Difficult Truths versus Expedient Lies: HBO's *Chernobyl* and Climate Change Denial

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Abstract

In May-June last year, HBO aired its best drama series ever on the world's worst nuclear disaster that took place at the Chernobyl Nuclear Power Plant in the Soviet Union on April 26, 1986. HBO's Chernobyl, written and created by Craig Mazin is an engrossing ecodisaster docudrama that retells the catastrophic Chernobyl accident in a horrifying yet hauntingly accurate manner. However, *Chernobyl* is not a polemic against nuclear power or against the powerful Soviet bureaucracy. At its heart, it is all about un-burying the truth in the face of the crude censorship of an all-controlling state. The ingeniously woven fiveepisode miniseries explores how the interplay of totalitarian power structure, government censorship and suppression of scientific truth was countered by thousands of individual acts of patience and courage during and after the disaster. And the politics of denial, lies and suppression of scientific facts that led to the Chernobyl disaster are uncannily similar to today's political climate where the climate change deniers disregard the reality of anthropocentric climate change. The suppression of inconvenient truths that led to the Chernobyl disaster has also been done by the conservative politicians who ignore the terrifyingly escalating problem of environmental catastrophe and imminent geopolitical threat. This paper attempts a critical reading of the HBO miniseries with special focus on its exploration of inconvenient truths in the face of lies designed to preserve a Stalinist system of governance. Relating the suppression of scientific truth about nuclear science to climate change denial today it further looks into how the show serves as a metaphor for understanding the science about and politics around global climate change in the Anthropocene.

Keywords: Chernobyl disaster, Nuclear threats, Climate anxiety, Nuclear denial, Parable, Climate change Denial

In recent years, popular media has been playing a key role in affecting public perception of the global environmental crisis and impending environmental doom. The entertainment media's cinematic representations of environmental catastrophe and climate crisis have played a significant role in bringing people face to face with the grim possibility of the human race being imperilled by its own hubris. Pointing to the importance of the fictional environment media Kirby writes: "Given the enormous audience for fictional films and television, it is important to broaden our conception of public understanding of science (about environmental crisis and climate change) to include fictional entertainment media" (262). A form of entertainment media that has perhaps most powerfully communicated the

global environmental challenges is environmental docudrama. Both dramatic and informative in nature, environmental docudrama addresses the serious environmental problems and challenges by striking an appropriate compromise between dramatic conventions and documentary research¹. In recent years, the world has seen a noticeable increase in the production of environmental docudrama and this upsurge has some obvious connection to the excessive human demand on natural capital and resulting environmental disasters over the past few years. The environmental disaster docufilm like Omar Madha' Burn Up (2008), Ravi Kumar's Bhopal: A Prayer for Rain (2014), Peter Berg's Deepwater Horizon (2016), Todd Haynes' Dark Waters (2019) and many others communicate the intensity and severity of anthropogenic environmental disasters by exploiting the tensions between dramatic and documentary aesthetics. However, long before this widespread popularity of environmental and climate change docudrama, the cinematic and televisual representations of nuclear anxieties, particularly in the nuclear decade of 1980s, demonstrated docudrama's political impact and its potential to contribute substantially towards the (de/re)formation of public opinion. In the late Cold war period the imagined apocalypse that engulfed the human race was not environmental, but nuclear and this nuclear terror made its way onto the television screen in the form of fact-fiction dramadoc/docudrama. The 1980s nuclear docudrama like Nicholas Meyer's The Day After (1983), Mick Jackson's Threads (1984), Albert Ruben's Countdown to Looking Glass (1984) and Joseph Sargent's Day One (1989) among many others made the human vulnerability and nuclear shadow visible. In this context it is important to note that in the "nuclear 1980s", as Daniel Cordle calls it, the accident at the Chernobyl nuclear power plant increased people's fear of nuclear technology and its application. The filmic re-creation of the catastrophic Chernobyl nuclear accident of 1986 in the 2019 HBO fact-fiction miniseries Chernobyl² relives the terror about nuclear holocaust. However, in a time when the global ecological crisis is the biggest threat to human survival on the planet earth, this historicalnuclear docudrama created by Craig Mazin, directed by Johan Renck and produced by HBO in association with Sky UK metaphorically relates the nuclear tension to global environmental challenges. In its filmic representation of the nuclear accident and environmental toxicity this historical drama miniseries merges the docudrama's facts-tornfrom-today's-headlines approach with the recreation of an older historical event.

Nuclear Imagination in Literary/Cultural Texts and Representations of Chernobyl Catastrophe

The atomic attacks that concluded the World War II made the apocalyptic imagination about nuclear holocaust permeate the human consciousness in the post-Second World War time. The atomic detonations at Alamogordo, Hiroshima, and Nagasaki introduced the hypothesis "of a total and remainderless destruction of the archive" and the pervasive cultural embeddedness of the possibility of nuclear eschaton gave birth to what Messmer calls "nuclear culture" (Derrida 27). The "utter reality of predictable death" influenced a significant body of literature and the nuclear emerged as a dominant trope in apocalyptic literary and filmic texts (Scheick 5). Regarding the literary expression of nuclear imagination Derrida observes that the nuclear issue is "fabulously textual, through and through" (23). In the early Cold War period the atomic culture expressed itself both in

literary expression and popular culture. Apart from the Japanese Atomic Bomb Literature⁴ many works of speculative fiction represented the nuclear proliferation and apocalyptic nuclear future. The "nuclear uncanny"⁵, as Saint-Amour calls it, found artistic expression in dystopian science fiction like Peter Crowcroft's *The Fallen Sky* (1954), John Wyndham's *The Chrysalids* (1955), Daniel F. Galouye's *Dark Universe* (1961), Brian Aldiss' *Greybeard* (1964) and Edmund Cooper's *The Cloud Walker* (1973) among many others. As regards the filmic and televisual representation(s) of the nuclear culture and nuclear anxiety in the first phase of the Cold War, a variety of cultural and media productions explored the nuclear tension and the "dialectic of mimetic rivalry" it provoked ("Proposal" 2). The projections of the apocalyptic imagination in nuclear-themed films like *The Atomic City* (1952), *Godzilla* (1954), *Fail Safe* (1964), *Battle Beneath the Earth* (1967) and television programs like *A Day Called "X"* (1957), *Panic in Year Zero* (1962), *The War Game* (1966) and *Genesis II* (1973) made important contribution to the public discussion of nuclear issues.

