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# Apocalyptic Allegories: Resisting Strategic Nuclear Imaginaries through Critical Literacy

In a critical scene from The Matrix, Neo aka Thomas Anderson is introduced by the rebel leader, Morpheus, to the "Desert of the Real," or the computer-generated simulation that Neo had perceived as the "real world" before this point in his existence. Neo is informed that, during the war between humans and solar-powered artificial intelligence machines at the end of the twenty-first century, humans had deployed nuclear weapons in the hope that a nuclear winter devoid of solar energy would obliterate the sentient machines. Ironically, Morpheus notes that in the aftermath of the nuclear winter, the machines realized that "the human body generates more bioelectricity than a 120-volt battery and more than 25,000 BTUs of body heat" (The Matrix): the most effective and renewable form of energy that the machines would ever need. Beyond the effective operationalization of a dual apocalypse, nuclear and technological, the scene highlights the use of human bodies as a back-up resource to serve their inhuman technological masters: a possible reference to the dehumanizing attributes of the specialized discourses that facilitate strategic nuclear imaginaries and answer the clarion call of the military-industrial elite for aggressive nuclearization. Science and Technology Studies scholars Sheila Jasanof and Sang-Hyun Kim point out that these national socio-technical imaginaries are "collectively imagined forms of social life and social order reflected in the design and fulfilment of nation-specific scientific and/or technological projects" (121). Such imaginaries, which in the American context are produced and disseminated by the military-industrial complex, create tangible connections between nationhood and nuclearization. At the same time, though, they also obstruct other possibilities for a humane future, which by contrast is devoid of catastrophe and destruction. However, the articulation of the horrors of the nuclear, either as a weapon or a technology, is constrained by the lack of a specific intimacy with the material and tactile elements of the nuclear, which are understandably unavailable among the living. Exceptions to this statement include victims and survivors of nuclearization - such as the Pacific islanders, Native American minorities, or the Bishnois in India amongst others (see Roy, "Strategic Science vs. Tactical Storytelling," and "Will the Real Atomic Subaltern Please Stand Up") – for whom an articulation of the violence of the bomb may not be possible due to their minority positionality. The fact remains that cultural productions of the Apocalypse play a crucial role in creating a critical argument against aggressive nuclearization. They also shape a resistive literacy opposed to both martial ideologies and the techno-positivist theorizations, instrumentalization, and experimentation of weaponized nuclear technology (Galison 118-57). Significantly, the relative stability of such state-sponsored and militarized nuclear imaginaries has been the subject of a considerable body of critiques in contemporary American nuclear culture.

Cultural expressions of the Apocalypse underwent an epistemic shift with the Trinity tests on July 16, 1945, followed by the horrific bombings of Hiroshima and Nagasaki that decisively reconfigured the meaning of the Apocalypse. Arguably for the first time in human history, the Apocalypse was recast from its etymological origins in Greek (*apokalypsis*), signifying an uncovering or unveiling, to a human-engineered catastrophe emphasizing destruction instead of revelation. Barring a brief period between the 1950s and 1960s, which was characterized by a propagandabased bomb culture that celebrated nuclear technology as a panacea for all human needs (see Drogan and Link; Zeman and Amundson), American nuclear culture actively acknowledged the potential of weaponized nuclear technology to end human civilization. This irrevocable alteration of the eschatological tradition – from an imaginative practice of predicting futurity to a cataclysmic vision of complete annihilation - underlines the pessimism that lies at the core of a transformed apocalyptic tradition, which shifted from the "traditional optimistic conclusion" to "imaginative but definitive end-scenarios" (Rosen xv). This article leads to one of the key questions that this neo-apocalyptic genre and indeed this RSAJournal special issue aims to address: what are the pedagogic stakes for cultural

productions that imagine our world as ended or ending through the hubris of aggressive nuclearization?

Motifs of literacy, while seldom discussed, share a self-reflexive relation with nuclearization, since the specialized nature of nuclear technology transforms nuclear discourses into signifiers of power: a self-reflexive form of cultural capital that emerges from, and simultaneously legitimizes, nuclear weapons. Jacques Derrida notes that "in our techno-scientificmilitaro-diplomatic incompetence, we may consider ourselves [...] as competent as others to deal with a phenomenon whose essential feature is that of being *fabulously textual*" (23). Keeping this premise in mind, this article examines two contemporary cinematic renderings of postnuclear apocalyptic spaces, The Matrix (1999) and The Book of Eli (2010), as representative of American nuclear culture, but also coextensive with nuclear cultures elsewhere. Nuclear weaponry's dependence upon "nonvocalizable language, structures of codes and graphic decoding" (Derrida 23) implies that Anglo-American conceptualizations of literacy and strategic nuclear imaginaries derive from the same epistemological source, where "subject manner or meaning is privileged over form" (Hwang iv). Therefore, countering hegemonic knowledge systems, such as specialized nuclear discourses, can only be achieved by developing counter models of critical multimodal literacy: a tactic coterminous with challenging the epistemology of modernity based largely within a print-paradigm. Inclusive models of multimodal literacy that acknowledge linguistic, aural, spatial, verbal and even tactile methods of acquiring knowledge become the primary motif in The Book of Eli and The Matrix. This allows both these neo-apocalyptic productions to recover the *non-vocalizable* humanity suppressed by hegemonic knowledge paradigms.

