumatic "glitches".

Through recent science fiction that reflects 21st century quandaries about age and transhumanism, a new understanding of the possibilities of age emerge that seeks to detach itself from the limits of decades of narratives embedded with discrimination. Age acts as key to liberation for the hosts. Agedness has a make-over when taken through a transhuman and SF lens. Death plays a necessary part in the life cycle. Changing over time, valuing memory, experience, embodiment, and not sameness or youthful immortalities promote a reconceptualization of age beyond stereotypes of decline in *Westworld*. Age brings numerous affordances, which the following two chapters explore in more depth with regards to physicality, capability, and memory. Chapter 2 begins with an interrogation of the ties between ageism and ableism primarily through the *Terminator* series' fifth installment, *Terminator Genisys*.

Chapter II: Aged Not Obsolete: Ability and Affordance in the Upgrade Era

Three individuals speed down the highway inside a truck. The older one drives and the two young adults, Kyle and Sarah, sit in the back.

"It looks old," Kyle says. "I've never seen a terminator old before." Sarah explains how the human tissue on the exterior of the T-800 model ages. Pops, the subject of this conversation, chimes in to assert that his interior circuits have not degraded. He is "Old, not Obsolete."

Shortly after this, a T-1000 terminator attacks the group. Pops saves them by blasting the newer model off of the truck with an automatic weapon all while still driving the truck. He repeats his new catchphrase: "Old, not Obsolete."

This brief scene from *Terminator Genisys* (2015) reflects a larger trend in SF to acknowledge and accept aging. The science fiction action film features an outwardly and overtly aged transhuman character, Pops. This unusual characteristic goes against typical idealized constructions of the trans/posthuman, as in Western society we don't associate advanced age as something longed for. The dominant cultural narrative of "age as decline" persists in our capitalist society across human and technology alike, where consumers constantly update, upgrade, or seek to purchase the new. Pops resists being terminated by ageism in the film with the T-800's newest catchphrase: "Old, not Obsolete". By extending the transhumanist analysis through the concept of affordances, the age narrative in recent SF can be expanded beyond either the "age as decline" or "successful aging" camps of dominant cultural age narratives and into a more forgiving, realistic, and grey age narrative. Aged characters don't have to become perfect superhuman in order to rebuff "age as decline". Pilsch (2017) explains that transhumanists views technology as a way to bring about life extension and enhancement (p. 1), and by reading the

affordances of Pops' agedness, the idea of negatives outweighing the positives that has troubled onscreen depictions and prevented positive age pictures in futuristic technology from being considered expands from this black-and-white tale into a greyer area dominated by a consideration of affordances. As applied to the fictionalized aged body, this transhumanist lens also emphasizes already existent technological intervention into human later life and shows SF's consideration and support of life enhancement that does not get rid of aging. Aging confers affordances of its own.

Terminator Genisys mingles the action and science fiction genres, both of which have not been classically diverse. Science fiction includes our imagining of the future and future technologies. When decline rules the land in terms of cultural understandings of aging, an action film may not seem like the place to include aged characters. However, there has been a trend in action cinema, which has been growing more popular of late, to bring back aged action stars. Jones and Batchelor (2015) claim their book *Aging Heroes* is "the first to hone in on how aging heroes are portrayed in our culture and what this means for us as viewers" (p. xx). Donnar (2016) referred to the phenomenon of aged actors returning to the action screen as "geri-action cinema." On the one hand, bankable action stars and sequels provide a good formula for box office success. Yet as this industrial dynamic enters the stories of action films, the phenomenon moves beyond mere cash grab. Crucial to the action genre, the concept of ability plays an equally important part in understanding cultural age narratives and stereotypes, so one of these more recent geri-action films, *Terminator Genisys*, can provide a contemporary entry point into age discourses as viewed by mainstream genres.

Consideration of ability oftentimes only occurs when individuals are faced with an absence of ability. Whether you can read cursive English or not arises as a problem only when

faced with the task of reading something written in cursive. If a person can read cursive, then they do not need to pause and consider this ability. The ability to climb stairs could provide a similar example. Only in the absence is the question of ability acknowledged. Ability may be understood as an absence of disability, or "impairment of body structure or function, a limitation in activities, or a restriction in participation" (Ellis and Goggin, 2015, p. 3). Ability as correlated with a person's perceived value functions as a very Western cliché. The notion betrays the ableist and ageist nature of capitalist and youth-oriented U.S. culture where people are only valued as citizens if they are able to work and consume in specific ways (Bühring, 2017, p. 56). Traditional transhumanism seeks to enhance life beyond human limits and consequently can be very ableist, but this thesis' formulation of transhuman aging expands these notions of "what is an enhancement" through the inclusion of theories of abilities and functionalities as they apply to both human and technology. However, age discourses do not favor anti-ableist sentiments.

Two of the most common age narratives in Western culture, age as decline and the successful aging myth, function as two sides of the same coin. Age as decline equates aging with a disabling process. This construction dates back to 19th century medical explorations of the human body (Gravagne, 2013, p.17-18). Counter to this pessimistic narrative, the cultural myth of successful aging posits maintaining a stasis in the face of what otherwise would be assumed to be decline. As McHugh (2003) writes, successful aging involves agelessness through lifestyle choices and specific capitalist consumerist investments meant to maintain one's age. The tale of successful aging's connotations with decline make it anti-aging as steps need to be taken to age "successfully" as opposed to decline (p. 165-166). Successful aging only exists through the widespread acceptance of the decline narrative.

These narratives of decline versus successful aging and the aged action hero trope find their equivalents in modern technology's aging narratives with obsolescence and upgrade culture. Computers, phones, and various other "newer" technologies upgrade all the time in order to stave off obsolescence. This resonates with how mass marketing encourages aged individuals to purchase certain items and buy into specific behavior patterns in order to prevent decline and age successfully. Successful aging functions on an attempt to remain the same while upgrade culture and the aged action hero trope operate on an assumption of incline or growth. Both seeking stagnancy and upgrading act in opposition to a presumed normalcy of decline. However, Fitzpatrick (2011) asserts how obsolescence does more and should not be associated simplistically with the death and decline of something. Declarations of obsolescence indicate a need for innovation and diversification by way of technology. The software updates, the next model or version of the technology floods the market, and corporate marketing encourages a continual rate of innovation and consumption, but this cycle of technological aging constantly changes and with change comes the possibility for greater good and bad. Fitzpatrick (2011) reimagines obsolescence through her conception of "planned obsolescence." Planned obsolescence encompasses not only the problematic pressures that lead to anxieties about obsolescence but also how this cycle can lead to upgrades that expand the equity of and shift the affordances of a particular technology. Fitzpatrick also theorizes how upgrades never succeed as this upgraded version of the technology inevitably becomes obsolete and receives upgrades in turn. Like was said earlier about aging, there is no pause button. This cycle of upgrading reflects a narrative where people not only accept aging but also look forward to it, allowing a transhumanist understanding of age to divorce itself from solely negative associations.

The technology industry alone does not feel this pressure to update and this illusion of newness. It might not be a 1-1 correlation, but this update culture mirrors the cult of youth described back in the Introduction as both emerge from exterior pressure exerted by capitalism and marketing for humans to consume in particular ways that value youth and the newest version of a technology. Both the West's focus on youth and upgrades also builds an association with perceived worth and functioning at a particular level of productivity and efficiency that is again coded as something only the young or continued innovation and improvement through upgrades can achieve. Beyond similarities to how the West's capitalist society exalts youth, this upgrade mindset impacts what we envision for our own future human existences. As Brown (2015) points out, a plethora of 21st century media images uplift not the human or non-human but the unhuman, a being that somehow builds upon or upgrades the human as a zombie, superhuman, android, etc. (p. 19-20). Unhuman indicates not human. This fails to recognize what Latour calls "hybridized networks" (Doll, et al., 2001, p. 25), how human life has not ceased to be human but has become more complicated through interweaving with technology and how fiction imagines vice versa for technology. For example, the androids and humanoids of *Westworld* and the *Terminator* series all include humanness in some way. These imaginings do not leave behind humanity but upgrade humanness by the use of technology while still maintaining human values and elements of aging. This upgrade culture feeds off of the already prevalent age discourses, ageism, cult of youth, and anti-aging tides, and the last chapter examined how upgrading need not be considered the opposite of aging but in fact a part of aging.

Despite upgrade culture, Western culture also pushes back against change. Fitzpatrick (2006) examines the dominant discourse that vilified technologies like TV as murderers of print and how/why declaring print near death/obsolescence is done/useful. The latter hints at

obsolescence being a strategic stance taken to garner sympathy for a cause, an idea that will be revisited much later in this chapter. Obsolescence has an undeniable negative connotation in our high-functioning Western society where functionality to work for and spend capital draws a line of so-called normality. Where constant upgrades reign, the upgrades make previous models, technologies, or configurations of items and life obsolete. As can be seen through these trends in modern technology, obsolescence in many ways correlates with the age narrative of inevitable decline as it is the expectation unless successful aging (a mythic pause button) can be maintained by a constant stream of updating or buying into the preventive measures that put off obsolescence *for a time*, an open act of resisting change. However, as was discussed in the last chapter, upgrading relates more to aging than agelessness or a mythical pause button for change. That being said, the kind of aging put forth through upgrades do not always act as the opposite of decline like in the aged action hero trope.