The nuclear referent continues to shape the literary and cultural expressions in the nuclear decade of the 1980s. In the nuclear 1980s the emergence of the academic terrain of Nuclear Criticism that "reads critical or canonical texts for the purpose of uncovering the unknown shapes of our unconscious nuclear fears" gave fresh momentum to the representation(s) of the nuclear culture and nuclear threats in literary and cultural texts ("Proposal" 2). Derrida's nuclear criticism in his seminal essay "No Apocalypse, Not Now: Full Speed Ahead (Seven Missiles, Seven Missives)" (1984) analysed the "mechanisms by which nuclear narratives are constructed and enacted" and his famous dictum about the textuality of nuclear warfare established the nuclear discourse ("Proposal" 3). The geopolitical tension between the two superpowers in the 1980s and the threat of ultimate nuclear apocalypse resulted in an ascension of perceived fear of nuclear annihilation into social imagination. In fact, as Daniel Cordle has observed, "the whole topography of the decade, comprising cultural, social, geopolitical, domestic, political, economic, technological and scientific features, was both shaped by and shaped nuclear preoccupations" (2-3). This dominance of nuclear threats in public discourse translates to the screen in the nuclear-themed apocalyptic cultural productions like War Games (1983), The Day After (ABC, 1983), Testament (PBS, 1983), Threads (BBC, 1984) and The Sacrifice (1986). The transatlantic nuclear discourse of the 1980s is particularly manifested in British and American literature(s). The 1980s British and American nuclear literature canon include such nuclear texts as Maggie Gee's The Burning Book (1983), James Forman's Doomsday Plus Twelve (1984), Tim O'Brien's The Nuclear Age (1985), Ian McEwan's The Child in Time (1987) and Martin Amis's London Fields (1989) just to mention a few. These texts do not necessarily use the threat of global nuclear war and vision of a nuclear future as the only themes. They rather explore the psychological effects of the 1980s nuclear culture.

The increasing prominence of nuclear threats in public discourse in the nuclear 1980s was intensified by one accident in a civilian nuclear power station-the explosion at the Chernobyl nuclear power plant in the then Soviet Union. The Chernobyl nuclear disaster vindicated the public perception of the toxic effects of nuclear fallout and vulnerability of humans to nuclear technology. After the Chernobyl accident the potential hazards of nuclear

technology crystallised in the public imagination and the sinister connections between civilian and military nuclear technology in the late Cold War state became clear. As Cordle observes: "Indeed, civilian nuclear power plants, often previously seen as benign alternative uses of atomic technology, were persuasively portrayed by 1980s activists as environmentally toxic and as cogs in the machinery of the military-industrial complex" (4). Immediately after the Chernobyl disaster the accident was represented in a variety of literary and cultural texts and their representation(s) of nuclear technology "as a world-ending technology inspired both acute anxiety and eschatological speculation" (Cordle 5). Soon after the accident it was novelized in Frederik Pohl's Chernobyl: A Novel (1987). Maggie Gee's (in)direct engagement with the disaster and its radioactive consequences found literary expressions in her novel Grace (1988). As regards the filmic re-creation of the Chernobyl catastrophe, in addition to hundreds of documentaries, it has been represented in many feature films produced from countries across the world. Some of the popularly acclaimed features films based on or inspired by the Chernobyl nuclear accident are Mykhailo Belikov's Decay (1990), Oksana Bayrak's Aurora (2006), Thomas Jonhson's The Battle of Chernobyl (2006), Bradley Parker's Chernobyl Diaries (2012), Michale Boganim's Land of Oblivion (2011) and Vitalii Vorob'ev's Inseparable (2013). In all these films the Chernobyl accident has been represented as an apocalyptic event making rebirth possible. Johanna Lindbladh has rightly observed that "the narrative structure in these films is surprisingly homogenous, representing Chernobyl not primarily by its negative consequences, but rather in terms of a positive force contributing to rebirth" (240). The political aspect of the disaster however has mostly been overlooked in the filmic and televisual representations of the Chernobyl disaster. This tradition of parochialism and irresistible fascination with apocalypse has been debunked by HBO's miniseries that explores how the interplay of totalitarian power structure, governmental secrecy and suppression of scientific truth led to disastrous consequences. A fine blend of art and modern-day cinema, this nuclear docudrama looks beyond the apocalyptic visions of traditional nuclear literature and explores the politics of lies and denial that induced the disaster. And the lesson it teaches about inconvenient truth and convenient lies makes the show a modern parable.

