Genetics and Ethics in the "I am Legend" Corpus

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I. Introduction: One Story over Fifty Years

Skin bakes under the harsh blue light of an ultraviolet lamp. A subject lays limp on a medical gurney, restrained at the wrists and ankles in an underground laboratory. Her chest is heaving with exertion and the heart rate monitor is racing. A man in a white lab coat speaks into his audio recorder: "Extreme reaction to UV exposure. Symptoms and tissue samples confirm subject is infected with KV. Vaccine test: GA series serum 391 compound 6. Commencing human trials." With that news he plunges a syringe into the subject's IV line. Almost immediately respiration, heart rate, and core temperature drop to stable levels. "We may have something here." The subject abruptly bolts upwards screaming in the hackneyed style of a Hollywood jump scare. The camera zooms in on her wide-open mouth, shrieking in agony, before she falls backwards and flatlines. The scientist throws down his gear and retires for the day – another subject, another failure. Such is daily life for US Army virologist, Lieutenant Colonel Robert Neville, as played by Will Smith in the horror-thriller, *I am Legend* (2007, Francis Lawrence).

Few viewers would think to ask where research protections for human subjects have gone in this movie's post-apocalyptic landscape. The desperation of a solitary survivor of a global pandemic can justify many atrocities, as can the complete absence of any of the infrastructures and institutions of society. But viewers who have read the science fiction/horror novel on which this film is based would not be so quick to give Colonel Neville an ethical free pass, for the plot twist that discomfited many of the first readers of Richard Matheson's novel, *I Am Legend* (1954), was the startling revelation on the last pages that Neville, the hero (or perhaps "antihero" is the better term), had been the perpetrator of the real atrocities all along – not the vampires that stalked him. The film's horrific scene of research on a human subject (Col. Neville labels it as a "human trial") does not even hint that there might be an ethical problem with the experiment. But the scene raises questions of research ethics, which loom large in the latest film version's treatment of genetic engineering.

This article explores the four main versions of the "I am Legend" stories, comprised of one novel and three cinematic adaptations, all of which deal with existential threats to humanity caused by various (pseudo-)scientific mechanisms behind a vampiric infection that devastates the world's population. There have been three cinematic adaptations of Matheson's science fiction novel: *The Last Man on Earth* (1964, Ubaldo Ragona and Sidney Salkow) starring Vincent Price; *The Omega Man* (1971, Boris Sagal) with Charlton Heston; and *I am Legend* (2007, Francis Lawrence) featuring Will Smith. While each version deviates somewhat from the others, the premise remains steadfast: One lone survivor of a pandemic, usually denominated "Robert Neville," finds himself in a post-apocalyptic world where seemingly all of humanity has been wiped out. Neville, who is immune to the disease, must fend off the vampiric corpses reanimated by the disease. Fighting to preserve the human species, Neville struggles to preserve his identity as the last man on earth.

In this article we argue that the "I am Legend" stories reflect a shift from fears of external threats characteristic of warfare and geopolitics to concerns about dangers internal to twenty-first century science, particularly genetics. The shifting nature of the threats to the bodily integrity of the protagonist in the "I am Legend" stories captures

the cultural mood of the different time periods. Initially, the threat is one of contagion from others. In the novel and first cinematic adaptation, a wind-born germ devastates the human population, leaving only the protagonist, Neville, and a marauding horde of undead vampires. By the 1970s, when the Charlton Heston version was produced, the threat had changed to a pandemic created by chemical warfare between Russia and China. The threat is still external – it comes from overseas – but it is now clearly identified as created by advanced science and perpetuated during armed conflict. This film introduces The Family – a vampire cult dedicated to eradicating all remnants of science and technology, which they blame for the destruction of civilization. In the twenty-first century adaptation, the pandemic is caused by a medical scientist, apparently working in the U.S. or U.K., who releases a genetically engineered virus as a cure for cancer. The threat no longer comes from without, nor is it the result of warfare. Instead, the threat is internal to science itself – it is the unintended consequence of a gene therapy trial that presumably met contemporary legal and ethical standards for the protection of human subjects.