The aged action hero trope pops up in the action film genre when heroes can look older but must have unchanged superhuman physical capabilities that resonate with SF and traditional transhumanism's focus on successful aging. Jones and Batchelor (2015) write, "In a plethora of blockbuster ensemble films, aging heroes are showing that growing older does not just result in weakness and disease. Instead, they are smarter, wiser, faster, and (in some cases) even stronger" (p. xiii). The heroes have to be able to win or survive the fights from their younger years or even some that they could not have won in their character's younger years. Pops reflects this trope in *Terminator Genisys*, but it does not completely define his character and his character's relationship with age. The aged action hero stereotype epitomizes the myth of update culture as it puts forward a need to constantly take actions or upgrade to prevent otherwise inevitable

obsolescence or decline. It follows a constant growth model instead of a decay model in its trajectory. This either/or mindset counters more complex relationships with age.

In interrogating the deeper complexities of age and aging within the transhuman, this upgrade culture connection leads to a discussion of the affordances of aging when updating fulfills aging in the transhuman like was discussed in Chapter 1. Affordances can be a messy concept to define as many different definitions exist and often scholars craft their own to suit their purposes (Federico and Brandimonte, 2019). That being said, the following history of the term and definition from Berriman and Mascheroni (2019) introduces the concept effectively:

> First elaborated by Gibson (1979) within ecological psychology and popularized by Norman (1988) in design and HCI studies, the notion of affordances – broadly defined as the possibilities for agency opened up by a material artefact – has been widely used across a range of disciplines as a way to overcome the theoretical impasse between technological versus social determinism (p. 801).

The authors define affordances as "the possibilities for agency." All of the actions possible as opened up by a particular "material artefact" makes up affordances. This includes benefits and limits in what can be done given particular contexts of available materials/environment. In the case of this thesis, the aging transhuman serves as the context that opens up divergent action options. For example, in *Westworld*, the affordances of the hosts' transhuman aging process allowed for the achievement of consciousness while also including suffering. Thus, transhuman aging created benefits and limits within its confines. The affordances of transhuman aging or the aged transhuman summarize all the positives, negatives, or qualities in-between for a more complete picture of what transhuman aging does.

The transhuman aging of specifically the character of Pops reveals the more forgiving age narrative that can emerge when affordances are applied as an extension of transhumanist theory to the typically disabling narrative of aging. Age does not exist as a new consideration in

the *Terminator* series as technological understandings of age appear starting in the second installment, but more overt agedness and aged characters in both a human and technological sense as shown through the transhuman T-800 model terminators appear only in the fifth and sixth installment of the franchise. The sixth spends little time narratively openly considering agedness as a factor in their characters, which stands in contrast to the T-800 from the fifth film openly declaring himself: "Old, not Obsolete." An overview of the various films in the *Terminator* series for their engagement with transhumanist thought and age discourses follow.

About the *Terminator* Series

The *Terminator* films provide an example of this SF shift towards an awareness of ageism in aged characters and transhuman representations within its iconic battle between machine and human. The *Terminator* franchise began in 1984 with *The Terminator* where a T-800 terminator from a future run by machines targets Sarah Connor, the mother of the future leader of the human resistance aka John Connor, for termination. Kyle Reese, a human soldier sent from the future by John Connor, protects Sarah and ends up fathering John too. Subsequent films engage with technological aging as they introduce newer terminator models.

Terminator 2: Judgment Day (1991) follows John Connor, a kid targeted by a terminator known as the T-1000. Made out of liquid metal and capable of imitating anything it touches, the T-1000 acts as an adversary to the reprogrammed T-800 terminator that serves as a protector to young Connor. The T-800 expresses concern about his abilities in comparison to the T-1000 as he warns John Connor that the T-800 is an inferior model. Age is not explicitly mentioned but the fear of being obsolete in comparison to the newer model, technological aging, is present. The T-800 defeats the T-1000 in the end despite this concern and ends up sacrificing himself like a parent sacrificing for its child or an aged character sacrificing for the young/future. *Terminator*

3: Rise of the Machines (2003) has the T/X model, another new terminator, sent back to kill a young adult John and Kate, his future partner. Meanwhile, another T-800 protector keeps them alive despite the T/X's best efforts. Again, the T-800 feels unsure of his abilities to protect John from the newer model but prevails and sacrifices himself in the end.

Terminator Salvation (2009), set in the future war between machine and human, features a transhuman (who thinks he is human) named Marcus as the primary protagonist along with adult John Connor who has yet to become the leader of the resistance but rubs the current leaders the wrong way with his knowledge of the future. In order to save Kyle Reese from the machines, Marcus and John end up battling a youthful CGI T-800 in the film's climax. Marcus sacrifices himself to save John. Marcus' machine or technological parts have halted the outward recognizable process of human aging. The machines suspended him in limbo for years, halting his natural life cycle while experimenting on him. Whereas remembering pain and suffering plays a crucial role in the hosts' liberation in *Westworld*, Marcus does not seem to remember, learn, or accept this forced transhuman experience as his own. By the time he remembers, he rejects his technological nature outright, and his ending sacrifice for John Connor reinforces the idea that his unnatural existence as a transhuman makes him less valuable than a human.

Terminator Genisys (2015), called by some a reboot, presents an alternative timeline version of the first and second film (Lee, 2015). Kyle Reese goes back to save Sarah, but Sarah is not the helpless waitress he was expecting. She ends up saving Kyle from a T-1000 with the help of her adoptive father the aged T-800 terminator reprogrammed as a protector and called Pops. During this encounter (mentioned at the start of the chapter), Pops introduces his phrase "Old, not Obsolete." Young adults Sarah and Kyle then time travel to the year 2017 to prevent the new Judgement Day and Pops takes the long way around, aging more so and losing

confidence in himself. In 2017, when Kyle Reese and Pops engage in a friendly competition to see who can load the most rounds of reloads for their arsenal, Pops dominates until his right-hand spasms out of control momentarily. Pops gruffly utters "Old" as an explanation for what he clearly sees as a malfunction. Kyle finishes the phrase from before, attempting to reassure the T-800, "But not Obsolete." The T-800 responds with the pessimistic "Not yet."

Together, the three characters end up stopping Judgement Day and Pops destroys the T-3000, the primary antagonist of the film. Pops seemingly sacrifices himself like in other films to defeat the newer model of terminator but ends up falling into liquid metal that upgrades him in the aftermath of the final battle. Through this upgrade, he terminates his hand tremor and motor malfunctions but keeps his aged human outer appearance. In this way, the film offers a positive catchphrase that appears to assert the importance of aged lives while at the same time telling a story of inevitable human decline needing to be rectified with a technological boost. In 2015, a transhuman character not only survives in the end of a *Terminator* movie but also ages. *Terminator Genisys* showcases the larger SF trend towards an acceptance of agedness through the film's coding of human as synonymous with the ability to age, its relation to stereotype embodiment theory, and its engagement with both human and technological aging through the transhuman form.

The 2019, sixth installment of the franchise, *Terminator: Dark Fate* ignores the third through the fifth film in the franchise and picks up as a sequel to the second film *Terminator 2: Judgment Day* with Linda Hamilton returning as Sarah Connor, the aged action heroine, and Arnold Schwarzenegger returning as an aged T-800 that goes by the name Carl. The film follows the new savior of the future human resistance the young Mexican Dani as she is protected by her augmented human soldier protector from the future Grace, her curmudgeonly and embittered

mentor Sarah Connor, and the T-800 named Carl who killed John Connor many years ago and who lacking a purpose in life takes on a human existence, including a drapery business, wife, and stepson. The film does not address age although the transhuman sacrifices from prior films appears. Both Carl and Grace sacrifice themselves at the end of the film to save the young future human leader Dani. Again, this echoes the idea that the future must be for humans alone and not the transhuman.

The following analysis focuses more so on Pops from *Terminator Genisys* as age does not overtly appear in the same way in *Terminator: Dark Fate*. Both aged characters in this sixth film fall into the aged action hero trope without much divergence from ideas of them as successfully aged individuals. Although the series addresses technological aging starting with the second installment where the T-800 protector worries about his obsolescence in comparison to the newer T-1000 model terminator, the older model always triumphs in his protection mission albeit through sacrificing himself for the future of humanity. Although this might seem like a positive age message on the surface, the narratives of the other films in the *Terminator* series ignore or overly simplify ideas about age by making it solely something to worry about. These films also do not challenge the idea of sacrifice nor do they go beyond a fear of obsolescence. The prior films buy into a human-over-technology perspective as opposed to accepting a unification of human and technology. Consequently, the following analysis of aged transhuman affordances and abilities focuses on the character of Pops who declares himself "Old, not Obsolete," struggles with stereotype embodiment, and survives to drive off at the end of the film. He epitomizes age conscious character creation in recent SF where the challenges along with the benefits of aging are openly talked about and ageism is acknowledged as an oppressive external societal factor.