From Actuality to Filmic Re-creation: Imagi(ni)ng the Disaster

HBO's *Chernobyl* is an unsettling dramatization of the Chernobyl nuclear accident and bizarre clean-up efforts that followed. The show cinematizes the gradual build up to the disaster, the severity of the accident, the science behind how a RBMK nuclear reactor works and the painstaking clean-up process followed by the dramatic prosecution. Darker than most horror flicks, *Chernobyl*'s excellent storytelling, brilliant cinematography and eerie music trigger a huge array of emotional responses from the audience. The show kicks off with Valery Legasov (played by Jared Harris), the chief of the commission investigating the Chernobyl accident, recording tapes detailing how disillusioned he had become with the failure of the Soviet authorities to confront the design flaws in the reactor and then hanging himself. The story then takes us back to the night of April 26, 1986, the night the actual accident took place at the Vladimir Ilyich Lenin Nuclear Power Plant in Ukraine. The rest of the episode is like a horrifying disaster movie describing the gradual build up to the

explosion at reactor four and the secretive Soviet bureaucracy's cover-up of the accident to maintain the image of communist idealism. The second episode records the science behind the nuclear reactor and volatility of nuclear fission. It manifests the vulnerability of human and animal lives in the exclusion zone⁶. It is important to note that the character of the nuclear physicist Ulana Khomyuk (played by Emily Watson) is a fictional one. She represents a composite of real-life scientists involved in the investigation of what actually led to the explosion of the core. She is a sort of Horatio character in Hamlet. She acts as Legasov's conscience, pursuing him to tell the truth before the world. The third episode which morphs into a personal political drama describes the post-disaster clean-up process. It cinematizes how the Soviet system of governance was desperately struggling to hide the scale of the accident and how the KGB intelligence officers were spaying on Legasov and Khomyuk for stopping them from knowing the truth. The moral dilemma for Legasov with Khomyuk urging him to tell the inconvenient truth about the flaws in the Soviet reactor design and Shcherbina (played by Stellan Skarsgård) urging him not to tell the complete truth to avoid government retaliation constitutes the climax of the show. The gripping finale uncovers the mystery around the man-made disaster with Legasov affirming publicly in the courtroom that the explosion in the reactor was caused by a design error. Legasov's final speech revealing the truth about the botched design flaws in the reactor's emergency protection system and his bold dissection of institutional rot take the show beyond a melodramatic disaster story. The ending gives us a kind of catharsis and we are left with the lesson that "every lie we tell incurs a debt to the truth. Sooner or later that debt is paid" (Vichnaya Pamyat). Legasov who had to fight against two invisible antagonists namely radiation poisoning and a regime of terror resembles the character of Cassandra in the Trojan myths. The physicist can see how things can go badly wrong. He gives a warning about it but unfortunately no one pays any heed to his caution.

There is no denying the fact that although exquisitely researched there is plenty of fantasy in HBO's *Chernobyl* and a lot of it is made up⁷. It gets plenty of things right about the events surrounding the world's worst nuclear accident but a good part of the show verges on myth as well. Higginbotham and his colleagues have raised serious questions about issues like the character of Ulana, the "Bridge of Death", contagious radiation sickness, naked miners and the helicopter crash as shown in the show. The disaster survivors have also found fault with the (mis)representation of the characters of Dyatlov, Fomin and Burkhanov as villains. As shown in the show, Anatoly Dyatlov (played by Paul Ritter), the deputy chief engineer in charge of reactor 4 at the Chernobyl power plant bears much of the responsibility for the accident. However, as most of the historical documents prove, Dyatlov was actually the Union of Soviet Socialist Republics' scapegoat for the disaster and the Soviet narrative deemed him responsible just to hide the institutional failure, the truth about the design flaw in the reactor. Oleg Voinov who had made a docufilm on the Chernobyl accident commented that HBO's Chernobyl is "wonderfully shot, professionally edited, and the special effects are great. But it doesn't come close to reflecting reality.... A lot of the facts presented are just not true"8. Because of its historical inaccuracy the Putin government also criticized the series as 'provocative and politically motivated'. However, notwithstanding the controversy about the historical accuracy of the show there is no denying the fact that Chernobyl relates the nuclear threat of the 1980s to climate change crisis, the most apocalyptic challenge to human survival on earth today. It certainly acts as a connecting link between nuclear fear experienced by people in the nuclear decade and the climate anxiety people are going through at present.

From Nuclear Fear to Climate Anxiety: Chernobyl and the Apocalyptic Imagination

HBO's Chernobyl connects the nuclear threat of the time the accident occurred to climate anxiety of the time the docudrama is produced. The sense of looming risk and consciousness of acute vulnerability as explored in the show are the interweaving points and mediating elements between nuclear threats and climate crisis. The dissolution of the Soviet Union and the end of the Cold War in 1991 reduced the risk of nuclear war that defined the Cold War, the ideological confrontation between capitalism and communism. With the end of the nuclear arms race and dispersal of nuclear risk the threat of nuclear annihilation that disturbed the public imagination in the Cold War nuclear state drew to a close, at least for the time being. And with the prospect of a total thermonuclear war noticeably decreased, the post-Cold war world saw the emergence of new terrains of apocalyptic anxieties. In the 1990s and 2000s a whole new range of transnational threats and crises "eclipsed nuclear terror as the prime mover of the apocalyptic and dystopian imagination" (Hughes and Wheeler 1). While discussing the 1990s, Ann Larabee has observed that in the nineties "the apocalypse has been shifting to the more subtle forms of viral invasion, global warming, sperm count loss from pollution hazards, and the like" (153). These new threats threaten life on a planetary scale just as the nuclear weapons signalled the gravest threat to human survival in the throes of the Cold War. And there is no denying that among all these postatomic age threats and crises climate change stands out as the principal threat to human survival on planet earth. In the age of human supremacism we are in, the exceptionalist discourse of humanism has tampered with earth's natural state in such an irrecoverable way that the current environmental predicament poses a threat of potential global apocalypse. This sense of global risk, the feeling that "we are all trapped in a shared global space of threats" relates the nuclear risk to the climate change crisis. In the Anthropocene⁹ changing climate appears to operate as a synecdoche for global peril as nuclear energy and nuclear arsenal posed threats of transgenerational harm during the Cold War. Chernobyl's "end of the world" rhetoric renders these dangers of nuclear risks analogous to the climate change crisis. Drawing connections between the nuclear threats and current ecological challenges with this global peril as the connecting thread it signifies that