The "I Am Legend" stories enable us to pinpoint several changes in the cultural response to biological threats: (1) To mark one sign of the emergence of genetics as a threat in the cultural imaginary; (2) to chart the movement of this threat from viral infection, spread by others, to the unintended consequences of genetic engineering; (3) to register the movement from external threats involving Othered groups to internal threats such as tampering with our genes; and (4) to explore the way popular media forms like science fiction and horror films often perpetuate cultural blind spots toward research on populations that have suffered civil death or have been reduced to what the philosopher Giorgio Agamben calls "bare life." Within the context of the "I am Legend" oeuvre, our protagonists' development begins with Othering the vampires and ends with being Othered by the very same group he once feared – a motif that we read as a critique of our human predilection to categorize and persecute those perceived to be different from ourselves. This predilection stems from and reinforces racist discourses that question the humanness of persecuted groups and perpetuates the belief that only particular lives in society are valuable and thus their loss grievable by those in the majority (Butler 35).

II. Background and Methods

Seeing the figure of the vampire as a thinly allegorized portrait of an Othered population has a long history predating Matheson's novel. One of the first great vampire horror films, Nosferatu: A Symphony of Horror (1922, F.W. Murnau), has become a touchstone within the history of the horror film genre. The figure of the vampire has a storied folklore, characterized by horrific representations of the Other, who are portrayed as relentless invaders of the protagonist's native land and who activate specific fears of biological vulnerabilities, such as the threat of contamination and disease. Packed away in a coffin of dirt with his army of rats, Nosferatu the Vampyre makes the journey to Germany aboard a ship from his home in Transylvania, ravaging crops and spreading disease along the way. This unauthorized adaptation of Bram Stoker's novel, Dracula, is celebrated today as one of the canonical vampire horror films, but it is not without criticism. The figure of Nosferatu bears many similarities to the nineteenth- and twentieth-century caricatures of Jews that circulated widely through Europe – he has a hooked nose, bushy eyebrows, and together with his rat battalion, brings forth disease and misery, echoing common anti-Semitic calumnies that foreshadow much of the derogatory propaganda targeting Jews by the Nazi party in 1930s Germany (Hughes and Cruz). Nosferatu evokes the perceived social threat to domesticity at the hands of an increasing population of East European Jews - a fear common at the time among Western Europeans. His dreadful appearance and thirst for blood threatens a treasured way of life for many in the German homeland, bringing corruption and death wherever he ventured.

The horror genre, when successful, distills social and historical traumas, generational sentiments, and identity politics into resonant stories that often reflect larger social trends. As has been theorized by film scholars and sociologists alike, the intimate bodily nature of monstrous figures in works of horror has been influential in activating and giving form to anxieties about biological vulnerabilities (Gibbons, Stovall, and Clayton). In a case study on zombies, sociologist Todd Platts supports the notion that the genre conventions of horror open the door to examine a wide gamut of collective fears at a particular moment in time. In horror, social traumas caused by war, natural disaster, or pandemic are abstracted, dissected, and worked through by the audience within a specific cultural setting. To this end, David J. Skal writes in the introduction to an anthology on monsters in horror media, "Speak of monsters and you're soon speaking about all kinds of things." (xi). Monsters - whether vampires, zombies, aliens, beasts, or human psychopaths – are multifaceted and often function as what Fredric Jameson calls an "ideologeme," which records the predominant anxieties in a particular time and place. In the suite of works we investigate, the vampires and zombies have been read as metaphors for the racial tensions in 1950s America and as representative of the threat to individual freedom in capitalist democracies (Ransom). The vampiric epidemics that beset humanity in each iteration of the "I am Legend" stories are not isolated from other social concerns, and they should be considered not only within the context of their respective time periods but within the larger oeuvre of vampire monsters in the horror genre as a whole.

Writing about the trope of mutation in science fiction films, Frances Pheasant-Kelly connects the abjection and disgust that a mutated human body too-often inspires, with a "corresponding socio-cultural and political zeitgeist" (238). She argues that although biological horror is intimately interconnected with the real-world circumstances of the time, it would be overreaching to maintain that the aesthetics of a particular genre directly causes broader socio-cultural anxieties. Nonetheless, as we can extrapolate from the origins of monster horror films such as *Nosferatu*, particular cultural anxieties are often capitalized on by the media industry to create a resonance between their fictional worlds and contemporary circumstances.

This is certainly the case today, particularly within the genre of horror films. In the decades following World War Two, the horror genre entered the genetic age with a vengeance, beginning with stories of mutant creatures spawned by the after-effects of nuclear fallout and moving on to monsters formed by genetic engineering in later decades. In a survey of 238 films containing genetic motifs, we found that horror ranked as the second most common genre (38 films), trailing only science fiction, with which it was frequently combined. Notable examples of genetic horror include *The Island of Dr. Moreau* (both the 1977 version, directed by Don Taylor, and the 1996 version by John Frankenheimer), *The Fly* (1986, David Cronenberg), *Species* (1995, Roger Donaldson), *Annihilation* (2018, Alex Garland), and the latest adaptation of *I am Legend*.