I emphasize in this article that, since the period of the Cold War, the global nuclear landscape has rarely been more unstable. Increasing animosity between Nuclear Weapons States (NWS) such as the USA and North Korea, or India and Pakistan, as well as the recent nuclear disaster at Fukushima have prompted the *Bulletin of the Atomic Scientists* to move the Doomsday Clock to 100 seconds from midnight in 2020. This act has been accompanied by a laconic but chilling warning: the Bulletin of the Atomic Scientists Science and Security Board today moves the Doomsday Clock 20 seconds closer to midnight – *closer to apocalypse than ever* [...] the international security situation is now more dangerous than it has ever been, even at the *height of the Cold War*." ("Doomsday Clock Timeline"; italics mine)

Turbulent times such as these, I suggest, warrant the need to critically engage with the imagined landscapes of popular culture, especially postnuclear apocalyptic films.<sup>1</sup> From a methodological point of view, I examine these two contemporary American cultural productions as texts from the post-catastrophic genre. I provide a close reading of the two texts within the context of the "enduring nuclear," or the "slow violence of the nuclear disaster" (Deckard 1, 22), which highlights the epistemic violence of constantly living in fear of an anticipated nuclear catastrophe, in an always already global nuclear landscape.

The instructive potential of apocalyptic tales is not new. Indeed, they have always occupied a distinctly edifying place (at least within the theological traditions). Narratives that adopt the traditional (and etymological) notions of the Apocalypse are sites where "the damned are educated by their own punishments" (Henning 213). In these selfcontained pieces, retribution is followed by salvation, since it is precisely salvation that is predicated by a world/theological order that perceives the Apocalypse as redemptive. While maintaining their valence in global popular culture, nuclear Apocalypses have undergone several shifts in the American context. If the period between 1945 and the 1970s was characterized by an increased focus on addressing nuclearization in its most extreme forms, such as redemption or devastation (see Drogan and Link), during the 1980s nuclear culture was co-opted into children's literature as a site for educational and instructive messages (Hager). The events of 9/11, however, made it impossible to locate an educational potential in nuclear scenarios. This led to the rise of a neo-apocalyptic tradition, such as cautionary tales "positing potential means of extinction and predicting the gloomy probabilities of such ends" (Rosen xv). In re-evaluating Elizabeth K. Rosen's assessment, this article focuses on representative and contemporary American apocalyptic films that illustrate how catastrophic post-nuclear apocalyptic sites can also be inherently pedagogical sites, which are causally

linked to an epistemic excess. The post-nuclear holocaust spaces in the texts analyzed here demonstrate that the need to express this surfeit of knowledge - of how the militarized use of nuclear technology can result in unparalleled destruction, mass fatalities and indeed the erasure of all human archives - results in tropes of literacy becoming the key motifs within this reformed neo-apocalyptic tradition. In contesting Susan Sontag's assertion that fantasies of the Apocalypse are a rather "inadequate response" (italics mine) to "the most profound dilemmas of the contemporary situation" (48), I point out that any act of artistically representing/articulating the disaster is always an act of tangible recovery. Particularly in the case of cultural productions that deal with post-nuclear apocalyptic landscapes, this recovery of the "knowledge of the [imminent] disaster [...] saves it from being this disaster" (Blanchot 9). In other words, I argue that a key tactic for challenging the strategic and militarized nuclear imaginaries is through a critical consumption of cultural productions that acknowledge and indeed materialize the catastrophic sites of speculative post-nuclear landscapes.

Neo-apocalyptic culture, which is substantially influenced by the ideologies of the military-industrial complex, as well as by the global anxieties it engenders, reflects the nuclear scenarios constructed in Techno-strategic Discourse<sup>2</sup> – a specialized linguistic paradigm which combines strategic thinking with nuclear technology. In formulating "rational systems for dealing with [...] nuclear weapons" (Cohn 690), Techno-strategic Discourses not only codify the strategies of nuclear war but also erase the catastrophic potential of nuclear weapons, subsequently dehumanizing all living subjectivities including survivors of a nuclear fallout. Cohn discusses the dehumanization implicit in Techno-strategic Discourse:

What hit me first was the elaborate use of abstraction and euphemism, of words so bland that they never forced the speaker or enabled the listener to touch the realities of nuclear holocaust that lay behind the words. [...] This language has enormous destructive power, but *without emotional fallout*. (691; italics mine)

Current depictions of nihilism in neo-apocalyptic culture can be linked to the unstable status quo existing amongst antagonistic Nuclear

Weapons States (NWS) that were and still are being forced by the theory of mutual survival into nuclear deterrence.<sup>3</sup> Neo-apocalyptic texts reflect the dread implicit in nuclear deterrence that a first strike by any NWS would probably connote irredeemable world annihilation. Paradoxically, since the "physical power [of nuclear weapons] exerts no force until it is textualized" (McCanles 13), in order "to compensate for its incapacity to enter the domain of human semiotics and thereby directly communicate its threatening message" (13), purveyors of nuclear systems seek fulfilment in the verbalizations of Techno-strategic Discourse. The power of nuclear weapons, unlike conventional weapons cannot be displayed through "the palpably visible pageant of cavalry, infantry, artillery, and implements moving across the countryside, usurping the routing peasants and poultry, approaching the watchtowers" (13). During the Cold War, this forced the US and USSR to adopt discursive signifiers to communicate both their strength to their adversaries as well as to remove the bomb's catastrophic potential from the public sphere. Even in the current volatile nuclear landscape such an ideological nuclear legacy implies that testimonials of nuclear threat are mostly confined to linguistic spaces such as "the verbal texts of dispatches, diplomatic missions, treaties and ultimatums [...] understood as tissues of verbal signifiers referring beyond themselves to the 'real' power that gives these whatever force they claim" (13).