An ecological consciousness essentially involves the understanding that what happens on a local level scales up to impact on a global level. Rather than imperilling a single country, nuclear war is frequently represented as an assault on the Earth itself, as in the examples above of nature blasted by radiation or going out of kilter. The emphasis is on global, not national, peril. (Cordle 66)

The global eco-precarity largely resembles the nuclear vulnerability in the sense that both of them show the precariousness of human lives on planet earth. The "intertwined set of discourses of fragility, vulnerability, power relations across species and imminent extinction" connects the eco-precarity to the vulnerability of human life to nuclear risk (Nayar 6). Exploring the linkages between nuclear and climate risks Jonathan Schell states:

The two perils have a great deal in common. Both are the fruit of swollen human power—in the one case, the destructive power of war; in the other, the productive power of fossil-fuel energy. Both put stakes on the table of a magnitude never present before in human decision making. Both threaten life on a planetary scale. Both require a fully global response.¹⁰

The nuclear anxiety and dystopian imagination of the nuclear future have largely been replaced by a pervasive threat of environmental doom. The "anxieties about the vulnerability not only of individuals, but also of society, the species and even the planet" bear close resemblance to climate anxiety or eco-trauma as Zhiwa Woodbury calls it (Cordle 19-20). The megarisk of climate catastrophism has stimulated solastalgia and existential anxiety among people who are experiencing the condition of being-at-risk in the face of global environmental breakdown. Chernobyl crystallizes all these parallels between nuclear and climate anxieties. In exploring the cultural panic around the nuclear risks it appears to operate as a metaphor for understanding trauma and anxiety caused by ecocatastrophes and extreme weather events. It turns out to be a nuclear-environmental risk narrative in striking an appropriate compromise between the possibility of a nuclear eschaton and slow violence¹¹ of environmental toxicity. However, at its heart, the show is all about nuclear denial and suppression of inconvenient truth about nuclear radiation by a totalitarian state. It is an evocative cinematization of the exploration of difficult truths about the failure of an apparently fail-safe nuclear technology and the serious human-environmental ramifications the disaster generated. And in unearthing the truth the show delivers in a "clever cloaking in a riveting historical context, an evergreen lesson that is especially resonant today: Suppression of the truth can lead to disastrous consequences." (Prescott n.p.)

Through a Web of Lies and Propaganda: Un-burying the Truth

In his essay "Nuclear Denial: From Hiroshima to Fukushima" (2013) Charles Perrow highlights the instrumental role played by "nuclear denial", the downplaying of the harmful effects of nuclear radiation, in the expansion of nuclear power. Perrow has determinedly stated: "Nuclear denial creates scientific ambiguity that provides cover for governmental and commercial interests and allows nuclear power to continue expanding worldwide" (57). Perrow shows "an uncanny resemblance in the rhetoric of harm in radiation exposure across historical catastrophes" and his examination of the radiation effects includes the power plant accident at Chernobyl in what is now Ukraine (Wallace 160). The "multiple denials regarding Chernobyl (that it happened, that it was serious, and that it is still serious)" have problematized the political, social and cultural response(s) to the accident (Perrow 64). Most of the cultural and literary representations of the accident overlook the politics of denial and suppression of scientific facts that led to the disaster. They are mostly "clumsy piece(s) of backslapping propaganda showing how well the Soviet scientific, technical, military and party authorities came together in the face of great adversity to overcome the severity of the accident" (Van Wyck 96). HBO's Chernobyl breaks away from this tradition of heroworship and lionization of the Soviet system of governance. The drama in this show is a cinematic rendition of how truth ultimately finds its way through a web of lies and propaganda designed to preserve a Stalinist system of governance.

The first episode is all about revealing the gross incompetence of the operators who were on duty in the Chernobyl's reactor 4 on April 26, 1986. An ill-tempered person and a tough boss, Dyatlov is blamed for his reckless negligence of every safety measure during the safety test. It is true that Dyatlov ignored high dosimeter reading, but this denial and ignorance are less about radiation denial and more about the manifestation of the secretive and authoritative Soviet mentality. The show explores an all-controlling state's fascination with communism and censorship of truth most exquisitely when a nameless old sage of the Soviet party lectures on the superiority of Soviet socialism. The old party man's recommendation of total lockdown and information blackout represents the communist totalitarianism that operates by the means of collective gaslighting. This episode brings to mind what Winston, the protagonist in George Orwell's dystopian novel Nineteen Eighty-Four, experienced when he was tortured to believe by O'Brien that 2+2=5. Regarding the character of that idealistic and anonymous old partyman, Mazin comments: "That character represents a certain philosophy...a philosophy that goes all the way back to the Russian Revolution. I wanted somebody who represented that true belief in a dream of a utopia that never was going to be and never was, but who was still clinging to it" (#Betv #ChernobylBetv #ChernobylHBO). And about the applause at the end of the old man's emotional pep talk, Mazin observes: "In moments of terror, people turn to their delusions, and in that moment you see the triumph of delusions" (#Betv #ChernobylBetv #ChernobylHBO). Again, when an engineer from the plant informed the officials about the high dosimeter reading, they simply dismissed the reading and discounted the reality by the question: "How can a nuclear reactor core explode?" Actually the entire show revolves around this critical question and over its five episodes it constantly moves toward answering this question. The Soviet government was so proud of its nuclear technology that nobody could even imagine the design flaws in the reactor. In "Elements of Chernobyl" after the first episode, Mazin speaks about how truth ultimately triumphs over all attempts to suppress it: "When people choose to lie, and when people choose to believe the lie, and when everyone engages in a passive conspiracy to promote the lie over the truth, we can get away with it for a very long time. But the truth just doesn't care, and it will get you in the end" (#Betv #ChernobylBetv #ChernobylHBO). This celebration of inconvenient truth in a world filled with political lies and propaganda takes the show beyond the Chernobyl disaster and makes it a modern parable.