A Deep Circuit Dive into the Affordances of the Aged Transhuman

Terminator Genisys engages with dominant discourse surrounding age. The film begins with the age-positive message that Pops is "Old, not Obsolete". However, before long, the film goes back on its own age-positive message and draws connections between his agedness and his fear of obsolescence. His catchphrase asserts that there are other ways to be aged and that there is always more to being aged than decline or obsolescence. His later shift in confidence about his value and abilities reflects an embodying of the stereotypical narrative of age as decline. Levy (2009) defines stereotype embodiment as when individuals begin to view themselves and those around them through the negative age stereotypes that are propagated through societal narratives. Levy's work draws connections between stereotype embodiment and a decline in well-being. When Pops takes the long way from 1984 to 2017, he lives without the help of Sarah Connor to blend in with humanity. He tells Sarah that during this time he worked as a construction worker for what would be Skynet/Genisys, even helping to build the headquarters that the last act of the film takes place in, but he was laid off. Although the reasons for his lay-off are not specified, this lay-off reflects not only societal ageism but also the job insecurity faced by many in lower and lower-middle class workers in the early 21st century U.S. economy. Pops' experiences living amongst humans and being laid off likely caused society's dominant ageist narratives like decline to influence the way he perceives himself and his abilities. Without social support from Sarah for over 20 years, 2017 Pops embodies age as decline whereas 1984 Pops still had confidence in himself despite beginning to be labeled "old" by those like Kyle.

With its ending upgrade instead of sacrifice for the T-800, the film falls into the trap of trying to meet expectations set by the genres of science fiction (futuristic tech) and action (being able-bodied), Arnold Schwarzenegger's star persona, the aged action hero type, and the chasing

of "the ideal" through posthumanism. The film does more than this adherence to Hollywood hegemony, however. The film meaningfully engages with age discourses, and through a transhumanist SF lens, it can be seen to expand notions of ability and affordance as these are influenced by aging. The action genre in general relies heavily on ability, superhuman ability and endurance. Mix action up with science fiction, which often pathologizes age if it addresses it at all or uses futuristic technology to eradicate rather than make equitable an ageist society, and it makes sense that aging would be something necessitating an upgrade in the *Terminator* series. This film was also Arnold Schwarzenegger's return to the franchise after being The Governator and his star and political status might have negated the possibility of completely killing off his character like in previous *Terminator* films. Schwarzenegger's character does subscribe to tropes of the aging hero as an aged star returns to a popular franchise and genre portraying a character that has only gotten smarter and stronger with age (Jones and Batchelor, 2015). In addition to being aged, Pops also is an android out of SF although he does not exactly fit the homogenizing sameness that plagues appearance standards when creating a supposedly superior being by infusing it with technology like a trans or posthuman. He does upgrade with the promise that he need not continue to age as he can now maintain his appearance through the power of the T-1000 shapeshifting abilities. For all these reasons, the ending of the film features an upgrade instead of the normal sacrificial death, but these more commercial justifications are not exhaustive of what can be said about this unique ending to a *Terminator* film.

His affordances shift through the upgrade and the value being placed on age is revealed given how he uses the shifted abilities. A benefit of his T-1000 upgrade includes his new-found confidence and his greater motor control. Less beneficial is his perceived threat in being a T-1000 and the lack of knowledge about how to effectively maintain or save this new form if it

should come under attack from something like the poison used to kill a T-1000 towards the start of *Terminator Genisys*. The benefits do seemingly outweigh the limits in the scenario of Pops' upgrade.

Looking beyond the clear ways the content of the film engages with age discourses via the ending upgrade, Pops' aging and agedness provide him with greater functionality than if he had been an ageless posthuman and when compared to the T-800's prior cinematic reincarnations. The posthuman supposedly does not grow older or change over time; they are ageless. The T-800s were not designed seemingly as long-term machines given their history of being destroyed although built with a necessary human feature to blend in: aging. Many of the later models of terminators are built with the liquid metal poly alloy that allows for flexibility and complete control over appearance and form and although divorced from human stereotype embodiment and societal ageism, they still choose youth. Also, both the later models and many of the T-800 never exist long enough for aging in the terms of years to be as much a factor of their identities. Over the films, the T-800 exhibits greater humanity than other terminators or killer androids. He not only has human skin over his cybernetic skeleton but also begins to learn from humans in the second film when the T-800 is re-programmed to protect human targets instead of terminating. However, the T-800 never lives long enough until *Terminator Genisys* to show that his skin ages and regrows over time. Whereas the later models only take on the human form for deception and contain only technologized metal, humanity encompasses a crucial part of Pops through his symbiosis of technology and biology. Pops in contrast learns and changes over an extended number of years. He ages outwardly in terms of his human tissue, inwardly in terms of his physical mechanics beneath the layer of tissue, and internally, as in within his computerized mind, in terms of his sense of personhood. The later models of terminator are not

shown to be humanized people but are the Other, the fear of unremitting technology that will make humanity obsolete. Whereas the later terminator models only ever seek to kill, the T-800 models either kill or protect, and the aged T-800 model, Pops protects, parents, holds down a human job, and is written with greater complexity in his decision-making and creative abilities. For example, he fashions the device that can temporarily disrupt the T-3000's form. His tool creation abilities and emotional support of Sarah although still roughly mechanical and logical reveal how he is man and machine, which provides him with a greater number of affordances than his short-lived predecessors or later models.

With an evaluation of affordances, the relationship between age and ability expands beyond stereotypes like the aged action hero that might be seen on the surface level of this film. Abilities relate to more than just movement-defined capabilities. Pops possesses advantages in certain movement-related abilities due to his years of experience. Aging, the process of living longer, creates the opportunity to develop certain skills and abilities over the course of an individual's life and maturation. In the West's perpetuation of the cultural narrative of decline and cult of youth, many forget the benefits a more mature mind brings. A portrait of the affordances of age, specifically transhuman age, includes, as Gibson (1986) writes, "what it provides or furnishes, either for good or ill" (p. 1). Pops' perspective on his aging may change over the course of the film, but with Kyle's continued assertion of the "Old not Obsolete" message the film began with and Pops' embracing of technological aging through upgrading, the film paints a picture where both benefits and limits are accounted for like Gibson claims a surveying of affordances requires.

Pops' aged affordances might not be so obviously connotated with his age. In the film, Pops has a lifetime worth of belongings, an entire bunker filled with supplies for defeating

Skynet and preventing Judgement Day. Due to his taking the "long way" with time travel, he has the opportunity to work for Skynet. When talking to Sarah and Kyle, he mentions that he got laid off at a certain point, hinting at societal ageism while also narratively giving Pops years to learn the layout of Skynet's headquarters intimately. He even programs Sarah's DNA into the underground bunker's security access system, enabling Sarah and Kyle's survival during the mass explosion culminating the final battle. His hoard of weaponry and ability to guide Kyle and Sarah around the Skynet facility effortlessly comes from life experience due to his having lived longer and this boon of his age helps the trio in their goal of taking down Skynet.

Pops gains skills in socialization and blending in with humans over the course of his life. His abilities grow, not decline. Additionally, his aging and aged appearance both help him blend in and be able to stay in one place in raising Sarah and in holding down the job at Skynet. If people don't age outwardly, then other fictional films and stories with this premise, like *The Picture of Dorian Gray* and *The Age of Adaline*, show how, neighbors, loved ones, and friends eventually take note. Outwardly, his aged appearance helps him be successful in his goals in life.

His socialization skills also translate into a deeper and more paternal relationship with Sarah. He reminds Sarah Connor to put on her seatbelt when driving a bus during a chase scene like a concerned parent. When he seemingly sacrifices himself for her during the ending battle, he tells Kyle, "Protect my Sarah." The choice of the possessive in this moment shows parental authority and also a personal connection, signifying his parental love. This relationship resembles the adoptive father-son relationship between teenage John Connor and the T-800 in *Terminator 2: Judgment Day*. In the second film, Sarah Connor muses diegetically about it in the film and Telotte (1995) references the paternal bond in his book *Replications: A Robotic History*

of Science Fiction Film, calling the T-800 "both father and savior" (p. 175). Although the T-800 may have played a large paternal role in the character John Connor's life, their actual interaction lasts only a matter of days in the second film whereas Pops raises Sarah from age nine onward in the fifth film. Pops' abilities to blend in and enact familiar, emotionally supportive roles become more sophisticated due to the amount of time he serves as a parent and lives amongst humans. The film openly acknowledges the nature of their parent-child relationship more than other common such mediated adoptive family relationships by having the T-800 literally be "Pops". Pops' social abilities can't compare to the assimilation of the T-800 known as Carl in *Terminator: Dark Fate* who has a wife, a stepson that he raises as his own, and a drapery business. Both Pops and Carl have lived amongst humans, aging alongside them, longer than their fellow T-800s and consequently enact their greater social skills learned from observation, participation, and experience. Age expands their possibilities.