Post-nuclear apocalyptic landscapes, therefore, become convenient sites for portraying dehumanization, since the landscape itself emerges from an ideology (of militarized nuclear technology) that has scant regard for humanity. Subsequently, these texts translate the premonitions of catastrophe implicit in Techno-strategic Discourse into the non-redemptive spaces of post-nuclear apocalyptic settings. Cultural imaginations of post-nuclear apocalyptic landscapes, I argue in this essay, recover what is abstracted and denied within the domain of militarized and strategic nuclear scenarios – namely an acknowledgement of the immediate as well as the long-term physical and psychological fallout of nuclear weapons on living (and non-living) beings. These imagined settings illustrate how the use of nuclear weapons must naturally be accompanied by bodies stripped of their values, ethics, morals and sense of identity; in other words, of the very qualities that make them human.

Cohn highlights that Techno-strategic Discourse "almost seems a willful distorting process, a playful, perverse refusal of accountability - because to be accountable to reality is to be unable to do this work" (698). Dehumanization in the literal sense of "removing the humanness" is expressed in these post-nuclear apocalyptic landscapes not by the absence of human beings but rather through the presence of bodies "that seemed human – had a human-looking form, walked on two legs, spoke human language, and acted in more-or-less human ways - but which was nonetheless not human" (David Livingstone Smith 1). As David Livingstone Smith notes in his seminal treatise, Less Than Human, ideologies/individuals that perform such dehumanization literally believe in the sub-human status of the populations they abhor. Using the example of the Nazis during WW II, Smith mentions how the Nazis were "convinced that, although Jews looked every bit as human as the average Aryan, this was a facade and that, concealed behind it, Jews were really filthy, parasitic vermin" (2). This mode of thought that creates a clear "conceptual distinction between appearing human and being human" (2) is what structures the imaginary governing nuclearization as well. The dehumanized settings in the neo-apocalyptic productions discussed here serve, in fact, as an effective pedagogical reminder of the cruelty and potential for mass genocide implicit in the nuclear bomb and weaponized nuclear technology. Therefore, the cultural productions analyzed in the following section use depictions of dehumanization to challenge the abstraction of human bodies as well as to promote a new literacy revolving around community-based humane practices.

Resisting Literacies of Power in The Book of Eli and The Matrix

Language is the essential matrix of action and policy. Every decision to pursue power, wealth, pleasure, or any other goal is shaped from the very beginning within the nexus of language. (Chernus 6)

Language and nuclear weapons are inextricably linked<sup>4</sup> since the destructive capacity of nuclear power is ensconced within specialized

discourses (Hilgartner et al. 209). By virtue of their role in creating these discourses of catastrophic power, the users of this language (defense intellectuals and nuclear analysts) are culturally and socially constructed as empowered hyper-literate entities. This section demonstrates how The Book of Eli and The Matrix question such dehumanizing epistemes by using non-traditional subjectivities, as the repositories of redemptive and indeed revelatory knowledge within these post-apocalyptic nuclear landscapes. The erasure and elision of minority subjectivities are symptomatic of specialized domains such as Technostrategic Discourses, which allow and legitimize the participation of only privileged and normative bodies. Donaldo Macedo terms such knowledge systems as *literacies of power*: an ideology that systematically negates the cultural experiences of many members of society - not only minorities but also anyone who is poor or disenfranchised (Macedo 48). The movies discussed here are distinguished by their attempts to question those literacies of power that deny the value of human bodies and serve dominant ideologies. While there are multiple texts that perform similar tactical subversions of strategic knowledge systems, this article chooses to focus on The Book of Eli and The Matrix for two specific reasons. Firstly, both post-apocalyptic texts, though thematically divergent, become primers for understanding the different signifiers for *literacy*, which is always a social process and deeply intertwined within its specific context. Secondly, the specific setting of both texts deals with spatial estrangement - a "massive destruction or disruption of the landscape so severe that" even familiar terrains "have to be explored afresh" (Seed 203). Such an estrangement of familiar (American) landscapes implies a cognitive dissonance by disrupting any normative understanding of place or time: an act of epistemic violence based in strategic nuclear imaginaries that reminds the audience that "we are always on the edge of disaster without being able to situate it in the future" (Blanchot 1).

The potential for salvation that was considered synonymous with earlier conceptualizations of the apocalypse was replaced, after 1945, by the "nuclear referent": a signified that cannot have a material existence since the presence of a nuclear apocalypse must be synonymous with the absence of all signifying systems (Derrida 20). Unsurprisingly, many artistic productions in the neo-apocalyptic tradition have further consolidated

this sense of an irrevocable ending, through representative examples that conceptualize the apocalyptic as an "adjective now understood to be a synonym for the catastrophic or devastating" (Rosen iv). Peter Szendy takes this argument further in his topical treatise *Apocalypse-Cinema* and notes that the affinity between the apocalypse and cinema is due to the contingence between "anticipations, intimations, representations of the end of the world and [...] *the finitude of the film* as a structure delimited in time" (qtd. in Weber x). The sense of urgency that results from the finiteness of film-as-a-medium also makes it a particularly potent political site, since the director can choose to deliver content which provokes conversation/action and in effect extends the life-span of cinema beyond the viewing duration of films.

At first glance both *The Matrix* and *The Book of Eli*, separated by a little more than a decade, would seem to belong to the nihilistic neo-apocalyptic genre, as they deal with decidedly non-redemptive spaces that arise in the wake of a nuclear holocaust. Films in the genre of "apocalypse-cinema" are bound to have thematic similarities, and The Matrix as well as The Book of Eli share multiple intersecting points, including an emphasis on religiosity, a denial of modernist grand narratives and an attempt "not merely to represent apocalypse [...] nor just to tell about it, but to enact it, with as great an immediacy as is possible" (Weber xiv). Beyond such surface similarities, the imagined sites in both these cinematic texts use the finality of an apocalyptic setting to highlight the key connection between strategic nuclear imaginaries and the complete abstraction of human subjectivities. The (real and imagined) catastrophic circumstances found respectively in fact-based speculations of techno-strategic discourses and the cultural interpretations of post-apocalyptic spaces are shown to have a crucial connection: the politics of literacy. As these texts highlight, in both domains literacy moves beyond being a theoretical notion to become a social site of difference that can be used to both create and dismantle literacies of power.