Of the dozens of horror films with genetic motifs released since WWII, we selected the "I Am Legend" corpus for analysis because it enabled us to register the emergence of genetic engineering as a motif within a prominent series of films – an emergence that corresponded in time with a spike in genetic-themed movies across all genres. The number of films featuring genetics rose significantly in the 1970s (20

films), more than doubling the 9 films featuring genetics released in the previous decade, and the number grew significantly every decade from then on.³ This increase in genetic motifs should be no surprise, given the widespread publicity attending scientific breakthroughs in areas such as recombinant DNA, assisted reproductive technologies, and cloning throughout the 1970s. These figures help to support our contention that the changes in the "I Am Legend" stories are representative of larger cultural shifts within the body of horror films containing genetic motifs, and also point toward a significant methodological innovation that underwrites this article.

Our study is part of a larger, interdisciplinary project funded by the ELSI program of the National Institutes of Health (NIH) focused, in part, on the impact of popular culture on public attitudes toward genetic privacy. Our team uses a multidisciplinary approach to validate the findings of one method by checking them against the results obtained from the others. By virtue of our participation in this project, sustained over several years, we have an unusual degree of confidence that the interpretations generated by our close attention to the four texts in the "I Am Legend" corpus can be generalized to larger groupings of texts. The reverse has also been found to be the case. The statistical measures and quantitative approaches finding changes in attitudes toward genetics over time are buttressed by our focused interpretations of the "I Am Legend" stories here.

Our attention to the varying sources for the vampiric infection stresses the biological and bodily aspect of these fictionalized case studies; the vampire is always biologically different or Other, thus offering a rationale for Neville's practice of oppressing, eradicating, and experimenting on them. The cause of the virus, though, varies in the adaptations. We take this to indicate a persistence of discrimination against the abject body of the Other regardless of the cause of its abjection. While there has been much scholarship regarding American race relations in the "I am Legend" corpus, little has focused on the viral vector of racial abjection and what that indicates about public attitudes toward genetics through the decades (Brayton).

III. The Course of a Legend: A Filmography

Richard Matheson's 1954 novel *I am Legend* initially met a mixed reception, largely because of Matheson's liberal politics and unscientific medical explanation of the vampiric outbreak. The well-known science fiction author, anthologist, and literary critic Damon Knight panned the novel, writing,

[I am Legend] is full of good ideas, every other one of which is immediately dropped and kicked out of sight. . . . All the same, the story could have been an admirable minor work in the tradition of Dracula, if only the author, or somebody, had not insisted on encumbering it with the year's most childish set of 'scientific' rationalizations. (194)

Nonetheless, the book was a commercial success and authors such as Stephen King and computer game producer Tim Cain have spoken about the influence Matheson's book has had over their creative work.

Shortly after the publication of *I am Legend*, Matheson began working with filmmakers Ubaldo Ragona and Sidney Salkow on the first film adaptation starring Vincent Price, *The Last Man on Earth*. Unhappy with the adaptation of his novel in this movie, in large part because of its extremely limited budget, Matheson ultimately removed his name from the screenwriting credits and distanced himself from its production. Several years later, however, the story was given another opportunity under

the production of Warner Bros., who had by then acquired the rights to the novel, in the now cult classic *The Omega Man* featuring Charlton Heston. This film gained more commercial success, most likely as a result of Heston receiving top billing and the large Hollywood production budget, but it suffered from negative reviews by critics. Again in 1994 Warner Bros. began developing yet another version of the "I am Legend" story, now to be set in New York City. Delayed due to the technical problems involved in filming an abandoned and desolate Manhattan and problems with the casting, the project was shelved until a later date. After a litany of additional issues, budgetary and otherwise, production for *I am Legend* finally began in 2006 starring Will Smith as the (almost) sole actor, and it enjoyed a successful theatrical release one year later in 2007. In a departure from the original script, Warner Bros. rejected the final scene and relegated the original ending to the DVD bonus material as a "controversial alternative ending." We will return to this point later in the article.

