



Of Monstrous Machines and Extreme (Post-)humans: Challenging the Agency and Centrality of the Human in the Posthuman World Building of Neal Asher's *Brass Man* and *Line War*

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ABSTRACT:

The article seeks to engage in a close reading of the two novels of British science fiction author Neal Asher, namely *Brass Man* (2005) and *Line War* (2008) in order to explicate how these works reimagine and reenvision the agency and autonomy of humanity in an extreme posthumanist universe where machines have attained sentience and self-awareness and posthumanity is the norm. Through a careful discussion of the various science fictional tropes that Asher employs in his works, such as man-machine merger, mind uploading and virtual immortality etc. to name a few, the author tries to show that a careful analysis of the various facets of a posthumous culture demands a deeper analysis into the implications of such fictional tropes. Therefore, it is necessary to not just view the changing condition of the machines from a human-centered perspective, but also to analyze the condition of (post-)humanity from the perspective of the sentient and powerful machines as they continue to become more powerful and influential than their human creators. As part of the theoretical framework, author primarily employs Stefan Herbrechter and Matthew Gladden's idea of posthumanization via technologization and David Roden and Bruce Sterling's theory of 'Speculative Posthumanism'.

Keywords: *Speculative Posthumanism, Technologization, Singularity, Machinicity, Humanity, Agency, Post-Anthropocentrism, Hard Science Fiction*

Introduction:

Neal Asher's novels portray extreme posthuman and often monstrous transformations and compels us to rethink the position and agency of humanity in the wake of such paradigm-shifting and transgressive transformations. The present article will attempt to look at various ways how the very paradigm of transformation of machines and humans play a central role in defining the posthuman culture portrayed in the novels. The article will analyze how Asher describes the condition of humanity or posthumanity from the perspective of both extremely evolved, superintelligent machines or nonhuman entities, and the condition of the machines from pure human and posthuman perspectives. Through such an analysis of different perspectives, the article will point out that Asher seeks to illustrate the precarity inherent in the condition of both the humans as well as the machines from an omniscient, third person perspective. In this way, the study will try to show how Asher's extreme posthuman world building drastically alter, expands, and redefines the very notion of humanity. The article will try to closely analyze Asher's novels *Brass Man* (2005) and *Line War* (2008), which are parts of the *Agent Cormac Series* comprising of five novels and which itself in turn is a part of the larger *Polity* supernarrative. Asher's *Agent Cormac Series* consists of these five novels - *Gridlinked* (2001), *The Line of Polity* (2003), *Brass Man* (2005), *Polity Agent* (2006) and *The Line War* (2008). The novels in this series primarily concern with the adventures of one legendary Earth Central Security agent named Ian Cormac and contains actions of various dangerously psychopathic mercenary androids such as Mr Crane and Arian Pelter, gigantic alien bio-constructs such as the Dragon, civilization-consuming alien technologies such as the Jain, synergistically merged human-AI symbionts known as the 'haimens', and the dangerously insane, Jain-infected hive-mind entities such as Erebus seeking to exterminate the humanity for good. Against this backdrop, we see how humans and machines continue to merge and co-operate to avoid even greater catastrophes, machines attain omniscience only to lose their minds and humans and transhumans vacillate on the borderline of techno-immortality and a total loss of self. Within this backdrop, Asher weaves his philosophical speculations on the nature of morality, AI ethics, question of conscience, nature of consciousness and how human and machine minds differ in their response to ethical questions etc. to name a few. Herbrechter and Gladden's posthumanization via technologization are the two theoretical frameworks which the author shall employ in order to study the nature and scope of posthuman evolution of humanity and its relationship with the machines. Also, Roden and Sterling's 'speculative posthumanism' will be important in constructing a holistic evaluation of the extremely posthuman worldview that these works present. Herbrechter (2013) speaks of a "purely technology-centred idea of posthumanization" (*Posthumanism* 14), while Gladden (2018) calls for developing "imaginative and realistic visions of the ways in which human agency and organizations will be transformed through their encounter with new forms of artificial and hybrid human-synthetic agency" (*Sapient Circuits* 13). Also, borrowing the words of David Roden (2014), we may say that Asher attempts to construct his posthuman world around "a point beyond which biological constraints on human and nonhuman life on this planet would cease to apply" (*Posthuman Life* 22). This is the crux of his idea of speculative posthumanism idea which endeavors to hypothesize how posthuman descendants of humanity could emerge via such exotic routes as "modified biological descent, recursive extension of AI technologies (involving human and/or nonhuman designers), quasi-biological descent from synthetic organisms, a convergence of the above, or via some technogenetic process yet to be envisaged" (*Posthuman Life* 22-23). Sterling (2014) also comments on the possibility of emergence of such "radically non-human forms of life" which will be totally alien to humanity, and observes that "the