In *The Book of Eli* the protagonist Eli (Denzel Washington) is one of the few survivors in a post-apocalyptic world, which has been ravaged by a nuclear war. He has become a *walker* who moves from one place to another in search of subsistence and shelter, and has been doing so for

thirty years. While he wears tattered clothes, scavenges for attire from dead bodies and eats only animals that he has himself hunted, Eli has remained on a righteous path and refuses to engage in any unethical act to fulfil his material needs. In this bleak post-nuclear apocalyptic setting where there has been a complete breakdown of social order leading large sections of humans to cannibalism, Eli is distinguished by his actions: he is empathetic to the plight of stray animals and even reformed robbers. His only means of solace are listening to classical music on a battered iPod and reading a book that he carries in his backpack.

On the contrary, Eli's antagonist in the movie, Carnegie (Gary Oldman), is introduced as a "cultured" individual who is nattily dressed and groomed, within a setting where most individuals don't bother about cosmetic looks and hygiene. When the audience first encounters Carnegie, he is reading the biography of Benito Mussolini, as his henchmen bring forward a further consignment of books. It soon becomes clear that Carnegie, who is the ruler of a small town, is a tyrant, and much like the subject of the autobiography he is reading, has plans for world domination. He seeks to achieve this ambition by appropriating the "power" invested in a particular (initially unknown) book, and hence regularly sends out his accomplices in search of textual artefacts. However, unlike Eli, Carnegie is bereft of a moral compass, as is made clear in the first few scenes. He rules over the inhabitants of the town he stays in and exploits, physically and sexually, a blind woman, Claudia (Jennifer Beals) and her daughter Solara (Mila Kunis), who are forced to live with him for food and shelter.

In sharp contrast to Carnegie, the Bible quoting yet heavily armed Eli has the makings of being a humanist and an idealist. Eli has unmatchable combat skills, but he refrains from using violence until he is forced into it and believes he is helping his fellow survivors. As the movie progresses, the viewer is made aware that Eli's apparently invincible status resides in the faith that he derives from a first edition of King James Bible, which he carries in his backpack. The audience soon comes to know that it is this *very* book that Carnegie sees as a "weapon aimed right at the heart and minds of the weak and desperate" (*The Book of Eli*). Carnegie's desperate attempt to acquire this book from Eli is fundamentally in conflict with the purpose of

Eli's journey: to reach a destination on the US West Coast where his faith and a "voice in his head" have asked him to take the Bible.

At their first meeting in Carnegie's bar-cum-brothel, Carnegie asks Eli "Do you read?" to which Eli responds, "Every day," underlining that conventional textual literacy is a rare commodity in this uncivilized world. Film scholar Seth Walker argues that while the authority of Eli resides in his theological faith, Carnegie's power derives from his charismatic authority, based on the Weberian paradigm of leaders who rule through affective surrender (6). However, I contend that in this dystopic setting, where the only forms of literacy required are the skills that allow an individual to survive (often through looting, mutilating and plundering others), Carnegie's and Eli's ability to critically engage with printed material underscore their evolved and consequently "hyper-literate" status. Carnegie remarks to Eli that "people like you and me [read: literate and educated] are the future" (The Book of Eli), since Carnegie believes they are in possession of the social and cultural capital required to control the world. In an exchange with his second-in-command Redridge, Carnegie notes:

It's not a fucking book. It's a weapon! A weapon aimed right at the hearts and minds of the weak and the desperate. It will give us control of them! If we want to rule more than one small, fucking town, we have to have it. People will come from all over. They'll do exactly what I tell them if the words are from the book. (*The Book of Eli*)

In abusing his literate status to exploit his fellow human beings, and in using his personalized interpretations of religion for social and political domination, Carnegie epitomizes not only the Western tradition of logocentric literacy, but also all specialized knowledge frameworks (such as Techno-strategic Discourses) that use language for non-altruistic and harmful purposes. Carnegie exemplifies the "modernist modus against which postmodernists identify themselves" that create referential models of epistemology, as opposed to the postmodernist conception according to which "the meaning of any word, concept, or idea is *not* anchorable in any definitive sense" (Smith 252). These monolithic modernist models, criticized by deconstructionists as being "driven by a desire to establish

human meaning through an anchoring of it in constructs and categories, which can then be taken to 'represent' an original reality" (252), is exactly what Eli stands in opposition to in the film.