The cause of the mysterious plague that leaves Robert Neville as the last man on earth changes from one version to the next. Significantly, these variations reflect some of the scientific and cultural fears of each adaptation's time period. By tracing the intimate bodily nature of the monstrous threat, variously incarnated in zombies, vampires, or Dark Seekers across the iterations of "I am Legend" from the years 1954, 1964, 1971, and 2007, we glimpse some of the social anxieties of the times. In Matheson's novel, Neville, a plant worker, is the sole survivor of a bacterial plague caused by close encounters with others during a period of war. It is spread by dust storms and an explosion in the mosquito population. In the novel, Neville is not a doctor, yet he works tirelessly to understand the origins of the disease by educating himself with medical textbooks and by experimenting on himself – when he is not killing vampires.

The first film adaptation, The Last Man on Earth, filmed in black and white and accompanied by a Golden Age style horror musical score, remains more or less faithful to the book's plot with only a few exceptions, most notably the fact that Neville (here, for no apparent reason, renamed Dr. Robert Morgan)⁴ is a research scientist working to produce a cure for the disease caused by a germ, bacillus, or virus before the full onslaught of the pandemic. (The film does not make any attempt to differentiate between these three agents, using the terms more or less interchangeably.) Just as in the novel, Neville suffers from extreme bouts of depression and raging alcoholism in response to his increasing loneliness and destitution. Although the vampires here resemble zombies to the contemporary eye, they are called vampires, and like other vampiric monsters, are repelled by garlic, mirrors, and crucifixes. All the same, Last Man on Earth is often considered to be the first cinematic depiction of zombies and profoundly influenced the seminal cult-horror film, Night of the Living Dead (1968, George A. Romero). Prior to the outbreak we see the dedicated scientist working away tirelessly in the Mercer Institute of Chemical Research for a solution to the plague, even as his wife and daughter perish at its hands. He scoffs at the notion of vampires and dedicates himself to logic and reason – giving little credence to the sensational stories in the newspaper. Neville spends the rest of the film in a relentless attempt to eradicate the vampires while they sleep until he is ultimately killed himself, ending the human species and making the way for a new society of vampires.

The Omega Man, the second film adaptation, departs somewhat from the horror genre and edges toward the conventions of an action-thriller – a move that is bolstered by the casting of Charlton Heston as Neville. In this version, the cause of the plague is explicitly identified as global biological warfare stemming from a border conflict between China and the Soviet Union. The cause of the plague transparently reflects

fears of chemical and biological warfare during the Cold War. Neville is an army doctor at the onset of the pandemic. As he is in flight to deliver an experimental batch of vaccines, his pilot suddenly succumbs to the plague and his helicopter crashes in a fiery explosion. Neville crawls to the helicopter's ruins and injects himself with the vaccine. In a significant departure from the novel, Neville encounters a love interest, Lisa, who introduces him to the rest of a colony of survivors — most of whom are children or teenagers. In this film as well, Neville is killed by the vampires, but not before he provides his blood to pass on the immunity he acquired from the vaccine to ensure the survival of the colony.

The latest, and best-known, adaptation of Matheson's novel stars Will Smith under the original title, *I am Legend*. Neville again is a military doctor with immunity (for unknown reasons) to the virus. Within the first minute of the film we learn the source of the vampiric infection is a drug trial gone horrifically wrong. The film begins with a news broadcast interviewing a pioneering medical scientist, played by Emma Thompson:

[Interviewer] The world of medicine has seen its share of miracle cures from the polio vaccine to heart transplants, but all past achievements may pale in comparison to the work of Dr. Alice Krippin. Thank you for joining us this morning.

[Dr. Alice Krippin] Not at all.

[Interviewer] So, Dr. Krippin, give it to me in a nutshell.

[Krippin] Well, the premise is quite simple. Take something designed by nature and reprogram it to make it work for the body rather than against it.

[Interviewer] We're talking about a virus?

[Krippin] Yes. In this case, the measles virus which has been engineered at a genetic level to be helpful rather than harmful. . . .

[Interviewer] Now, how many people have you treated so far?

[Krippin] Well, we've had ten thousand and nine clinical trials in humans so far.

[Interviewer] And how many are cancer-free?

[Krippin] Ten thousand and nine.

[Interviewer] So you have actually cured cancer?

[Pause]

[Krippin] Yes, yes. Yes, we have.