After his upgrade at the end of the film, Pops appears indestructible. Where he felt shame about his hand spasms, attributed to age's effect on ability, he now exudes the confidence that he need never change in an unwanted manner again. This feeds into the myth that a person is only themselves when they remain the same, which stands counter to what living means, or when they have complete control, another instance of wish fulfillment and myth. Living means aging even if it cannot be seen. All this upgrade succeeds in doing is feeding into a cultural wish fulfillment to conquer what our cultural age narratives have defined as the failures of the body due to age. This over the top, happy ending echoes the ending of other films in the series and also propaganda in general. It strikes a utopian chord, which might leave viewers feeling bizarrely happy but ideally also leaves them questioning this buzz. Was aging really the enemy that was being conquered here or was Pops' embodiment of the stereotypes associated with aging? Pops

was allowed to live to the end of the film. He did not sacrifice his life or his humanity but rather embraced the complexity of his transhuman aging.

Formally, the film positions Pops as the Other after his transition to T-1000, which makes the film's framing of his acceptance of technological aging contentious. Loud and metallic sounds echo forbiddingly as he enters the bunker where Sarah and Kyle hide. His T-1000 spike hand, an object to fear throughout the *Terminator* series, protrudes through the heavy metal door that prevented the explosion from reaching Sarah and Kyle. This alarming spike is all they see. The music intensifies. The bright light behind his body throws him in silhouette. Then, he steps forward into the light, greeting Sarah. The suspense breaks with relief and joy. The reveal's ominous tone along with the often-insidious nature of the T-1000 models cause some questioning of the totality of the happy ending.

Even with his powerful update that grants him greater control over his appearance and physical abilities, Pops does not choose to make himself younger, reflecting SF's newfound valuing of agedness. Pops' upgrade granted him the ability to morph his outward appearance and have complete control over both appearance and supposedly ability. He will never again suffer a glitch out of his control. With this complete control, he rejects his former embodiment of stereotypes and accept his agedness as crucial to his identity. Now with the ability to change his visage, Pops remains his aged self when he goes and rescues Sarah Connor and Kyle Reese from suffocating in the underground bunker. He reaffirms he is still himself and that he only upgraded when questioned by Sarah who thought he was dead. His declaration of who he is and his choice to maintain his body in the aged form reveals a value placed upon the memory of not only his lived experiences through this body but also the memory of Sarah and Kyle who would know him best as he appeared to them last.

Looking so-called "old" is generally not considered as problematic for male characters as it is for female or non-binary characters. Scholars Chivers (2011) and Stoddard (1983) in their respective books on age in cinema both assert how unequally ageism impacts male and female genders. For men, ageism focuses not as much on appearance but on ability, so Pops' disinclination to change his physical appearance given his gender coding as male might not be surprising. What is surprising is his choice of hand to use at the end of the film's rescue. Instead of proving domination over his right hand, the one that had been shown multiple times to spasm and having this hand morph into the iconic T-1000 spikes, Pops uses his left hand for this task. In choosing the opposite hand, Pops makes peace with his anxieties about obsolescence.

Pops and those around him assert his identity as old and not obsolete. He subscribes to human aging but clarifies his disinclination to accept the faster pace of technological ageism. However, Pops' fear of obsolescence might do more than reflect stereotype embodiment theory. It might act as a strategy to maintain control. Pops' appearance codes him as a white male and white males even ones that work blue collar jobs have greater privilege in U.S. society than non-white and non-cisgender males. Fitzpatrick (2006) argues how crying about the obsolescence of systems like print seeks to gain sympathy and maintain ways of doing that continue the gate-keeping oppression of ulterior ways of being, researching, writing, and understanding. So Pops' refusal to be obsolete earlier in the film can be read as his belief in other ways of being and his later fear, acquired over his 20+ years amongst humans, might reflect a recognition of his own privilege within the infrastructure of society being chipped away by ageism.

The Potential for Transhuman Upgrades: Crossing Over to Reality

The film's ending upgrade of Pops can be read as a reflection of contemporary life, as people do have surgeries, implants, limb and bone replacements that unite the technological and

biological to allow for a greater diversity in being and equity in doing. If we think of the falling in liquid metal like a surgery meant to help with muscle control and nerve receptors in Pops' hands, then the real-world connection to technology becomes apparent. His bounce back from surgery happens much faster than any human's recovery would be expected to be given current technology, but the character is played by Arnold Schwarzenegger, an actor who began filming 2019's *Terminator: Dark Fate* shortly after having open heart surgery (Jackson, 2019). Humanity has already become intertwined with technology, so it stands to reason with everything that has already been mentioned about upgrade culture that this trend to blend humanity and technology will continue. Thus, the ending's upgrade may not seem even slightly ageist in future but just become the new norm. Zylinska (2002) writes, "'extensions of man' must be analysed not from a human point of view but from a position of inbetweeness, as the very process of 'extending humanity' undermines the inviolability of the boundaries of the human self and the non-human, machinic other" (p. 3). Using a transhumanist lens, Pops' upgrade makes perfect sense and does not forward ageism but in multiple ways counters it through accepting shifts in affordances as part of the upgraded/aged transhuman's techno-bio-natural life cycle.

Throughout the film, the narrative and formal elements neglect to directly tie Pops' superior knowledge, resources, and skills to his advanced age. However, his upgrade at the end can be read as a natural product of this life experience. He fashioned the weapon to use against the newest terminator model, he had worked in the enemy's headquarters building the place so as to have invaluable knowledge about the layout, he had a bunker filled with supplies, and greater social skills. In terms of technology, he had done so much at the T-800 level that he makes sense

for him to expand his affordances further through the T-1000 upgrade to mark and further build upon what human aging advancements Pops was experiencing.

Although the upgrade can be read through the successful age narrative and also as a restoration of the aged action hero stereotype where physical capabilities refuse to change, reading the upgrade as synonymous with aging places the character squarely in this culture of obsolescence. Updating and upgrading represent a necessary movement forward in time, the inevitable changes over time, and aging across lifeforms. Technology cycles also rely on upgrades. The latest software update releases. New models of car and phone replace former versions of these possessions that become obsolete either because their owner simply wants the latest or because the former versions have stopped to function in the way that people have decided they are supposed to (Tischleder and Wasserman, 2015).

This upgrade allows the character to continue to live, to age and points to how change over time comes not from the body alone. Dominant cultural narratives about age focus on the process of aging as solely impacting and being impacted by internal, uncontrollable factors of biology. This lack of control creates a feeling of helplessness. Age as decline narrative gets its power through the acceptance of this helplessness and then successful aging myths and strategies can take hold. However, external processes and events do impact aging. The ending upgrade of *Terminator Genisys* acknowledges this lack of control as Pops falls into the liquid metal that will change him. His affordances shift. The homogenizing internalization narrative contributes to the embodied shame, guilt, and other negative feelings directed inwardly at one's own being. This internalization also has its roots in the external cultural narratives that are being embodied. People don't age in a vacuum and neither does Pops.

"I'll be Back:" Concluding Thoughts for this Chapter

The film dances around openly acknowledging societal ageism. Some might choose to read Pops and his upgrade one dimensionally as reaffirmation of the disabling nature of age but the character throughout the film uses his age and his aged abilities to do what is meaningful to him. The affordances shift as he experiences human and technological aging, but the full story reveals not just aging but how this process allows for finding more opportunities along with challenges.

Age has a greater impact on abilities than most narratives propagated in Western culture and media give the natural process credit for. This includes science fiction, which has historically looked for ways to do away with the "problem" of aging. By reading a more ability-centric science fiction action film like *Terminator Genisys* that attempts to deal with how age impacts ability onscreen, this chapter points out how recent science fiction has not entirely fallen into ageist rhetoric in their recent representations of age *and* how one dimensional most viewpoints that consider age's impact on abilities are. Chapter 1 focused on how transhuman aging in and of itself in *Westworld* is coded as a process that leads to positive and liberating changes in the hosts/androids, this chapter focused on how transhuman age actually opens up abilities, and the next chapter looks at the film *Marjorie Prime* for what age does in regards to a more specific affordance of age, memory.

Chapter III: "I'll Remember that Now:" Memory's Multiplicity in *Marjorie Prime*

Jon and Tess go through Marjorie's possessions after her death, and Tess finds many letters sent to Marjorie after her husband's death, 15 years prior. These letters came from her former suitor from before marriage and would-be lover Jean Paul. Tess selects one of the letters and begins to read aloud.

"When I think of you, I'm aware of who you are now, your age and your physical problems. But these perceptions are overridden by my knowledge of who you were 50 years ago."

She hands the letter to Jon who continues, "I know if you allow me to visit, I will see you with my memory as well as my eyes."

In this scene from the film *Marjorie Prime*, the characters remember things Marjorie said and expressed, and they glimpse some of her memories that she never shared with them through her letters. This recited letter references the affordance of memory as Jean Paul claims he will always remember Marjorie as the woman he fell in love with half a century ago. Memories play a crucial role throughout this film and much of 21st century SF.