The parallel between the setting of *The Book of Eli* and the contemporary world is explicit: Eli and Carnegie represent the two opposite poles of the same spectrum in which knowledge of specialized discourses produces valued hyper-literate bodies. Eli mirrors the position of skilled yet empathetic experts, such as doctors and teachers, who are understood to contribute positively toward human society. In contrast, Carnegie represents such individuals as nuclear hawks and corrupt politicians, who often operate within a grey realm of profiteering and exploitation (Obeidalla). Eli therefore actively resists the literacy of power that Carnegie represents, and instead believes in a democratic and pluralistic model of knowledge dissemination. Hence, he refuses to hand over the Bible, which he knows will be exploited for Carnegie's personal benefit. On the contrary, as the audience later finds out, Eli's intended destination in the West is a place from where multiple physical manifestations of the Bible (literally meaning "The Book") can be produced and circulated for individualized interpretations. As the plot progresses, Eli is violently forced by Carnegie and his troops to forsake possession of the Bible when they hold Solara hostage. However, in a significant twist, it turns out that the book is in Braille, revealing Eli's visually challenged status. Significantly, the Bible that Eli carries with him performs a critical role since it is a text that predicts both the disaster/Apocalypse and the resultant revelation. It functions as a semiotic marker indicating both the Apocalypse and the consequent potential for a (neo) revelation through a non-traditional model of literacy. The power of the Bible is therefore indeed the power of the sign and the persistence of semiotics in creating fluid signifiers that are not tied to specific signifieds. In doing so, Eli reminds us that the signified for nuclear technology need not be tied down to the potentially catastrophic (and hegemonic) nuclear imaginaries of the elite military-industrial complex. Indeed, like the Marxist critique of religion that tells us "how elites have used and still use their religion – to give themselves a sense of legitimacy for their privilege" (Raines 169), The Book of Eli reminds us that strategic nuclear imaginaries are utilized by elites to justify their political and colonizing goals.

Significantly, Eli's inability to see and engage with the printed text is not a drawback, since he has memorized the entire book, thus enabling himself to physically narrate the content to the librarian at his final destination, Alcatraz Island (which in the meantime has been transformed into a makeshift library and press). By contrast, Carnegie's inability to decipher the Braille text (as a visually able person he is unversed in Braille) is a striking reversal of the "deep politics of exclusion that resides [...] within the logo-centric tradition" of literacy (David G. Smith 253), which constructs interpretations from alphabet-based printed texts as the dominant discourse. Eli's physical proximity to the text for the last thirty years and his very ability to engage in a tactile conversation with the Bible (and metaphorically all sources of knowledge) reinsert the humanizing potential of literacy within an otherwise dehumanized space. Eli's final act of narration before his death, as he lies down beside the librarian at Alcatraz Island, shows a community-based model of literacy that directly challenges super-specialized epistemic models – like nuclear discourses – that only cater to the interests of a few elite subjectivities. Eli's intimate narrative performance also emphasizes the unreliable (yet humanistic) tradition of oral narration as a legitimate act of knowledge production, which is often denied within hegemonic literacy models. This act of deconstructing what is understood as the first printed artefact<sup>5</sup> in human civilization, through the unreliable memory and narration of a traditionally minority subjectivity, metaphorically demonstrates that meaning cannot be grounded into a singular model, since the "meaning of something cannot be 'defined, only derived referentially'" (250). Eli's verbal performance underscores that "what is lost continues to 'play' [...] within the present interpretations as a 'trace,' which can itself be archaeologically recovered through the process of 'deconstruction'" (253).

Distinguished from the "extraordinary abstraction and removal from [...] reality" (Cohn 686) that characterizes the mechanized modes of specialized discourses, knowledge is produced in *The Book of Eli* through human interaction and aimed at an inclusive community-based dialogic model of social progress. Furthermore, verbally eliciting an unstable narrative in a post-apocalyptic space, from a racially marginalized literate body, undercuts the hegemonic tradition of literacy implicit in Anglo-

American epistemes. It establishes the importance of recognizing nontraditional processes of literacy that exist within "women, aboriginals, or once-colonized peoples of the Third World" who are "marginalized within the reigning dispensations of knowledge and control" (David G. Smith 253). As a racial minority who initiates a humane model of literacy, Eli not only challenges "the literate abuses of power [that] are the result of long-standing projects, like European imperialism" (Willinsky 1), but also reverses the destructive tradition of the neo-apocalyptic genre by representing a (re)new(ed) beginning through decentered knowledge production. This continues even after Eli's demise, as in the last scene of the movie, where we see Solara taking up Eli's sword and attire to embark upon her journey and presumably carry forward the legacy of Eli as a walker. Considering the terribly reductive portrayals of women in postapocalyptic settings, and "the anti-feminism in popular contemporary apocalyptic films" (Hussain 8), the portrayal of Solara as a primary protagonist is refreshing and reasserts how epistemes of power must move beyond normative subjectivities. Critically, alternate models of literacy, symbolized by Eli and Solara, show the empowering potential of knowledge when it is not just intended as capital, to be exploited for personal benefit. On the contrary, knowledge embodies a new form of "revelation" through "the hopes, the promises and pleasures, that come of working language's possibilities" (Willinsky 3).

Unlike *The Book of Eli*, the post-nuclear apocalyptic setting in *The Matrix* is not made immediately apparent. In the past, critical scholarship around *The Matrix* has focused on a range of topics. These include the often unconvincing amalgamation of spirituality and world religions (see Milford), including the racial politics of messianic figures (Allen); philosophical treatises about the metaphysics of the matrix (see Chalmers); the concept of *simulacra* and Jacques Baudrillard's influence on the movie; the conflation of destructive apocalyptic technology that embraces the role of world religions; and the film's esoteric use of philosophical concepts (see Lutzka 113-29; Stucky 1-15). However, hardly any scholarship exists that highlights *The Matrix* as a post-apocalyptic artefact, even though this topic forms one of the most significant narrative tropes in the movie. When the movie celebrated its twentieth anniversary, in 2019, amidst reports

of a fourth film being released, interest in the film resurfaced. Since then, though, little attention has been paid to this filmic artefact as a key node in understanding contemporary hegemonic American nuclear imaginaries (Woodward). While analyzing the reasons for the lack of scholarship on this critical facet of nuclearization is beyond the scope of this essay, I would like to point out that artefacts exist "under the pressure of a fundamentally historical sensibility" (Nora 7), which allows for its interpretation within specific pressing contexts. The elimination of *The Matrix* from the pantheon of American nuclear culture might be indicative of how the banalization of nuclear threat since the end of the Cold War (Masco) has allowed strategic nuclear imaginaries to be normalized within contemporary culture. Therefore, my discussion of *The Matrix*, and its recovery within the postnuclear apocalyptic genre, is a hearkening back to academic projects like *nuclear criticism*, which had a distinct agenda for politically-enabling voices of the anti-nuclearization minority (see Ruthven; Hubbard).