[Cut to black; cue ominous music]

IV. The Scientist as God: Damnation, Salvation, and Genetic Difference

Dr. Krippin's arrogance engenders the unforeseen consequence of the vampire apocalypse. Since Mary Shelley's *Frankenstein* (1818), scientists have been accused of tampering with the laws of nature and "playing God." After World War II, these doubts about scientific hubris frequently focused upon fears of the atom bomb. By the mid-1970s, however, genetic research came to the fore as a topic of public hopes and fears. In a Ngram search comparing the prominence of the word "atomic" with the word "genetic," "atomic" increases dramatically from 1940 until 1960, then steeply declines. In comparison, the appearance of the word "genetic" slowly grows from 1940, taking over "atomic" around 1973 before peaking in the early 2000s. Today a search using the phrase "scientist playing God" yields hundreds of thousands of articles, opinion pieces, and polemics, many focused on one development or another in the field of genetics.

Although the 2007 version of *I am Legend* begins with the broadcast featuring Dr. Krippin, the figure of Neville as the noble, dedicated, and last remaining scientist quickly undercuts the negative portrayal of science. In all versions of the "I am Legend" story, Neville's search for a vaccine or cure presumes that the affected so-called patients want to be cured, negating their difference and asserting it as a disability that must be rectified. The genre conventions of horror naturalize this assumption, of course, as do the festering open sores on the face and hands of the monsters. Action genres, like Hollywood films more generally, acculturate viewers to adopt the perspective of the protagonist and thus view the fight against monsters through a heroic lens. It goes without question that we will root for the protagonist in his life-or-death struggle against such repugnant opponents. Thus, few viewers would find themselves objecting to most of the measures Neville takes.

In the 1964 Last Man on Earth, 1971 Omega Man, and the 2007 I am Legend, Neville's quest for a cure is characterized by a paternalistic, hegemonic, and arrogant attitude toward his research subjects, which ultimately raises the question: Who decides whether a given characteristic or condition should be seen as a disability to be "cured"? (Overboe). It may seem ludicrous to suggest that horrid vampires, shambling forth at night and crying for blood, should be viewed with compassion, still less as a species with its own rights. But two things must be remembered: First, that is exactly the message of Matheson's novel, and second, the persistent association of vampires with racial Otherness should make us chary of rushing to judgement about the status of their condition.

Neville's skepticism about vampirism and his privileged logic in scenes portraying Neville's life before the plague in *Last Man on Earth* contribute to the "noble scientist" trope that characterized most portrayals of the medical field in the 1950s and 1960s, while flashbacks from *I am Legend* set Neville up as the humbled hero – one driven to extreme measures by necessity, not out of hubris (Strauman and Goodier). Nevertheless, the framing of genetic variety in terms of proclivity to illness or disease reaffirms a normative status quo at the expense of non-normative bodies and modes of life. The transition in the illness's source from *Last Man on Earth* to *I am Legend* furthermore marks the emergence of genetic engineering (and, by extension, overreaching geneticists) as a threat beyond that of viral infection (Haynes).

Matheson's novel and Last Man on Earth present threats external to American society; the viral causes for vampirism are carried by the wind or transmitted from the close contact of soldiers at war. In these cases, the causes of the vampiric plague come from overseas and cannot be contained or avoided. While the infections in the Omega Man and Lawrence's I am Legend are also unavoidable, the plagues are a result of human error: biological weapons unintentionally causing a worldwide pandemic and the arrogance of scientists "playing God" with genetic engineering. In the novel and first film adaptation, Neville's sheltering at home (a fortified home, at that) could be read as insulating himself from an exterior threat. When the vampiric illness results from biological warfare or genetically modified measles vaccine/cure for cancer gone awry, however, the threat comes from human arrogance. To make this clearer, a scene from the 2007 I am Legend depicts Anna as she gazes upon the dozens of photographs of failed experiments on Dark Seekers. "My God," she exclaims, to which Neville sternly retorts, "God didn't do this, Anna. We did."