In episode two, when the Soviet top brass is still in denial about the existence, impact and severity of the nuclear fallout, Legasov presents his scientific report in a meeting of top Soviet officials. In the meeting, everything the Soviet General Secretary Gorbachev was concerned about was the foreign press and the Soviet's security interests. Again, when Ulana, the fictionalized composite character, warns a local politician, Garanin about the severity of the accident at Chernobyl, the big fat man as represented in the show completely ignores the warning as he has been assured by the party men that the situation at Chernobyl is "under control". Garanin, again, is a fictional character who represents nuclear denialism and romantic fascination with communist idealism. Regarding Ulana's pursuit of truth, Mazin says:

I needed a character to represent the hundred of scientists who came together to try and figure out how it stop Chernobyl from getting worse, to clean it up and then to determine how it happened in the first place....These were scientists that understood that they were trying to solve a mystery in a system that did not want them to solve the mystery....They understood as scientists that the truth was no longer something that could e hidden away, that it was not too late. (Ari)

Episode three and four are all about Ulana's investigation into what led to the explosion of the core. Although Ulana's reading for the investigation was also censored, her study and interrogation led her to the fact that a similar accident had occurred in the Leningrad Nuclear Power Plant in Russia ten years before the Chernobyl disaster because of the design flaw in the SCRAM¹². The truth about the reactor design flaw was, however, suppressed by the Soviet state to maintain the supremacy of the Soviet nuclear power industry and the KGB classified that as a state secret. The official position of the Soviet state on the Chernobyl accident was unambiguously clear. As Shcherbina, the communist party loyalist and skeptical truth-teller determinedly asserted: "The official position of the state is that a global nuclear catastrophe is not possible in the Soviet Union" (The Happiness of All Mankind). Towards the end of episode four when Ulana proposed that Legasov should bring the truth about the design flaw to force the central committee to take action for averting further accidents at the nuclear power plants Boris sarcastically commented: "What you are proposing is that Legasov humiliate a nation that is obsessed with not being humiliated" (The Happiness of All Mankind). The episode four ends with Legasov caught in a conflict between saving his nation from losing its face before the world and his moral conviction about telling the truth. Legasov enacts an acceptance of vulnerability to nuclear radiation and his fight against the nuclear deniers to establish this truth about nuclear vulnerability renders him a hero in the show.

The thrilling finale that uncovers the mystery around the disaster is a fine blend of art and modern-day cinema. The courtroom drama, the lengthy trial, rundown of nuclear physics, pursuit of truth and the ensuing epilogue-all these make the finale gloomy, gripping and informative. The finale exposes the extent to which the Soviet state protected its secrecy, lies and propaganda to its own detriment. It is interesting to note that the KGB chief identified lying as "statecraft". Despite Gorbachev's laudable dedication to *glasnost*, openness of ideas and expressions, the Soviet state tried to protect its image by playing down the scientific truth about reactor design flaws and high-level nuclear radiation: "The state will never willingly fix the reactors, because acknowledging the problem means admitting that they lied" (Vichnaya Pamyat). In the show trial, Legasov emerged as a candid scientist defending the truth against the state that willfully denied scientific facts to protect its image. His brilliant explanation of nuclear physics ultimately points to the truth in defiance of the widespread censorship and government secrecy. The judge Kadnikov, a representative of the state machinery was frightened by Legasov's truth and in reply to the Judge's warning what Legasov says consists of the moral of the entire show:

I've already trod on dangerous ground. We're on dangerous ground right now. Because of our secrets and our lies. They are practically what define us. When the truth offends,

we lie and lie until we cannot even remember it's there. But it is still there. Every lie we tell incurs a debt to the truth. Sooner or later, the debt is paid. (Vichnaya Pamyat)

The ensuing epilogue shows the cost Legasov paid for the crime of knowing and telling the truth. Legasov's final voiceover beautifully sums up the message that in the end truth is truth and sooner or later we have to pay if we debase and distort the truth.

To be a scientist is to be naive. We are so focused on our search for truth, we fail to consider how few actually want us to find it. But it is always there, whether we can see it or not, whether we choose to or not. The truth doesn't care about our needs or wants. It doesn't care about our governments, our ideologies, our religions. It will lie in wait, for all time. (Vichnaya Pamyat)

Speaking about the lesson the show imparts Mazin sums up: "At the heart of this show, we are asking a question-what happens when we debase the truth and celebrate lies instead? Or when we play with the truth and make it our toy, or distort it? What happens when we deny that there's truth at all?" And the lesson that the show communicates is significantly resonant in the present time of global environmental crisis when the climate change skeptics heedlessly deny and downplay the inconvenient truths about climate change.