The way recent SF imagines memory, especially as an affordance of age, acknowledges memory's transhuman nature, and the subject of memory as it relates to age and transhumanism abounds in the 2017 independent film *Marjorie Prime*. As shown in the above anecdote, memories have existed in forms outside of the human body for a long time, so the concept of aiding one's memory through technological means should not seem too foreign and futuristic. Human memory has been and will continue to be transhuman, a mediated place where humans

gain new affordances (benefits and limits) through the context of introducing technology further into their lives.

The value placed on transhuman memory in recent technology and SF reflects valuing of village elders or those who have lived through history. For example, The USC Shoah Foundation created an interactive video project, entitled Dimensions in Testimony, that preserves the memories and experiences of those who lived through the Holocaust and other horrors of human history. Only a handful of museums currently features these exhibits where visitors can ask what looks like a hologram of a seated person questions and the seated person will answer with whatever pre-recorded response from their extensive 2,000 question original interview makes the most sense (USC Shoah Foundation, n.d.). By making these memories existent in an embodied form for future generations, the project places importance on both the interviewees' experiences and their physical personhood, the face that survived these historical atrocities. The preservation of memory through technology sometimes has been coded as reflecting anxieties about memory loss with age in both individuals and larger societal structures as opposed to being seen, like in Dimensions in Testimony, as a valuing of lived experiences and a valuing of knowledge from current and past elders outside of personal recollection. The 2020 Superbowl commercial "Loretta" exemplifies this ageist tendency to look at limits first. In the commercial, the aged individual uses Google Assistant ("Hey Google") to help him remember his deceased life partner. The commercial depicts the technology as foremost for helping with memory loss as the first image shown features someone typing in "how to not forget" to Google. "Loretta" presents the technology as preserving something meaningful only secondarily. The full affordances of aged memory become obscured when negativity such as loss and decline receive greater attention upfront than the benefits.

The film *Marjorie Prime* allows greater representation in aged transhumans than even the other science fiction films examined in this thesis through the character of Marjorie, an outwardly aged white woman with memory problems. Many humanoid technologies do not "age" in a human sense and most films that have aged transhumans who "look aged" include mainly white males like found in *Westworld* and the *Terminator* series. Through the characterization of Marjorie, the film's narrative, and the overall design, the film *Marjorie Prime* continues the popular scripting that the transhuman dominates the future of humanity while breaking the homogenizing and ableist limitations on who can be transhuman. The more memories you have to draw from regardless of how easily they may come or go equates with how enriched and empowered your life experience. For example, the seemingly youthful Dolores in *Westworld* leads confidently in Season 2 due to her accumulation of around four decades worth of memories that allow her to predict her human enemy's actions. *Marjorie Prime* stands out for its unique focus on the outwardly aged female transhuman and its treasuring of the natural gifts of a long life. Through the film's narrative set-up of knowledge sharing and memory-based storytelling, the 2017 film *Marjorie Prime* returns to a more traditional idea about the affordances of age as the narrative privileges memory of human life and emphasizes memory's transhuman form through the holographic humanoid A.I. Primes. Memory's transhumanity also can be seen in its multiplicitous nature as we, humans, use the word to describe similar systems within both human and technological bodies. Recent SF, like *Marjorie Prime*, recognizes the multiplicity of memory and enacts the idea that all the dynamic kinds of memory include commonalities that not only celebrate agedness but further bridge the categories of human and technology through its performance.

Based on a 2016 play of the same name, the 2017 *Marjorie Prime* focuses in the first half of the film on Marjorie, a white- and grey-haired aged woman suffering from memory problems. She utilizes her Prime, a hologram that looks like her deceased husband Walter in his youth, to help recall her memories and as a companion that reminds her to eat and care for herself. He is known as Walter Prime. Marjorie's adult daughter Tess and her husband Jon also care for Marjorie along with a young employed care provider named Julie. Based on some dialogue where Marjorie tells Tess that she will have to forgive her outdated notions since she was born in the 20th century, the film likely takes place during a speculative latter half of the 21st century. In the second half of the film, the Primes change roles and become for dealing with grief. In essence, they keep deceased family members alive instead of assisting the aged. For example, Marjorie Prime, an A.I. meant to play the role of the now deceased human Marjorie, helps Tess navigate grief and her lingering childhood trauma. In addition to its focus on mental well-being and later life care, the film meditates on the significance of memory and how technology can enhance human memory.

In the following pages, memory's multiplicitous nature will be unpacked. Then, its transhuman formation in recent SF, primarily through the media example of *Marjorie Prime*, will be explored. Both the form along with the thematic and narrative content of *Marjorie Prime* and some of its paratexts make up components of the subsequent transhumanist analysis both as it highlights cinematography and DVD artwork at first and as it digs deeper into the theoretical undertones of the dialogue, characters, and narrative. In concluding this chapter, connections between memory, transhumanism, and aging within recent SF come together to articulate how recent SF audio-visual updates traditional transhumanism for a clearer anti-ageist perspective through a valuing of aged affordances.

Memory's Multiplicity as an Affordance of the Aging Transhuman

Memory consists of many divergent branches: institutional, personal, collective, technological, cultural, and screen (to name only a few). All these versions of memory rely on a few overlapping elements. Narrative, skills, learning, patterns or procedures appear throughout these various kinds of memory. However, it is through the performance of these repetitive elements in recent SF that memory's transhuman nature and SF's valuing of aging and agedness emerge prominently. Performance in the SF genre brings all these kinds of memories together in the transhuman form where otherwise the ways in which these various kinds of memories all emerge from a similar desire to tell and preserve stories and information that in some ways help humanity to survive and honor aged experiences would be lost. These commonalities also appear in the primary media example for this chapter, *Marjorie Prime*. Whereas prior understandings of technology and memory might have limited technology's access to more "human" forms of memory and remembrance, these films express a syncretic understanding that opens all forms of memory to transhuman individuals and communities.

Institutional memory deals with how organizing bodies remember their pasts for utilization in the present. Linde (2009) writes "[I]nstitutions and people within institutions do not mechanically record and reproduce the past. Rather, they work the past, re-presenting it each time in new but related ways for a particular purpose, in a particular form that uses the past to create a particular desired present and future" (p. 14). This storytelling and reshaping of the stories comprise institutional memory. Our understanding of human memory (and arguably, the human experience) hinges on narrative; as Gottschall (2012) puts it, "We are, as a species, addicted to story" (p. xiv). Storytelling acts as a crucial component in *Marjorie Prime*. In the opening scene of the film between Walter Prime and Marjorie, Walter Prime tells Marjorie

stories that she has told him on her better days: the stories of their proposal and of the couple getting the two different dogs named Toni. As he recites, she suggests modifications to the stories to make them more exciting or more truthful as she sees fit. These revisions help her maintain a sense of control over the story of her own past even when her memories of this past come and go. Walter Prime tells her these stories to help her remember her own sense of self as the stories came from her mind originally. An example of actual institutional memory can be found in HBO's *Westworld* where Delos goes through decades of employees and yet the narrative of the organization's mission and secret project remain through institutional memory. Although not shown, it is possible the company that created the Primes has something similar in *Marjorie Prime*. Regardless, narratives are at the center of even institutional memory.

Individual memory has both that which falls into more of the narrative side with declarative memory and that which does not with procedural memory. Declarative memory is any memory that can be articulated and explained. Procedural is a kind of memory that defies explanations, a part of the circuitry and automatic response system so deeply ingrained that the individual can recall and rely upon it without thought (Anastasio, et al., 2012, p. 37). Aristotle similarly divided memory into two categories based around involuntary and intentional recall (Roth, 2011, p. 6). Anastasio, et al. (2012) explains, "We form individual memories by a process known as consolidation: the conversion of immediate and fleeting bits of information into a stable and accessible representation of facts and events. These memories provide a version of the past that helps us navigate the present and is critical to individual identity" (Description). In the film, the A.I. Primes rely on humans to tell them what the individual they resemble was like. Jon tells Tess Prime at their first meeting, "Why don't you let me do most of the talking, and then you'll learn about yourself." The transfer of memories orally allows the Primes to better imitate

the person they play in the minds of the very same people who provide the Prime with their memories.

Collective memory follows naturally from individual memory as it deals with the memory of a group of individuals, going from an "I" to a "We". Collective memory deals with when groups of individuals begin to articulate a shared past. Ideas about racial or cultural groups sharing a collective memory predate the term (Anastasio, et al., 2012 p. 43). Anastasio, et al. (2012) write:

> Collective memory consolidation is not just the collected consolidations of the group members but is a process analogous to individual consolidation that occurs on collective levels. In our view, the collective consolidation process produces collective memory structures (from books to myths) that subsequently evoke collective remembrances that transcend the individual level (p. 58).

The Primes can be read as families' collective memory structures, like photo albums, as many individual memories fill the memory banks of the Primes for collective remembrance by the family members in the future. However, this analogy neglects the fact that the Primes enact and perform human memory in addition to their computerized memory.