The status of "legend" and "God" in the "I am Legend" corpus undergoes dramatic shifts between the first two and last two works. In the final paragraphs of Matheson's novel, once Neville is captured by the vampiric people, he contemplates his coming death:

Robert Neville looked out over the new people of the earth. He knew he did not belong to them; he knew that, like the vampires, he was anathema and black terror to be destroyed. And, abruptly, the concept came, amusing to him even in his pain. (159)

The threat of the Other returns in full force once the tables have turned, only now Neville is the Other. He can no longer simply blame the "new people of earth" for their animosity towards him. Similarly, Last Man on Earth arrives at a trick ending when Neville meets Ruth, a woman he believes to be another survivor but is actually a spy for the vampire community. She reveals to Neville that the vampiric community already has an established treatment, which many of the vampires he has slaughtered were receiving. This "cure" is not a complete one, but rather a compound of defibrinated blood and vaccine, administered daily via injection much like a diabetic's insulin. (Last Man on Earth was released only three years after the widespread commercial deployment of the miracle polio vaccine in 1961, which might explain the addition of an inoculation absent in the novel.) Neville's response is to transfuse Ruth's blood with his own (without informed consent, of course), and he declares her to now be fully cured of the illness. There seems to be some allusion here to the so-called One Drop Rule that designated a person to be a racial Other despite their skin colour if there was traceable family lineage to a person of colour. Nonetheless, the vampires, now even more enraged, kill him atop a church altar. At death, Neville's views seem to flip: He first cries, "You're freaks," at the approaching vampires, but then reverses himself by expressing regret for his violence towards the new species, murmuring in wonder, "They were afraid of me." With the vampires now the dominant species, the notion of "legend" is reversed: Neville has become a boogeyman or legend for the vampires; he is a figure of horror who preys on the helpless and vulnerable vampires as they lie in bed.

The power of Neville's status as legend and his blood as a path to salvation also play an important role in the two later films, *Omega Man* and *I am Legend*, although the intent of the word "legend" loses its original signification. Whereas both Matheson's novel and *Last Man on Earth* had reversed the status of legend by signifying Neville as the legendary monster who haunted the vampiric race on earth while they slept, now *Omega Man* and (the theatrical release of) *I am Legend* reaffirm the human in a stereotypical upbeat ending. In the earlier works, Neville inadvertently becomes a legend but does not become a Christ figure; Neville's attempt to save the vampires by curing them ultimately fails, and the vampires survive as a new species to inherit the earth. In the later films, Neville succeeds in his mission, saving humanity through the blood of his sacrifice, closing the gap between God and scientist. If a scientist playing God is to blame for the pandemic, a scientist becoming God, at least symbolically, saves the human world through his sacrifice.

The two later films make Neville's Christ-like sacrifice abundantly clear. In *Omega Man*, Neville is transformed into a Saviour for the remaining human survivors in the colony he encounters. In one exchange after Neville reveals to the colony that he has been vaccinated and that his blood could be used as a serum, the teenage survivor, Butch, exclaims, "Christ, you could save the world!" In another exchange, a little girl belonging to the survivor's colony asks, "Are you God?" to which Lisa, the partner in Neville's love affair, smartly replies, "Let's find out if he's even a doctor first." To drive the point home, when Neville dies in the final sequence, he lies draped with his arms out over a sculpture resembling a cross. Butch and the children encounter Neville

near death in the morning. His final act is to pass on the vial of his blood containing the antibodies. The camera lingers on the same little girl who asked if he was God as she looks up to Neville, before they climb back into the Landcruiser and drive away to begin their new life. Science, through biological warfare, brought the pandemic, but through Neville's sacrifice, the human species will continue.

Near the end of the 2007 film, Neville and Anna, another survivor who is en route to the colony in Maryland with her son Ethan, are looking over another test subject in Neville's makeshift lab. A last-ditch vaccine attempt had been recently administered and the pair were noticing its success mere seconds before a group of enraged Dark Seekers break through the fortified walls of Neville's home laboratory. Behind plexiglass walls he pleads: "Stop! Stop! Look, I can save you! I can help you! You are sick and I can help!" In the theatrical ending, the Dark Seekers break through the plexiglass walls, but not before Neville draws vials of blood containing the antibodies that can produce a cure and allows Anna and Ethan to escape, thus sacrificing himself and becoming the saviour of humanity. In the original, deleted ending, however, the Dark Seeker leader tells Neville that the woman he has captured is the Dark Seeker's wife – and with that, Neville realizes that the vampires have their own society and culture. Neville peacefully returns the woman he had been experimenting on and escapes to the survivors colony in the final sequence. In this moment from the deleted ending, Neville comes to realize that the Dark Seekers are more human than he once believed – although, of course, he has been referring to them as human subjects since the beginning.