Despite the controversy about the historical accuracy and credibility of the show, the lesson it teaches about the destruction of truth by a government committed to safeguard its image makes it a powerful parable. Actually the show is not about a particular nuclear disaster per se, but about the disinformation industry run by the politicians-capitalists nexus for industrial, political and ideological interests. Speaking about this lesson of the show, the creator commented: "The lesson of *Chernobyl* isn't that modern nuclear power is dangerous. The lesson is that lying, arrogance, and suppression of criticism are dangerous" (Mazin). And the politics of denial and lies that led to the Chernobyl disaster are uncannily similar to today's political climate where the climate change deniers disregard the reality of climate change and imminent geopolitical disaster. HBO's Chernobyl, in fact, offers a chilling climate change parable in pursuing us to believe the fact that climate change is happening and it is on our face. It offers a perfect metaphor for understanding the environmental crisis because as the case was with the Chernobyl disaster, the main problem in mitigating climate change today is the world leaders' denial of the reality of climate change.

Chernobyl: A Metaphor for Climate Change Revisionism

In the "age of mankind" we are living in, anthropogenic climate change has been so profoundly impacting all our life in so many multiple ways that we can no more deny the fact that the climate around us has been changing unprecedentedly. The climate change-induced freakish weather events like catastrophic floods, heat waves, wildfires and tropical cyclones have proved the fact that climate change is not something abstract happening to other people only and that it is at our doorsteps now. However, despite the overwhelming evidence of human-induced climate change, a large section of people still do not accept the reality of climate change. Notwithstanding the scientific consensus on climate change, the climate change deniers hold unwarranted doubt about it. Under the aegis of politicians and industrialists, the biostitutes¹⁴ obscure the climate science and manufacture doubt about climate change by upholding pseudoscience¹⁵. The cornucopians¹⁶ who believe in the

managerial approach of technological fix lead the climate change-counter movement to undermine the public perception of climate science. The disinformation campaign and "denial machine" run by the fossil fuel lobby, industry advocates and right-wing think tanks use the gradualism rhetoric to downplay the catastrophic dangers associated with environmental collapse and climate change. This disinformation campaign formalized and institutionalized by political language places the Chernobyl disaster and climate change debate on the same platform. George Orwell nailed the essence of this state-sponsored disinformation industry when he wrote, "Political language is designed to make lies sound truthful and murder respectable, and to give an appearance of solidity to pure wind" (Orwell 157). It is not impossible to see parallels between the nuclear denial and modern climate denial on the ground that in both the cases scientific truths inconvenient to the political interests of the government in power are either concealed or dismissed. Climate change denial, in fact, ought to have the same signification as nuclear denial, "both seen as unscientific and dangerous" (Wallace 160).

As all the major global surveys have found, the US is a hotbed of climate change denial and a significant number of Americans still doubt anthropogenic climate change. President Donald Trump and his administration continue to dismiss climate change as a hoax. Trump has surrounded himself with people who are advocates of the fossil fuel industry. Many of these climate change deniers have histories of not only denying climate science but also working to disparage the scientists who study climate change. In June, 2017 the Trump administration pulled the US out of the Paris Climate Accord on climate change mitigation. The withdrawal of the US, the country that contributed most to global CO2 emissions to date, from the global commitment to fight the threat of climate change put it at the risk of falling apart¹⁷. While looking into the complexity of the US climate denial movement Jean-Daniel Collomb has observed that the climate change denialism in the US is a combination of three trends. Collomb writes:

It is my contention that the emphasis placed on the efforts of the fossil fuel industries to promote their short-term economic self-interests should be complemented by other important factors. First, there is an ideological dimension to the effort to counter climate action: the conservative movement appears to be committed to small government and free enterprise as ideological ends in themselves, irrespective of economic and environmental common sense. From the small-government perspective, therefore, discrediting calls for strong national and international climate action has become a matter of ideological survival. Second, another factor complicates the matter even further for Bill McKibben, Al Gore, and their followers: the defence of the American way of life defined as the dedication to permanently expanding economic prosperity and consumption has now become a highly convenient line of attack for climate change deniers. (1-2)

However, president Trump is not the only leader touting pseudoscience as opposed to scientific wisdom on climate change. There has been an organised climate change denial movement all over the world. In recent years the rise of economic nationalism under the aegis of far-right nationalist parties and leaders has significantly encouraged the climate denial movement around the world. When young climate activists like Greta Thunberg¹⁸

have been urging immediate global action to address/redress climate change, the political leaders across the world are still in denial. Speaking about the world leaders' denial of climate change, the American actor-environmental activist Harrison Ford commented: "Around the world, elements of leadership, including in my own country, to preserve their stake in the status quo, deny or denigrate science. They are on the wrong side of history" (AP Archive). When the ethics of proximity has been paralyzing individual efforts to act on climate change, the political inertia and lack of practical strategies have been undermining efforts for collective global action. And most importantly, a deliberate denial of objective facts and a callous indifference to imminent geopolitical disaster characterize the political doctrine of conservatism that sees climate change as anathema to socio-economic progress. This lack of political will and denial of scientific truth in favour of maintaining the illusion of control relate the climate crisis we face today to the lesson HBO's *Chernobyl* brings home. Relating the takeaway from the HBO show to climate change denial, the creator Mazin has rightly commented:

We live on a planet that is under threat, and scientists are warning us, just as they did in the '70s regarding RBMK reactors in the Soviet Union. Governments are choosing to listen or not listen, and people are choosing to listen or not listen. But the truth, the globe, the thermometer, doesn't care. And the RBMK didn't care either. It didn't matter what they wanted to do that night. It didn't matter that the fatal flaw of the RBMK reactor was a state secret. The reactor didn't care. And that's the problem we struggle with. We are attempting to make ourselves superior to fact, and we are not. (Mazin n.p.)