trajectory of current technoscientific change ‘deconstructs’ the philosophical centrality of the human subject in epistemology and politics – by, for example, levelling differences between human subjects, non-human animals, or cybernetic systems” (“The Manifesto of Speculative Posthumanism,” *Wired*).

Machines from the perspective of (post-)humanity:

At first, we shall try to see how humanity responds to the ever-expanding capacities of continually evolving machines and other non-humans. Secondly, we shall see how humanity is portrayed from the perspective of the machines and other highly evolved nonhuman or not-so-human beings who are either transhuman or have attained full-fledged posthumanity. The works attempt to portray the extreme limits of posthuman evolution and how machines and humanity continue to influence and inspire each other in their quest to attain a harmonious existence with certain exceptions where the machines go entirely rogue and become godlike in their augmented state. Also, the more extreme are the augmentations and transformations of both humanity and machines, the faster they seem to degrade into extreme insanity and mental derangement.

The novel *Brass Man* describes how the process of achieving the much sought-after synergy between human and machine minds is fraught with numerous dangers in which the artificial minds seem to permit the whole gamut of often unrestrained and unfiltered human thoughts to enter and contaminate in it unwittingly without realizing that the various conflicts, complexities, and contradictions could cause the AI mind to descend into a spiraling crisis of never-ending insanity. However, sometimes, when the AI minds find the best possible way to coexist and cooperate with their human counterparts, they can produce hybrid beings of superhuman capacities. The novel describes it thus from the perspective of a human character named Gordon who is long deceased but whose journal entries give us valuable insights into the highly complex and dangerously volatile nature of both human and machinic evolution. Being a human who has not yet adopted advanced augmentations, Gordon could see how directly interfacing advanced AIs and neuroprosthetics with human mind could enhance one’s computational abilities beyond imagination but also caused one to spiral into the abyss of psychosis, fears, and hallucinations sometimes leading even to death. With the advent of extremely advanced and transgressive posthuman augmentations, both humans and machines seem to be losing their intrinsic characteristics and while humans are often seen to be forgetting their original humanity, machines too appear to forget that they are machines and not actual human beings of flesh and blood. Horace Blegg is one such avatar who exist in abstract simulacrum only but deludes himself into believing that he is an actual human being. Such avatars can become whatever or whoever they wish but possess no built-in idea of self or core identity for themselves. Agent Ian Cormac, the human protagonist of the novel, informs Blegg that he is just “an avatar of the Earth Central AI—the human face, or interface, which transfers its orders to its agents. Sometimes you’re a projection, sometimes Golem” (*Brass Man*, 23). Cormac himself is a human who is a master in the art of killing his opponents swift and fast, “but he was also a human capable of doing something as yet unheard of: transmitting himself through U-space” (*Line War* 420). Cormac has this ‘gridlink’ lodged inside his head which posthumanizes him and enables him “to perceive things in a way theoretically impossible for a human being...” (*Line War* 270). In Asher’s works protagonists continue to incorporate more extreme augmentations within themselves and thus move towards attaining the desired posthuman status. Most of the humans have thousands of ‘biomodules’ inserted in their bodies while the bodies themselves operate on a suit made of advanced nano-machines: “Essentially, biomodules should simply be called modules - just one component in our complex and completely integrated technology” (*Line War* 70). In the words of Herbrechter, this can be termed as an “intensification of technologization, understood as the engine of posthumanization” (*Posthumanism* 22). Herbrechter even views such technologized posthumanization as “an intrinsic part of the cultural imaginary of our time” (55). This extreme dynamism and plasticity of being is one distinctive characteristic of a true posthuman culture such as the one Asher deals with on his works. Matthew Gladden calls this “technologically facilitated transformation in the nature of human agency and our relationship to our environment” (*Sapient Circuits* 13). To common