The Matrix is ostensibly set in the America of the 1990s, where Thomas Anderson, a gifted computer programmer, is stuck in a dead-end coding job by the day and transforms into Neo, the hacker, by night. He is fascinated by the mysterious group of anti-establishment hackers led by Morpheus and Trinity, who are continuously on the run from the government and its black-suited agents. Neo has an inkling that there is more than meets the eye in his world, a suspicion that is confirmed when black-suited agents arrest him in his workplace and literally "melt" his mouth shut during a brutal interrogation. It is only later, when Trinity arranges for a meeting between Neo and Morpheus, that Neo (and in effect the audience) becomes aware that the normal world circa 1999 in which he apparently exists, is a "neural interactive simulation," or The Matrix. As Neo is "pluggedout" of The Matrix, by means of taking the red pill, he is made aware that the actual temporal setting is circa 2199. This post-apocalyptic world, or the "desert of the real," as Morpheus terms it, resulted from a nuclear war between humans and artificial intelligence machines, a hundred years before. Humans had sought to end the war by nuking the atmosphere and stopping machines' access to solar energy, their main energy source. However, by a twist of fate, machines decided to replace their dependence on solar power by harvesting humans for their bioelectricity.

Neo's "plugging out" of the computer-generated matrix is critical in more ways than one. His liberation highlights the importance of understanding The Matrix as an unstable signifier. Neo is made aware that The Matrix he inhabited is a sixth iteration of a simulated world, which the machines created to enslave humankind. However, only those who manage to escape The Matrix can access this knowledge. The parallel with hegemonic knowledge systems in our everyday world is clear here. Each iteration of the matrix represents an evolved surface of signs that are utilized by the transcendental signifying system - machines in this case for their own profit. As within specialized paradigms like Techno-strategic Discourses, where human bodies are abstracted into "collateral damage" (Cohn 692) to further strategic interests, The Matrix has been created by an AI consciousness to literally deny human subjectivity and "keep humans pacified while being used as a power source" (Rosen 102). Furthermore, the motif of dehumanization that emerges within such specialized knowledge systems is also made explicit.

In a scene from the movie where Morpheus has been captured and is being interrogated by Agent Smith - head of a powerful program that eliminates threats against The Matrix - the agent comments: "Human beings are a disease, a cancer of this planet. You're a plague and we are the cure" (The Matrix). As in The Book of Eli, where Carnegie abuses literacy in order to create distinctions between rulers and underlings, the Agent symbolizes institutions and practices which create rigid binaries between dominant bodies and minority others through apparent epistemic superiority. Although it might be argued that the evolving models of The Matrix represent an evolution and hence a pluralistic paradigm, its multiple models are unified by the single goal of the machines - to quell human resistance. Neo's potential to be the "One" is only realized when he manages to perceive The Matrix in its "real form" - not as a tangible physical human world but as a specialized domain or computer simulation that reduces human bodies into "batteries" to support binary systems constituted of 0's and 1's. While configurations of literacy in The Book of Eli undercut hegemonic discourses in favor of legitimizing "the right to speak of all voices that are suppressed within the dominant dispensation of things" (David G. Smith 253), The Matrix explores another

facet of critical literacy, namely "the continuation of literacy by other means [...] that has given the written word a much greater a power to proliferate" (Willinsky 16). Interestingly, the simulated world created by machines to enslave human consciousness is still primarily a print-based culture. Even though computers are present in this artificial world, there is a reliance on information that has been physically documented. This is clear in representative scenes where Neo's hacking records are shown to be gathered by Agent Smith in a bulky dossier. However, the ostensible existence of a print-based literacy is a facade that has been maintained by machines to create a simulation of a human culture (circa 1999) within The Matrix. It may not be a stretch of the imagination to suggest that the failure of pre-Matrix human beings (circa 1999) to anticipate issues with machine sentience could be due to their reliance on print capitalism (Anderson 44-45), which has historically focused on profiteering and legitimizing dominant interests through the medium of print. Pertinently for Neo and his fellow human survivors who have taken the red pill to gain insight, there is a recognition that to simultaneously shuttle between The Matrix and the Zion (the only human subterranean city) they cannot rely on any one form of literacy, either digital or print. Survival within this difficult post-nuclear apocalyptic space requires an expertise in multiple semiotic resources (e.g. language, gesture, images), co-deployed across various modalities (e.g. visual, aural, somatic) (see Anderson). The Matrix emphasizes the importance of democratized knowledge circulation within and in opposition to bodies and organizations that champion specialized knowledge, alongside challenging the "decontextualized, culturally insensitive and often ethnocentric view of literacy" (Collins ix).