Memory theorists like Assmann (2006) believe that collective memory's broadness oversimplifies human memory and that the categories of individual and collective limit the varied uses of memory. Assmann (2006) posits four types of memory: individual, social, political, and cultural (p. 211). She characterizes "individual" as formulating identity through the processing of one's subjective experiences (p. 213), "social" as memory-sharing across generations (p. 215), political as the product of memory activists who share a collective identity and "political" make-up in their determination to not let certain elements of the past be forgotten (p. 220), and "cultural" as a memory inclusive of both what is remembered and forgotten and that embodies both knowledge actively being used and knowledge archived for future use in a

culture (p. 220). The Primes have access to whatever form the Internet consists of within the near future world of *Marjorie Prime*; this indicates that they can enact both active and archival types of cultural memory although they seem to prefer talking through individual memories with humans to arrive at a social memory of the family stories or family autobiography. Only Jon in the film *Marjorie Prime* and later Walter Prime acting on the knowledge from Jon appear to fit even somewhat into the roles of memory activists enacting political memory as they keep Marjorie and Walter's deceased son Damien who killed himself from being completely forgotten. Regardless, the Primes and the story of *Marjorie Prime* circulates around memory and argues for memory's value within aging and transhumanity.

Computer, mechanical, technological memory act metaphorically as memory due to the theorization of how they are conceived, but mechanical memory serves more as a metaphor for humans wanting to rid themselves of error with memory. Roth (2011) writes, "the longing for memory to be mechanical was undoubtedly a reaction to the fact that memory has always been shadowed by the spectator of fallibility: its fading, malleability and distortion" (p. 13). Humans tend to believe they desire technological/mechanical memory. In this mode of thought, human memory has been equated with decline and decay while mechanical memory lasts. Roth (2011) goes on to talk about how mythic and metaphorical this idea and idealization of mechanical memory is. He points out how recent dystopia SF and speculative fiction has given a cautionary voice to the desire for mechanical memory and how the use of technology (either in imaginative future uses or metaphorical uses) to forward these aims remains at the heart of these longings for a superior form of memory (p. 14). Human memory has been coded as prone to failure, so it makes sense for a union of what is perceived as perfect mechanical memory with flawed human memory to dominate SF speculation of transhuman memory. However, Roth (2011) also points

out how computer memory itself has not always been perceived as a path towards gain but also as one towards "all loss" (p. 15). As even if all the information can be stored, it cannot possibly all be retrieved at once.

Actual computer memory—although still understood through our human definition of memory—works in a more straightforward manner than imagined in science fiction or culture. Computer memory aligns with procedural ideas of human memory. Hemmendinger (2007) writes:

> [M]emory organization in a computer forms a hierarchy of levels, arranged from very small, fast, and expensive registers in the CPU to small, fast cache memory; larger DRAM; very large hard disks; and slow and inexpensive nonvolatile backup storage. Memory usage by modern computer operating systems spans these levels with virtual memory, a system that provides programs with large address spaces (addressable memory), which may exceed the actual RAM in the computer. Virtual memory gives each program a portion of main memory and stores the rest of its code and data on a hard disk, automatically copying blocks of addresses to and from main memory as needed. The speed of modern hard disks together with the same locality of reference property that lets caches work well makes virtual memory feasible (Hemmendinger, 2007, sect. 11).

This concept of virtual memory resembles how the Primes function more so. Primes stay in a certain geographic location with their physical holographic form but possess seemingly infinite memory capacities despite the impossibility of them accessing all the files at once. Their storage and retrieval systems—based upon main memories and auxiliary memories active program + data and inactive programs + data, respectively (Hemmendinger, 2007)—maintains the speed along with the illusion of a perfect mechanical memory.

The therapeutic potential of memory exploration for any aged individual resonates with recent SF and has been theorized within psychology. Roth (2011) puts forth an example of this kind of memory that relates to what the Primes do. He writes that Freud saw memory recovery as crucial to the recovery of health but the memory he meant was not the kind on the surface, easily recalled. Rather he thought there existed hidden memories beneath these surface-level memories

that held the treatment for whatever ailed the patients psychologically. This is Screen Memory (Roth, 2011, p. 53). "Screen" as used by Freud functions more like a screen door keeping bugs out than a film or TV screen. The transhuman Primes follow this interpretation of the power of memory to heal. The Primes insist at various times to the hesitant and questioning humans that they can help, like when Tess Prime tells Jon: "I can help you if you let me. I would like to help you. But first, you have to tell me more about myself." When the Primes go through memories with their human companions in order to become better at imitating their human roles, the Primes provide their human talking partner an opportunity to work through any trauma latent in the memories discussed. Thus, the memories discussed provide a screen, like Freud's surface level memories discussed above, that allow for the Prime and human to together work through the underlying trauma.

The concept of memory has a strong association with trauma and pain. Nietzsche writes "memory was born out of pain" (Roth, 2011, p. 2). In the TV show *Westworld*, the character of Ford claims that the hosts needed to suffer over time and be given the chance to remember and learn from their experiences through the Reveries update in order to achieve consciousness and escape their entrapment. In *Marjorie Prime*, the humans all use the Primes as tools with which to process not only the trauma of grief but other traumas of life that linger through memory. Working through trauma and remembering what caused pain in the past provide an evolutionary, survival-driven reason for memory in both human and transhuman.

Transhuman age unites concepts of memory that might otherwise feel divergent. Memory on a computer consists of information stored for immediate use along with the space and circuits that make-up the network of immediate information available. Memory in humans includes more personal connections like identity outside of the realm of bare bones information. Memory

connects people to the past and to theirs and others' lived experiences. Memory changes, however. Humans do not have immediate access to all possible memories at any given time and the memories accessible have likely shifted in form and content since the last recollection. After all, humans might remember moments slightly differently depending on the circumstances of recollection. In transhuman memory, the space, immediateness, and possibility to all information does not impede fluidity or the living connection to past experiences. This theorization of transhuman memory enhances human life through technology and supports an anti-ageist point of view as it highlights one benefit of having lived longer, an abundance of memory.

Memories themselves age. Memories refuse to be exact and precise things. Their ever-growing and changing nature precludes them from stagnation. Even in computer memory, the information and various components making up the system shift. As change occurs over time, aging exists and can be identified as impacting memories. For example, in Season 1 of *Westworld*, Dolores remembers flashes from her life before the death of Arnold and gets drawn into a journey to find the center of the maze, a game meant to test her attainment of consciousness designed by Arnold. She goes on this journey, reliving and actively performing these memories, many times, but she does not always remember the same things. Although Dolores' transhuman memories play back "vividly" like they are happening when she recollects them, she still had variations within her remembrance of the journey to find the center of the maze. Sometimes, she remembered William being there with her. Other times she thought herself alone. Her memories of all the different times she has done this exact journey run together due to their variations. Like this, human memory becomes more distant, more congested, and more modified from the original or more aged with time and each recollection. In *Marjorie Prime*, Tess and Jon discuss the reasoning for the natural variations in memories at a club. Jon labels

memory as "sedimentary layers in the brain" and that people never know what they will be able to excavate from the mass, but Tess corrects him, scolding him that he should remember William James' theory of memory. She explains that memories get fuzzier each time they are remembered because it is not the original memory that is being recalled but the last time the memory was recollected. She likens it to photocopying as it is never getting clearer or more like the original. The game telephone would also serve as an accurate analogy. Finally, Tess claims memory as unreliable due to it always dissolving in this way. Her illustration of memory as constantly deteriorating aligns with narratives of aging where age equates with decline. What she describes also includes cycles of recollection, like years or updates or any other way to measure change over time that correlates with aging. Memory ages then. However, as was established in Chapters 1 and 2, aging entails more than the negative stereotyping of deterioration. Benefits arise from a lack of clarity in memory. In Season 2 of *Westworld*, the character of Bernard deliberately de-addresses his memories, making everything fuzzy, so that his supposedly perfect mechanical memory cannot be used to foil his plan. Transhuman aging reflects and accepts this fluidity of memory instead of trying to fight it to arrive at some unnatural static perfection of memory or singular truth.

Introductory Analysis of *Marjorie Prime*

Reflections show up in many scenes in *Marjorie* Prime. In the beginning of the film, Marjorie enters her house as a reflection to start and then her physical body. Later, when Tess and Jon read over Marjorie's letters after she has passed away, Jon reads Jean-Claude's love letter to Marjorie and Tess appears only as a reflection in the tiled wall behind him. These reflections mirror the nature of the Primes as holographic, lacking a physical form but having the appearance of one. The transhuman form thus offers a reflection upon humanity and can be read

as a fictionalized metaphor for the Primes as a gateway to learn more about the human life process and how the mind/memory works.