Neville's pleading cry, "You are sick and I can help!" in I am Legend and his triumphant self-praise, "My blood has cured you!" in Last Man on Earth both contain obvious allusions to the salvation of humanity through blood and flesh, encapsulated in the blatant Christ symbolism of Charlton Heston lying dead in the posture of a crucifixion. This Christ imagery of blood and sacrifice rests uneasily beside the many motifs that evoke eradication campaigns of eugenics and colonial conquest over the Other. Writing about the popular television program *Buffy the Vampire Slayer*, literary scholar Mary Alice Money opines, "Viewers are forced . . . to consider the possibility that . . . disposable or dangerous representatives of the Other just might be capable of humanity also" (102). While the deleted ending of I am Legend shows Neville's recognition of the Other, the theatrical version undermines the values imparted by Matheson's original story, in which Neville recognizes his slayings as brutal murder and understands himself as the villain. The perspective of the deleted ending in I am Legend is closer to that of Matheson's novel than any of the other film versions, including especially that of the theatrical release, which is the one most viewers see. Even so, the deleted version still ends on a note of triumph for humankind, as Neville, Anna, and Ethan find their way to a colony of human survivors in Maryland. Perhaps we are to suppose that the planet will henceforth be populated by two species, ordinary humans and the posthuman Dark Seekers. But more probably we are meant to understand that humanity will eventually prevail, either by "curing" the Dark Seekers or by exterminating them. As shifting populations change the dynamics of the majority versus the minority culture caused by the vampiric outbreaks, Neville clings to his humanity for dear life and seeks to reverse the process and return to the previous status quo rather than confront his own – and his species' – fragility.

While Neville does not fear his individual death, he does fear the contamination of his human identity. Philosopher and cultural critic Slavoj Žižek wrote about the "I am Legend" films in 2010:

What gets obliterated in this change [from Matheson's novel to the 2007 version] is the authentically "multicultural" experience rendered by the title's original meaning, the realization that one's own tradition is no better than what appears to us as the "eccentric" traditions of others. . . . (63)

In no version of the "I am Legend" story is Neville's dedication to survival a dedication to his personal survival – it is a matter of preserving his identity as a human. Both Matheson's novel and *Last Man on Earth* portray Neville as suffering from major depression and alcoholism, often on the verge of suicide – what keeps him alive is his dedication to a larger purpose, preserving humanity. What Žižek calls (somewhat ludicrously) "the authentically 'multicultural' experience," is eliminated in *Omega Man* and both versions of the 2007 *I am Legend*, which suggest the triumph of the human species at the vampires' expense. The Othering and condemnation of the vampires in all versions of the "I am Legend" corpus set the stage for their persecution at the hands of Neville, but only the two later films completely transform Matheson's lesson by allowing the human species to continue.

V. Bare Life: The State of Vampiric Exception

It is no coincidence that in both these later films Neville is a military doctor, and therefore functions as a metonym for the state's power in the absence of a government. That is to say, Neville is the stand-in for the sovereignty of the country which protects itself by dominating and expelling the race of vampires as undesirable aliens. Communication studies scholar and member of our research team, Claire Sisco King, writes, "As a military scientist, Neville is professionally connected to the devastation" (146-147). The eventual eradication of beings who are regarded as beyond the pale in the last two versions of "I am Legend" recalls the power of the scientist as both cause and solution of disaster – perhaps not only the scientist as God, but also the scientist as State.

Earlier, we invoked Giorgio Agamben's concept of "bare life" to characterize the condition of the vampires. The status of "bare life" is dependent on the existence of an alternative form of life, one constituted by the existence of a state empowered to confer or deny the rights and prerogatives that come with citizenship. The historical resonances of this opposition are far reaching, extending well into our contemporary moment. Neville's ritualized and organized act of vampire slaying (he keeps a map of blocks in the city that he must search for vampires) recalls the roundups of Jews and minorities at the hands of the Nazis. Further, Neville's laboratory practices in the 2007 film recall the horrific experiments conducted on human subjects by Josef Mengele and other forms of Nazi medical practices: His captured experimental subjects are disposable like laboratory animals – when one dies, he captures another. The precarity of vampiric life is of no importance in any version of "I am Legend." Their lives are not valued by Neville at the same level that he affords human life, and are therefore not worth grief, since "grievability is a presupposition for the life that matters" (Butler 34). The "bestialization of man" seen in the representation of the vampires forcibly reduces them to "bare life," possessing no capacity for political life, at least in Neville's eyes (Agamben 15). The vampires represent society's Other, and their exclusion from Neville's conception of humanity – or rather his complete disregard for their lives – evidences centuries of oppression through the devaluation of persecuted groups' lives.