Neo's ability to unearth and literally deconstruct the dehumanizing matrix is latent to his pre-enlightened position not only as a software programmercum-hacker but also as a discerning reader of Jean Baudrillard (*Simulacra and Simulations*), Kevin Kelly (*Out of Control: The New Biology of Machines, Social Systems, and the Economic World*) and Dylan Evans (*Introducing Evolutionary Psychology*). Such eclectic reading habits indicate that Neo, the Chosen One, needs to be the repository of multiple epistemic systems, since monolithic models, based exclusively in either print or digitality, are destined to fail in this dystopic world. In fact, as highlighted in "World Record" (one of the movies in *The Animatrix*<sup>6</sup> series), an awareness of The Matrix requires "a rare degree of intuition and sensitivity and a questioning nature" qualities that can be mapped onto postmodern conceptions of literacy that need "an ability to decipher beyond what is represented" (Hwang). Specifically, in order to negotiate with the sentient machine consciousness Neo and the other human survivors need to have a level of multimodal literacy that unlike "textual literacy [...] requires one to possess increasing layers of literacy" (Liu, qtd. in Hwang). Neo's journey towards achieving this literacy, which is concomitant to becoming "The One," reaches fruition when The Matrix can be perceived as "a world without rules and control, without borders and boundaries" (*The Matrix*). This realization is finalized in the movie through tactile human contact, as the apparently-deceased Neo receives a kiss from Trinity – leading to Neo's revival and the physical deconstruction of Agent Smith by Neo's appropriation of his body.

Neo's destruction of the omniscient computer program Agent Smith (who is capable of assuming anyone's body/identity) essentially underscores the deconstruction of a single signifying system in favor of a pluralistic "world [where] anything is possible" (The Matrix). Neo's actions are mirrored in the tenets of postmodern critical literacies that decry monolithic knowledge systems, and insist on recognizing continuously evolving and dynamic modes of literacy. While some scholars have extolled Neo's character as a solitary messianic figure in a dystopic world, the movie highlights that, in order to deconstruct entire knowledge systems, a cohesive and collective effort is required. While a valid critique of Neo is that he reinserts the trope of the (white) Western Messianic figure within post-apocalyptic settings, some scholars have also offered the counter viewpoint "that Neo literally 'wakes up' to the true nature of reality through an amalgamation of the historical Indian Buddha and the Greek Oracle of Delphi" (Hussain 6). By incorporating Eastern as well as Western elements and thereby deconstructing a monolithic knowledge structure, The Matrix initiates a critique of selfidentifying "progressive" models of literacy, emerging from Anglo-American contexts, which ignore the voice and value of minority resistive voices, such as those raised against strategic nuclear imaginaries. Not surprisingly, in the last scene of the film Neo makes a telephone call to a presumably sentient machine consciousness, promising that he is "going to show the people what

you don't want them to see" (*The Matrix*), implying that the deconstruction of this monolithic model will be a community effort and not one based in a single body or subjectivity. The delegitimization of the dominant discourse in the film also occurs through the deconstruction of Neo's own ideological assumptions. Before his "death," Neo had been dubious of his status as "The One" who embodied the hopes of human salvation, but his resurrection critically underscores the fact that in order to conceive a pluralistic world it is necessary to go beyond any orthodox thought systems, even if they are one's own.

#### Conclusion

Events themselves only become meaningful as either the consequences of previous texts or the causes of still further interpretive texts. (McCanles 16)

The fear of global annihilation through nuclear war remains a threat that has loomed large over human civilization for the past several decades; paradoxically, it is a threat that cannot be quantified because, unlike conventional wars, until now nuclear war has only been the "signified referent, never the real referent" (Derrida 23). Beyond the domain of nuclear bomb testing, which occurs (mostly) under controlled circumstances, the nuclear bombings of Hiroshima and Nagasaki remain the single referential point for linguistically or culturally constructing nuclear events. Significantly, this implies that the real spaces of nuclear strategic thinking, and the imagined spaces of a post-nuclear apocalyptic culture, exist in a dialectical relationship as they collectively anticipate/ predict a nuclear catastrophe. Due to large-scale advancements in the field of nuclear technology, especially after the Cold War, the destructive capabilities of nuclear weapons have indeed multiplied to "levels of such grotesque dimensions as to defy rational understanding" (Keenan, qtd. in Cohn 688). Through specialized terms such as "clean bombs," "countervalue attack" and "collateral damage,"7 which manage to make abstract the destructive capacity of nuclear bombs, specialized and strategic nuclear imaginaries completely mask the element of human suffering. It is

precisely this human suffering that is expressed in the texts discussed here, which by unmasking the terrible realities of nuclear war uncover what remains unsaid in sophisticated linguistic paradigms. Beyond the surface dissimilarities, in both films the hope of human redemption is invested in a humane community-oriented literacy. While in the case of Eli the redemptive source is a graphical, material form of literacy, Neo emphasizes the fact that focusing on either print or digital literacy is futile unless it is grounded in empathetic human communities. Critically, in both cinematic texts there is a deliberate detachment from the associations of devastation and catastrophe found within the neo-apocalyptic genre. *The Book of Eli* and *The Matrix* construct post-nuclear apocalyptic spaces as terrains for the retrieval of social order. Significantly, this retrieval is to be attained through dynamic multimodal forms of literacy.

In both films there is a disavowal of a single book/signifying system/ world order, which can be linked to a critique of monolithic epistemes and the assumptions as well as practices that arise out of these discourses. The motif of a journey portrayed in the films leads to the realization that in both our pre-nuclear "real" spaces, as well as post-nuclear "imagined" spaces, literacy is empowering, but only when we refuse to stagnate within preconceived notions and move continually forward. Eli's literate status in the pre-apocalyptic world allowed him to access value systems that were rendered obsolete in the post-nuclear world. Even though Eli is exceptionally literate, his model of empathetic literacy is underlined through his realization at the film's conclusion: that it is the book's signified values he wants to proliferate rather than the signifier (the book) itself. This proliferation is exemplified by Solara, the female protagonist in The Book of Eli who takes over Eli's baton. Having appropriated the attire of the deceased Eli, she is shown, as the movie concludes, embarking on a journey to spread the message of civilization (presumably through communityoriented knowledge.) Similarly, Neo's status as the catalyst for change is fully externalized through his telephonic clarion call, which simultaneously anticipates the rise of multiple "Neos" who break free from the darkness of The Matrix into an enlightened revelation. The Book of Eli and The Matrix, in contrast to the specialized nuclear discourse that promotes a hegemonic literacy of nuclear technology in favor of militarization, focus on a

pluralistic understanding of literacy that eschews traditional print-based frameworks and caters to democratic definitions of multi-modal literacy, which seek to be more inclusive and support the "integration of multiple modes of communication and expression" ("Multimodal Literacies").