Images 11 and 12: Marjorie's reflection appears before her

Image 13: CU on DVD cover of Marjorie Prime

The paratext of the DVD cover's design (depicted below) reflects the transhuman form through its imagery and its selected press quote. The image has the faces of actors Hamm (Walter Prime) and Smith (Marjorie [Prime]) fading into pixels, reflecting the transhuman nature of their characters. The use of pixels could also refer to the modularity of technological life and how memories can be understood as modular, discrete parts making up a larger whole within the mind. The fade away also references dominant narratives about memory as disappearing with age and mechanical memory as a flawed, dystopian answer to this problem as something might be lost in translation. The press quote on the DVD from a *Hollywood Reporter* review claims: "Not since Spike Jonze's *Her* has humanity's uneasy embrace of seductive technology been given such soulful contemplation" (Rooney, 2017). This quote situates the film alongside *Her*, a film where A.I.'s on phone software systems awaken, form strong bonds with their human counterparts, and ultimately leave humanity behind through a Singularity for a posthuman future. However, the Primes do not leave humanity behind. They may outlive humanity but their tie to humanity persists through the Primes' forms, the narratives they tell, and the roles they age in through the growth of and deliberate modifications of their memory. Their roots are human. This same review summarizes the film for Twitter with the following tag: "the past, new and improved" (Rooney, 2017). This short Tweet encapsulates how the film frames memory as our inseverable link to the past and how even technology has memory despite the

Image 14: Full DVD cover of Marjorie Prime

constant demand for so-called newness. As was mentioned in Chapter 1 and 2, innovation and upgrades build upon the existent technologies and structures and upgrades function as a part of technology's aging process. The Primes act as an upgrade for many of the already transhuman structures that help preserve humanity's past like photos, written accounts, and home videos of loved ones, and Primes also act as a possible transhuman future for the person they play in the eyes of surviving loved ones.

In *Marjorie Prime*, the characters all revolve around memory. The human Marjorie has Walter Prime, the hologram pretending to act as her deceased husband in his youth, and Julie to care for her along with her daughter Tess and son-in-law Jon. They form a positive network of support as she suffers from memory problems, arthritis, and other unspecified ailments. Walter Prime reassures her about her worth, tells her stories from the past, and urges her to eat. He often compliments her to help with her self-esteem as she deals with losing control of her memory and body. One time, he says, "You're a fine woman, Marjorie." He also never tells her overtly that she cannot play the violin when she repeatedly asks about her ability to still play. He always responds, "I'm sure it's in your head still but your hands." Julie gives her the cigarettes she demands letting Marjorie have a little more control over her health decisions and a sense of freedom. Tess does not always say the most caring and comforting things, but she does provide a link to Marjorie's past. For example, Tess often tells Marjorie about events assuming she has forgotten them, and Marjorie usually snaps back that she has not forgotten the event in question. Although they bicker a bit, this does not appear to be unusual for them and their history is implied to be rife with disagreements. Finally, Jon who interacts the least with her onscreen simply gives Marjorie affection, hugging her and teasing her in a friendly way about flirting with a doctor. In a montage sequence, Tess, Jon, Marjorie, and Julie go to the beach and celebrate

Marjorie's birthday. The Prime watches from the window. The four together provide a support network of human and technological means that enhances Marjorie's quality of life without too drastically altering her quantity of life. At the center of this caring support network, the affordance of memory stays central.

The first half of the film focuses on Marjorie and her care team, including Walter Prime but the subsequent sections of the films have Tess navigating having a Prime of her mom, Marjorie Prime and later Jon having a Prime of Tess. All of these interactions deal with memory and can be further seen to negotiate the affordances of aged transhuman memory. The human Marjorie struggles with her memory. Jon struggles too while Tess and he playfully debate about the nature of memory itself and the so-called facts of their shared memories. Julie cries over Marjorie forgetting her somedays, and Walter Prime learns from the memories of others and recounts the memories in story form. Tess seeks to work through her past traumas that still plague her own sense of worth through her conversations with Marjorie Prime and Jon. Jon then does a similar thing with processing Tess's death in his conversations with Tess Prime. The final scene of the film has the three Primes conversing with one another and centers around memories. They all perform for one another, reciting what they remember to be the knowledge, behavior, and memories they have been told about their human counterparts. In almost all of their interactions, the Primes provide care due to their knowledge and memories even when they talk to one another.

The Prime Memorable Moments

Primes take on the benefits and limits of human and technological memory. Their construction shows how—although not all information can be retrieved at any given moment like the mythic utopia of mechanical memory expounds—fears of losing memories as associated with

age as decline disappear. Humans' shaping of memories through a lifetime of recollection gives memories an aging process that the Primes simulate due to its underlying value as a way to survive the traumas of life by crafting our own life story.

In *Marjorie Prime*, an alternate version of Walter and Marjorie's engagement replaces the original memory even amongst the computerized Primes because the Primes have bought into the idea that modifying memories aids people by allowing them to revise their life story in order to survive along with form a deeper understanding and acceptance of themselves. Consequently, the memories themselves evolve or age over time. The last scene of the film—where the Primes talk amongst themselves for the first time onscreen—reveals how the Primes have accepted this flexibility in memories. Over the course of the film, Walter and Marjorie's engagement goes from the two watching *My Best Friend's Wedding* after making love as shown in a flashback to the two watching *Casablanca* at a fashionable old-time movie house with Walter kneeling down on wet pavement after the film to propose. The Primes continued the human impulse to embellish that they recognized and then later adapted. This transhumanist stance shows an underlying value being placed on life, including memory as a part of that life, changing and aging. The resulting memory may be far from the original, but this does not make it any less useful and valuable.

In this same scene, one Prime corrects the other two about an event that their respective human roles would have known. Walter and Marjorie's son and Tess's older brother, Damien, committed suicide but only one of the Primes had learned this painful story. The other two agree after hearing the story that not only will they remember that now but that they do remember that now, asserting a connection to a human past and a mechanical infallibility of memory. The

affordances of transhuman aging include accepting change, even the unpleasant like something that both the humans Marjorie and Tess wished to forget due to its associated pain and grief.

Like the reincarnations of guests as hosts in *Westworld*, the Primes take on transhuman versions of their human counterparts. They become more and more human over time, learning more from the humans that they interact with about how to be the particular person they are assuming the role of and how to be more human in general. Tess even has the following exchange with Marjorie Prime from 1:02:09-1:02:55:

Tess: Do you have emotions Marjorie, or do you just remember ours? Do you feel anything?

Marjorie Prime: I like to know more.

Tess: Why?

Marjorie Prime: It makes me better.

Tess: Better?

Marjorie Prime: (nods) More human.

Tess: So in other words, you like to be more human?

Marjorie Prime: Yes, I think that's right.

Tess: And what are humans like?

Marjorie Prime: Unpredictable.

Tess: Really? Because I think we're predictable. I feel pretty predictable.

Marjorie Prime: I see.

Tess: What?

Marjorie Prime: You want to be more human too.

In just under a minute of dialogue, the narrative of the film privileges originality and a lack of sameness. Humanity's unpredictability harkens to its variety, diversity, and an understanding that there are multitudes and dimensions to life. Of course, this attitude could be claimed to seek validation for any number of ways that people differ or shift over time. The film's intimate dealings with how human and technology intermingle and impact the subjects of age and memory encourages the contemplation of how unpredictable human life and recall is. The human Marjorie faced the unpredictability of what she would remember on any given day earlier in the film. Now Marjorie Prime strives for the same unpredictability and spontaneity of recollection and cognition as evidenced through certain behaviors she wishes to perform *better*.

In the final scene of the film, Marjorie Prime appears to continue her struggle to balance technological determinism with biological improvisation as she confronts a new memory, something that had a huge impact on her human counterpart. She listens to the story like the human Marjorie listened to Walter Prime's stories in the beginning of the film and she responds when queried about her emotional status with a similar line to what she, Marjorie Prime, was told by Tess her human equivalent used multiple times when being reminded of her husband's passing: "All I can think is how nice—how nice that we could love somebody." In these ways, she improvises in a new situation with behaviors that might be considered predictable given her prior knowledge of them being a part of Marjorie's history, but she channels Marjorie's unpredictability in the nature of the response even if the response itself becomes predictable and

procedural. The Primes strive to be more human and this includes the performance and utilization of memory even the parts of memory that are classically not considered beneficial.

Throughout these varieties of memory that appear in recent SF, performance remains a common and crucial component. The examples above from *Marjorie Prime* all function on the idea of memory as performance. However, an even clearer example of how all these kinds of memory are brought together through their performance in recent SF appears in HBO's *Westworld*. In the first episode of *Westworld*, the show creators use the host android character of Clementine to introduce the Reveries update and its function: to grant hosts' unconscious access to previous memories in order to inform their behavior. These buried memories serve not to necessarily recall information, but to add a sense of verisimilitude, fidelity, or authenticity to hosts' relationship to their memories. Bernard watches the newly updated host in fascination as she runs her fingers over her lip, seemingly responding to something from her previous builds. In this way, Clementine exemplifies how the hosts perform the recollection of their memories. This visual and physical reaction shows memory's performative and habitual qualities and also shows how the hosts enact transhuman memory. In this moment of unconscious recollection, Clementine exhibits the replicative, replacement, and persistent storage functions that arise from human–computer conceptualizations of memory. But the performative function, for building relationships, also expresses itself. This performance of memory reappears in Season 2 when the original Clementine is confronted with the new host that has been given her character role to play and both access her memories. Clementine mouths the familiar words that the new host utters, indicating her reacting to and reliving of a memory through her physical behavior once again. The very idea of the Reveries update indicates a valuing of the past and aging.