It does not matter which version of "I am Legend" one looks at: Neville's mission is always to ensure the survival of the human species, a goal he pursues using genocidal tactics against bodies that were so maimed and disfigured by a virus that he

could no longer recognize them as members of the human community. Interestingly enough, in the first two versions – Matheson's novel and Last Man on Earth – Neville understands his defeat at the moment he realizes that the vampires can and have already organized as a society. This kind of recognition is entirely absent in both Omega Man and the theatrical release of I am Legend. However, in the deleted ending of I am Legend, this recognition does take place, but it is not the political structure of the vampires that convinces Neville of their "humanity." Instead it is the heteronormative nuclear family established between a Dark Seeker and his wife that reorients Neville's entire worldview.

Conclusion

The world's recent experience of the Covid-19 pandemic makes us all the more aware of the potential dangers that haunt the state's sovereign power. Demonstrated by dictatorial consolidation of power by the Hungarian head of state Viktor Orban, the invasive use of GPS phone tracking in Israel, and emergency deployment of the National Guard in the United States, we recognize that a state of exception carries its own risks (Dunai and Than; Halbfinger et al.; Lamothe). Furthermore, as we saw with the infection of British Prime Minister Boris Johnson and US President Donald Trump after contracting Covid-19, viruses expose the vulnerabilities in one's biological life without consideration of one's political existence. The plagues in Omega Man and I am Legend, not unlike Covid-19, may reduce all those who are infected to "bare life" and propel governments – even a government-of-one – into states of exception by means of genetic difference. Viruses are nothing but pure genetic information that take over a host cell to replicate themselves. In this way, viruses can trigger a state of exception not only in political terms, but in biology itself. Biologists debate whether viruses should be categorized as living entities – "Viruses today are thought of as being in a gray area between living and nonliving: they cannot replicate on their own but can do so in truly living cells and can also affect the behavior of their hosts profoundly" (Villarreal). Just as the viruses are neither fully living nor dead, vampires are our chief cultural representation of the living dead. Both capitalize on the biological vulnerabilities of their hosts, cells and humans respectively. Through the "I am Legend" corpus, we simultaneously glimpse a past and a future in line with the conventions of the sci-fi horror genre; one determined by genetic difference and discrimination against the Other. Placing the Other in the realm of the state of exception – genetically determined and bound to "bare life" – creates a world in which it becomes possible to seemingly protect life while authorizing a holocaust.

Notes

- 1. When appearing in quotation marks, "I am Legend" refers to the corpus of works that include and emerge from Richard Matheson's 1954 novel.
- 2. There is a direct-to-video indie production, *I am Omega* (2007, Griff Furst), released as a "mockbuster" only one month prior to the more popular Will Smith adaptation. Its production team, The Asylum, is best known for *Sharknado* and other off-brand movie titles. Additionally, there is a comedy television show by the name *The Last Man on Earth* (2015-2018, Will Forte), which has little, if any, relation to Matheson's story, sharing only a title with one of the film adaptations and a setting in a post-apocalyptic city in the Western part of the U.S. We are excluding both of these works from our analysis as they deviate from the drama of Matheson's original story and function differently as works of satire and comedy respectively.
- 3. In our research team's database, the numbers of films with genetics content by decade are: 1960s=9; 1970s=20; 1980s=18; 1990s=37; 2000s=61; 2010s=66. The figures for the last two decades would have been even greater, one suspects, were it not for the growth of "prestige TV," which has included notable series on Netflix, Amazon, and other streaming service with high levels of genetics content (e.g., *Orphan Black*, with 50 episodes spanning 2013-17). Evidence for this last speculation can be seen from the rise in TV shows with strong genetics content over the same period: 1960s=17; 1970s=28; 1980s=32; 1990s=49; 2000s=206; 2010s=207.
- 4. For the sake of simplicity, we shall henceforth call all protagonists of the "I am Legend" stories Neville.
- 5. Google Ngram Viewer: https://books.google.com/ngrams/graph?content=atomic%2Cgenetic&year_start=1940&year_end=2019&corpus=17&smoothing=5&s hare=&direct_url=t1%3B%2Catomic%3B%2Cc0%3B.t1%3B%2Cgenetic%3B%2Cc 0#t1%3B%2Catomic%3B%2Cc0%3B.t1%3B%2Cgenetic%3B%2Cc0.

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