I hope this article goes some way in showing how the so-called objectivity and specialized knowledge implicit in strategic nuclear imaginaries are inherently colonizing sources of knowledge that do not admit democratic dialogue in the nuclear domain. Furthermore, while the nihilistic tradition of neo-apocalyptic culture has gained considerable purchase, there is still more than ample space for cultural productions that earnestly examine and challenge the epistemological and political traditions of the Cold War. The films from the neo-apocalyptic tradition examined here adopt a praxis that politicizes our understanding of specialized knowledge systems and the individuals who colonize them, in order to reclaim the value of literacy as a humanizing enterprise. What is more, they promote a renewed neoapocalyptic tradition that recovers the etymological origin of the Apocalypse as an uncovering, instead of a covering-up, of catastrophe and nihilism. In doing so, these cultural productions become allegories of a redemptive understanding of the dialectic between literacy and power. By downplaying the position of individuals considered as hyper-literate in our current socio-political milieu, such as defense intellectuals within the militaryindustrial complex who represent "an exaggerated investment in the power of [specific forms of] literacy to the detriment of attention to how life is lived" (David G. Smith 248), the texts analyzed in this article emphasize that "any concern about language must point eventually to a concern about human relationships - a concern for how we have come to be organized and structured as a human community" (250). Both Eli and Neo underline that a mere awareness of epistemic knowledge is dangerous unless we interrogate the function and role of such knowledge. Precisely because they realize the intentions of specialized strategic discourses and the privileged entities who sponsor them, Eli and Neo represent subjectivities that can move beyond limiting notions of literacy, texts, power and identity. This is indeed an advanced model of acquiring and disseminating knowledge – a pedagogy that is not bogged down in monolithic systems but is in constant movement towards recognizing protean modes of knowledge circulation.

#### Notes

<sup>1</sup> I use the term "post-nuclear apocalyptic landscapes" to specifically denote post-apocalyptic settings that arise from a nuclear holocaust/a scenario where nuclear weapons bring about the destruction of human civilization, as we know it.

<sup>2</sup> The term "Techno-strategic Discourse," which is central to our discussions of the nuclear, was coined by Cohn "to represent the intertwined, inextricable nature of technological and nuclear strategic thinking [...], to indicate the degree to which nuclear strategic language and thinking are imbued with, indeed constructed out of modes of thinking that are associated with technology" (690).

Within this context it is vital to emphasize how deterrence is an entirely discursive phenomenon, since "deterrence depends not so much on possessing military capability and the willingness to use it, as on the communication of messages about that capability and that willingness" (McCanles 11; italics mine). In the period preceding the Soviet nuclear test the American military-industrial complex had been unwilling to share nuclear knowledge into the public domain, due to the sole presence of America in the nuclear club. Due to the lack of a competitive or a threatening adversary in the global nuclear landscape between the years 1945 and 1949, this strategic approach implied that American nuclear policy was under no pressure to declare itself as either a benign or a malevolent power. The entry of Soviet Russia into the nuclear arms race, however, ensured that the American government could no longer maintain their non-committal status quo. Confronted with a nuclear adversary "communication of messages" suddenly became vital not only for conveying constant information about nuclear weapons within the American military-industrial complex but also for addressing rising public fears about America's threatened sovereignty and presumed nuclear annihilation. On the other hand, the fear of retaliation from each other made the USSR and the US understandably cautious in the public exhibition of their nuclear capabilities. The forms of testing the capacity of nuclear bombs through underground, atmospheric, exo-atmospheric and underwater testing, undertaken during this period (and also later) by countries that have nuclear capability, are essentially non-full-scale tests that do not provide actual data about the destructive capabilities of fission or fusion bombs (see Sublette).

<sup>4</sup> This phenomenon became especially pronounced following the successful testing of Soviet Russia's first nuclear bomb First Lightning in 1949 and the effective declaration of Soviet Russia as a nuclear superpower. Latent fear of a nuclear conflict and the consequent holocaust that had been embedded within the American national imaginary since 1945 was suddenly galvanized in the population as a whole. The situation was not helped by US governmental discursive models like apocalypse management that construed the Cold war as an Augustinian struggle between good and evil and suggested that "communism, nuclear war and economic mismanagement all threatened to destroy the nation utterly" (Chernus 7). The declaration of Soviet Russia's nuclear capabilities became a watershed moment in the history of nuclearization since, for the first time in human history, the idea of nuclear deterrence had been established. <sup>5</sup> Bibles published by Gutenberg's Press are popularly understood to be amongst the first printed artifacts known to human civilization.

<sup>6</sup> The Animatrix is a collection of nine short animated films set in the world of the motion picture *The Matrix*. These movies deal with interconnected and often independent storylines that contribute to the trilogy of motion pictures.

<sup>7</sup> "'Clean Bombs' are nuclear devices that are largely fusion rather than fission and that therefore release a higher quantity of energy, not as radiation, but as blast, as destructive explosive power. 'Countervalue Attacks' is the military term used for describing the process of attacking cities with the aim of inflicting maximum damage to the cities while 'Human Death.' in nuclear parlance, is most often referred to as 'collateral damage'" (Cohn 691).

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