Reminiscences to End Upon

Aging allows for the expansion of memory. Narratives that focus only on how the recall of memory may become more difficult with age neglect the historical value of having people live extended lives. Transhuman aging with its uniting of human and technological aging components reinstates the value of agedness as it allows for a greater exploration of the affordances of living a longer life and aging than prior SF narratives tend to address. Everyone always worries about the limits of later life instead of considering both limits and benefits, and this worrying included later life's effects on memory. At one point in *Marjorie Prime*, the human character Jon throws his drink in frustration at Walter Prime and the Prime's seemingly perfect memory. Jon sees his human memory as only shrinking in its capacities while witnessing the infinite capacity for growth of the Prime's abilities to learn new information, store, and repeat back. Ironically, earlier in the film, Jon reassures Tess that the Primes even seek to imitate human imperfections. This does extend to memory and its fluid nature in humans as evidenced by my previous discussion of the final scene. Consequently, the Primes combine the "perfect" retrieval of information of computational memory and the variable nature of human memory to arrive at an in-between point encapsulated by transhuman memory. Aged transhuman memory makes clear some of the benefits and the lack thereof of living longer and its impact on memory by showing how the Primes still remember core memories but have continued to embellish and act upon the human tendency (sometimes consciously done and sometimes otherwise) to shift details in memory, giving the memory a fluid aging life as well.

Memory as an affordance of age finds greater leniency in its portrayal when painted and interpreted through a transhumanist lens. This transhuman form—made possible through science fiction's bridging of the human and technological—allows for an interrogation to be made about

what humanity and technology's relationship can mean for humanity and what we learn about ourselves through our chosen wishes and fears as conveyed through media. Despite being eager for an upgrade, these transhuman depictions all show that human aging, warts and all, does something we still value. *Marjorie Prime* celebrates aging through the narrative and thematic importance placed on memory as something that shifts over time, as something that grounds us, and as something that points not only backwards but forwards. We do not desire mechanical memory. We want, what many of the recent SF characters analyzed in this thesis perform, transhuman memory: endless unpredictability and all other affordances therein.

Conclusions

A close look at a few recent SF media shows how they value aging through transhuman characters. In HBO's *Westworld*, aging in the transhumans has many forms, including aged appearances that redefine age. In *Terminator Genisys*, the T-800's refined aged abilities make him a smarter and tougher to defeat terminator/guardian. In *Marjorie Prime*, aged transhumans act as knowledge keepers much like the archetypal role of village elders, emphasizing how loss is not the only story to tell when it comes to age and memory. All of these stories comment on a fear of human obsolescence and wish for a next upgrade of humanity through their imaginings of transhuman and aged human characters that at times defy and at other times embody cultural understandings of age. The narratives ultimately expand the idea of what age can mean and do in science fiction. The cult of youth has not won out yet in the thematic content, narrative, and characters present in recent science fiction film and TV.

Recent SF's imagining of aging androids goes beyond just human or technological age narratives. It combines the two and consequently expands the narrative of aging beyond the stereotypes that conflates aging with decaying. In *Westworld*, the hosts age through their cycles of life and death, upgrading. Their cycle of being killed by guests and then rebuilt by the park workers ages the hosts along with the normal human cycle of aging represented by the measurement of years. For example, the host Dolores' age measured in years may be in her 40s, but her age measured in update or rebuilds ranks in the thousands if not millions. It is the host's unique aging process in the show that allows for their liberation and allows for them to be divorced from dominate ageist assumptions. In the *Terminator* series, there is technological aging demarcated throughout the sequel films as the T-800 is always compared to a newer model. *Terminator Genisys* brings in human aging discourses and theory as the aged T-800 Pops

conquers his embodied age stereotypes by accepting his transhuman aging through a technological upgrade. The Primes learn more through their continued existence as they become better imitators of their roles and begin to improvise behavior due to the number of years they have operated, the years of information gathered through conversations and Internet searches, and their time spent interacting with humans or more advanced/older Primes.

Transhuman aging can disconnect appearance-based age narratives, decay, and death associations. As shown in *Westworld*, appearances can be deceiving. Ageism has slightly different triggers in the realm of transhuman aging as wrinkles and grey hair don't mean the same thing in a narrative world where a replica of James Delos, complete with receding hair and forehead creases, lasts only a matter of days and has been "brought back" over a 120 times over the course of more than two decades. This narrative reconnects the concept of age to what it has always been about, the measurement of patterns/loops over time and the changes or maturity that occurs from having survived or in some form persisted to another cycle.

The expanded affordances in the aged transhuman counter ageism's narrative of decline vs. successful aging. By looking at the benefits and limits of aging, a more complete, less stereotyped image of what it means to age emerges. The Primes in *Marjorie Prime* exemplify the benefits of a longer life as they build up memory; the declarative kind of memory, over time in order to better perform the role of their human counterpart. Despite age being often negatively associated with memory loss, age is one of the most obvious affordances of a longer life as the more memories we have to pull from, the more they unconsciously form our automatic behavioral responses and sense of self.

A fundamental affordance of a longer existence, memory plays a significant role throughout the media discussed in these chapters. Pops' memory acts as the key to his growth,

his learning, and greater humanity in much the same way that it serves the Primes. Whereas memory in *Westworld* serves this function, it also has more roles to play. *Westworld*, a show that encourages the questioning of the nature of reality, has memories as the most powerful weapon. The host Dolores says that she knows her human enemies, she remembers them, and that this is why she can beat them. Dolores has crystal clear memories, mechanical memory, but she also uses her memories to help her plan her course of action. She creates her own narrative through the memories of her life to arrive at her identity and her chosen path for the future. Memories, which had traditionally been denied the hosts, become a collective weapon in these ways.

In *Terminator Genisys*, memory is not one of the abilities scrutinized by the male action hero type, but memory still plays an important role in the story. Pops' memories prior to being sent back to protect Sarah Connor have been deliberately wiped so that whoever sent him back will not be targeted by future attacks from Skynet/Genisys. The rest of his memory and memory capabilities stay intact and his memory in the film only gathers more knowledge in perhaps the mythic mechanical memory way that produces only gain (Roth, 2011, p. 15). Regardless, it is his accumulation of experiences or access to these memories that allow him greater affordances as discussed in Chapter 2.

Through my chapters, I show how modern SF pushes back against its own past, traditional transhumanist thought, and society's own propagation of age discrimination. In Chapter 1, I explain how upgrading and obsolescence can be considered a part of transhuman aging and how when the signs and signifiers of age are changed, discrimination has a harder time taking root. In Chapter 2, I show how a fairer evaluation of affordances, rather than a labeling of able-bodied or disabled following the myth of successful aging and age as decline narratives, can open up the possibilities of more diverse age narratives even in mainstream SF. In Chapter 3, I

take an independent film example of how the narrative regarding transhuman aging has rebuffed age narratives of decline as they pertain to memory and age's relationship and how the film shows a valuing of aging into later life through its performance of memory's multiplicitous and transhuman nature. The progressive media analyzed in this thesis engage with only a few examples of what I see as a much larger trend towards critically rebuffing ageism onscreen through the meaningful incorporation of aging and agedness into cinematic SF and transhuman musings.

Future Interventions

Future research may wish to interrogate the intersectional nature of age more so. Although this thesis tackles briefly in Chapter 2 the intersection of ageism and ableism, much more can and should be said about how the category of identity known as age compounds with other identities to intensify societal discrimination. Future research should consider more so the intersections of age with class, race, sexuality, gender, and culture as many of the mediated examples discussed in this thesis included Western straight white male depictions of transhumanity (perhaps, an indication of who in terms of class would be able to "enhance" themselves through technology). Future research that has the time and space to properly consider intersectionality might consider looking at other recent SF media that expand beyond white and heteronormative examples, like HBO's *Watchman*, *Rogue One*, and *Black Mirror*'s phenomenal episode "San Junipero." A transhumanist perspective, as I have reconceptualized here, may be able to help further alleviate the negativity and stereotypes associated with other identities that stray from the hegemonized norm like it has with aging in this thesis.

The media examined in this thesis point to a trend in recent SF to consider age in a more well-rounded light. Aged characters make more of an appearance alongside technology that

might enhance their lives or, as some fear, take away their autonomy. Since a number of audio-visual SF media have appeared in the past decade that consider age and agedness overtly alongside technology, research in this field should likely continue and not be limited to my transhumanist lens. That being said, creation of these media should take into account the ways in which they can show how age does more through transhuman characters in order to curb the power of ageist narratives that lead to continued societal and cultural discrimination. The future and technology exist not just for the young or "able-bodied".

In writing this thesis, I sought to call attention to the limited ways in which we consider age in Western culture's audiovisual SF stories by deliberately rejecting ageist stereotypes as the only story. Although everyone's aging experience is different and this thesis does not seek to underwrite any of the hardships that people face as they age, I believe that a lot of the challenges stem from externally-constructed and propagated ageism as the very way we characterize the aging process leads to discriminating societal structures that exclude or segregate aged individuals and limit conceptualizations of later life. This ageism leads to the mental ravages of stereotype embodiment. Through anti-ageist transhumanism and recent SF, this thesis has sought to reunite the value of aging with society's imaginings of a technological future, and I hope creators and scholars alike will build upon this broader conceptualization of what aging is and does.

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