In Conclusion

HBO's Chernobyl is thus a cautionary tale in delivering the message that ignoring truth and concealing a problem in the face of imminent disaster only magnifies the damage. In the age of humans when the climate scientists have been repeatedly warning humanity about global warming and climate change, the world leaders have simply been discounting the conclusions of climate science in favour of pseudoscientific assumptions. This climate change denialism obviously bears close resemblance to the suppression of truth about the reactor design flaw at the Chernobyl nuclear plant by the Soviet state even after the nuclear fallout in the Leningrad Nuclear Power Plant in 1975. And this is where the nuclear denial as shown in HBO's *Chernobyl* parallels the climate change debate today. The show, in fact, serves as a metaphor for the global war on scientific truth, whether it is about nuclear science or about climate change. In today's world of collapsing ecosystems and unprecedented climate change when a collective action is urgently required to put a check on carbon emissions and global warming, the fictionalized representation of the Chernobyl accident brings home the message that without political will and sincerity of world leaders it is impossible to mitigate climate change. And the rest is left to the world leaders. It is their choice whether they would continue to deny the reality of climate change or overcome their ostrich syndrome¹⁹ by acting immediately on it.

Notes

All references to the show are indicated with the name of the episode in parenthesis.

- ¹ An environmental docudrama is different from an environmental documentary per se in that whereas a documentary is a truthful rendition of events as they actually occurred, environmental docudrama combines the elements of both documentary and melodrama. An eco-disaster docudrama is also different from the full-fledged hypothetical science fiction or futuristic climate fiction in the sense that the environmental disasters the docudrama represents ring true and concrete.
- ² HBO's *Chernobyl* is certainly a hit with TV critics. It is one of the highest-rated TV shows ever on IMDb. In June 2019, it became the highest-rated TV series of all-time on IMDb nudging aside long time favorites like *Breaking Bad* and *Planet Earth*. On *Rotten Tomatoes* it has received 96% in critics' ratings and 98% in viewers' ratings. The show has received high praise in reviews from film critics from *The Guradian*, *The Washington Post*, *BBC*, *The Atlantic*, *Metacritic*. In the 71st Emmy Awards, 2019 Chernobyl took home 10 awards out of 19 nominations. Recently in the 77th Golden Globe Awards, *Chernobyl* won the best Limited Series award. The drama series, however, got mixed responses from the critics and audience in Russia with the news of a Russian company planning to make its own Chernobyl blaming the CIA for the accident.
- ³ In an article "Nuclear Culture, Nuclear Criticism" Michael W. Messmer defines "Nuclear Culture" as the "pervasive cultural embeddeness of the bomb" that dominated the 1980s. It is because of these nuclear preoccupations that Daniel Cordle calls the 1980s "nuclear decade" or "nuclear 1980s". For details one can go through Messmer's article published in the Minnesota Review, Number 30/31, Spring/Fall 1988 (New Series), pp. 161-180.
- ⁴ Japanese Atomic-Bomb Literature is a fact-fiction literary genre that records accounts of the atomic bomb blasts and their aftermath. This body of literature consists of a variety of texts including diaries, reports of direct experiences, poetry, drama and fictional works focussing on both the victim and the perpetrator. The Japanese Atomic-Bomb Literature canon includes authors like Masuji Ibuse, Ineko Sata, Shinoe Shoda, Tamiki Hara, Sadako Kurihara among many others. For details one can read John Whittier Treat's book *Writing Ground Zero: Japanese Literature and the Atomic Bomb* (1995).
- ⁵ The traumatic anxiety produced by the chronic fear of nuclear apocalypse is defined as the "nuclear uncanny" by Paul K. Saint-Amour. According to Saint-Amour an uncanny anticipation of a total nuclear annihilation disturbed the public imagination after the atomic bombing of Hiroshima. For details one can go through Paul K. Saint-Amour's article "Bombing and the Symptom: Traumatic Earliness and the Nuclear Uncanny", published in the Diacritics, Vol. 30, No. 4 (Winter, 2000), pp. 59-82.
- ⁶ Chernobyl Exclusion Zone (CEZ) or Chernobyl Nuclear Power Plant Zone of Alienation initially existed as an area of 30 kilometre radius from the site of the Chernobyl nuclear reactor disaster. This area was marked for evacuation and for reducing the spread of radioactive contamination after the accident. The borders of evacuation zone, however, have

intermittently been altered to cover a large area of Ukraine and the zone now encompasses an area of just about 2600 km. However, even after 32 years of the accident there is no consensus on the exposure to radiation in the Chernobyl Exclusion Zone.

- (i) Aaron Bady's article "Is Chernobyl historically accurate about the things that matter?, published in *The Week*. https://theweek.com/articles/844566/chernobyl-historically-accurate-about-things-that-matter.
- (ii) Aria Bendix's article titled "What HBO's 'Chernobyl' gets right (and wrong) about the world's worst nuclear power plant accident", published in *Business Insider India* on May 28, 2019. https://www.businessinsider.in/science/what-hbos-chernobyl-gets-right-and-wrong-about-the-worlds-worst-nuclear-power-plant-accident/articleshow/69545222.cms.
- (iii) Brendan Cole's article titled "'A Blatant Lie': Chernobyl Engineer Says HBO Show is Full of Russian 'Vodka' and 'KGB' Stereotypes", published in the *Newsweek* on December 6, 2019. https://www.newsweek.com/blatant-lie-chernobyl-engineer-says-hbo-show-full-russian-vodka-kgb-stereotypes-1443547.
- (iv) Henry Fountain's article "Plenty of Fantasy in HBO's 'Chernobyl,' but the Truth Is Real", published in *The New York Times* on June 2, 2019. https://www.nytimes.com/2019/06/02/arts/television/chernobyl-hbo.html.
- (v) The article "Chernobyl survivors assess fact and fiction in TV series", written by Viacheslav Shramovych and Hanna Chornous and published in the *BBC News* on June 12, 2019. https://www.bbc.com/news/world-europe-48580177.
- ⁸ This view of Oleg has its origin in Fred Weir's review of the show titled "Chernobyl' TV miniseries: the reviews from ground zero", published in *The Christian Science Monitor* on May 238, 2019. https://www.csmonitor.com/World/Europe/2019/0528/Chernobyl-TV-miniseries-the-reviews-from-ground-zero.
- ⁹ First put forward by the Dutch chemist Paul Crutzen and American biologist Eugene P Stoermer, "Anthropocene" is the name given to the new geological epoch which has resulted from human tampering with the basic fabric of our planet in irrevocable ways. The Anthropocene Working Group (AWG) believes that the "Anthropocene" or the "Age of the Human" began around 1950s when the planet became subject to massive transformation as a result of unprecedented economic and population growth. Although subject to contention among the geologists, Anthropocene has become a buzzword these days among environmental thinkers who use it to refer the irreversible rupture in the familiar fault line that divides humans and the non-humans.
- ¹⁰ This is taken from the World Future Council's report titled "The Climate-Nuclear Nexus: Exploring the linkages between Climate Change and Nuclear Threats". A collaboratively written document by Prof. Jürgen Scheffran and his colleagues this report explores different aspects of the climate-nuclear nexus in the context of present climate change crisis. For

⁷ For details on this controversy, one can go through the following articles:

details visit https://www.researchgate.net/publication/285601318 The Climate-Nuclear Nexus Exploring the linkages between climate change and nuclear threats.

- ¹¹ "Slow violence" as defined by Rob Nixon is "a violence that occurs gradually and out of sight, a violence of delayed destruction that is dispersed across time and space, an attritional violence that is typically not viewed as violence at all". According to Nixon Slow violence lacks sensational visibility and the violence wrought by climate change, toxic drift, deforestation and other environmental disasters affect the "unimagined communities" gradually and often invisibly. For details one can read Nixon's evocative book *Slow Violence and the Environmentalism of the Poor* published by the Harvard University Press in 2011.
- ¹² A scram or SCRAM, popularly known as AZ-5 is the emergency shutdown system in a nuclear reactor. In emergency, the AZ-5 button shuts the nuclear reactor down by immediately terminating the fission reaction inside the reactor. The design flaw in this emergency shutdown system (particularly the use of graphite tips on the control rods) precipitated the Chernobyl reactor explosion.
- ¹³ In an interview Mazin had with the *Men'sHealth*, the creator thus summed up the lesson the show imparts. For details, on can go through Evan Romano's article titled "How HBO's 'Chernobyl" Parallels Today's Climate Change Debate", published in *Men'sHealth* on May 8, 2019.
- ¹⁴ Biostitute (blending of the words 'biologist' and 'prostitute') is derogatory term used for biologists who lie and misrepresent scientific research for commercial interests. The biostitutes are financially supported by the industrial pressure groups.
- ¹⁵ Climate deniers practice pseudoscience that consists of (un)scientific beliefs and practices that do not adhere to the standard scientific principles and methodology. As early as in 1844, pseudoscience was defined as "that opposite kind of innovation which pronounces what has been recognized as a branch of science, to have been a pseudo-science, composed merely of so-called facts, connected together by misapprehensions under the disguise of principles" in the *Northern Journal of Medicine*, issue 387. The climate change deniers deny the mounting evidence of climate change and influence the public perception of climate change by practicing spurious science in contrast to legitimate science.
- ¹⁶ The cornucopians are the futurists who believe that the dynamism of capitalist economies will solve the environmental problems to come. They uphold the view that there are enough resources on earth to provide for the human population. They also believe that population growth produces wealth needed for the improvement of the environment. The cornucopian lobby denies the reality of climate change despite the global expert consensus about it. For details, one can read Greg Garrard's book *Ecocriticism* (2012), pages 18-21.
- ¹⁷ For an idea of the possible economic and environmental outcomes of the US's withdrawal from the Paris Agreement one can go through David Roberts' brilliant article "The Paris climate agreement is at risk of falling apart in the 2020s", published in the *Vox* on November 5, 2019. https://www.vox.com/energy-and-environment/2019/11/5/20947289/paris-climate-agreement-2020s-breakdown-trump.

- ¹⁸ Greta Thunberg is a young Swedish climate change activist. Greta's *Skolstrejk för klimatet* (School strike for the climate) kindled similar youth climate activisms across the world. Because of her activism Thunberg was featured on the *Time* magazine cover in 2019 as *Time*'s person of the year and she also received many honours and awards. Thunberg's campaign against climate crisis has given birth to such ideas as "The Greta effect", "Fridays for Future" and "Flygskam". Thunberg has been repeatedly attacked by the politicians and other climate change deniers. However, the brave girl continues to speak bluntly to political leaders and industrialists. For details, one can visit https://www.fridaysforfuture.org/.
- ¹⁹ "Ostrich Syndrome" refers to denying problems or refusing to acknowledge something that is obvious. This idea is taken from the popular belief that ostrich birds bury their hands in sand to avoid danger. Despite global expert consensus on climate change people still ignore the truth without realizing that concealing problem in the face of imminent disaster only magnifies the damage.

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