humans, the machines when seen individually can appear to be inert and incapable of effecting any change but when seen to be working in unison, they give the impression of a being with inherent autonomy, agency, and independence. The machines themselves with their extreme capabilities seem to often induce the terror for the uncanny and the inhuman in mankind, and so, from the very beginning, humanity attempted to manufacture machines with that would follow their orders mindlessly. However, as the machines continue to advance, to the humanity, they appear to be grow “Unhuman, and becoming more so” (*Brass Man* 22). Earth’s sole governing body, the planetary AI Earth Central wields absolute command over many extreme machines, humanlike Golems, Cybercorp and the entire economic system, and now is bolstering a highly exclusive system of “silicon meritocracy—a ruling elite that humans only managed to join by ceasing to be entirely human” (*Brass Man* 24). Many characters in the novel are ‘haimens’, who have attained some sustainable synergy between their human and machinic parts where the machinic aspect has not overwhelmed and overpowered the more tender human part. Orlandine appears to be the most extreme of such haiman entities who features prominently in *Line War* as well as in Asher’s later works such as *Rise of the Jain Trilogy*. *Rise of the Jain Trilogy* comprises of these three novels – *The Soldier* (2018), *The Warship* (2019), and *The Human* (2020). Orlandine is described as “a rare product of evolution sufficiently intelligent to take apart a Jain node while avoiding all its traps” (*Line War* 254). For many humans, haimens are an entity in transition who still has a long way to go before attaining their ultimate form while to the majority of humans, they are already the most extreme posthuman entities that a human being can hope to be and thus have reached the dead end: “Haimanity therefore sits in a shadowy borderland between humans and AIs, sampling of both but never truly a member of either. Many believe that they are the future of Polity-kind, the post-post-humans. Many others believe they are a dead end, and that trying to fully meld the human with the AI is as likely to succeed as strapping a jet engine to an ox cart in the hope of breaking the sound barrier” (*Line War* 276). Roden speaks of posthuman minds “so vast that we have no models for their transformative potential” (*Posthuman Life* 22), and this applies to Mr Crane and Orlandine. Such enormously enhanced entities are naturally placed at a distant space in Legg and Hutter’s mathematically formalised classification of various machine intelligence (“Universal Intelligence, 1). In *Brass Man*, besides the extreme posthuman figure of Orlandine we come across one comparatively benign haiman named Buphal who is still way more transformed and enhanced in comparison to normal human beings. Orlandine is a peculiarly complex character who is not only AI-boosted but also receiver of a Jain technology node from none other than Erebus himself and now when Randal urges her to join hands with him in their efforts to terminate Erebus, Orlandine begins to vacillate at first. She also views her Jain enhanced AI self to be as precious as her human part and she is ready to achieve the maximum synergy between her two halves. Orlandine even proclaims that “despite Erebus’s manipulation of me, it still

gave me the greatest gift I could ever have wanted” (*Line War* 77). When Randal asks Orlandine if in the process of melding her human and machinic selves, she is ready to even deny her own humanity, Orlandine responds by saying that by deciding to remain completely human, one denies that synergy. Orlandine initially seems determined on becoming a most ruthless war machine who should not possess any human weaknesses whatsoever: “There was no time to sleep and, in reality, sleep was something Orlandine could easily forgo, allowing the hardware in her carapace and the Jain nanotech in her body to clean things up, repair any damage, make all those necessary adjustments usually made during that outmoded pastime” (*Line War* 140). However, as the narrative progresses, we see Orlandine despite “having sought and found the synergy of the human and the machine, she could not totally deny her human side”, and as the narrative progresses, she grows more protective and concerned of losing her humanity. In the end, it is Orlandine herself who plays a crucial role in stopping Erebus from destroying the Earth: “Erebus had managed to throw the AIs into total confusion while a single human being – though Orlandine was an extremely capable one -had set out to stop Erebus, and had done so” (*Line War* 446). It is not just the machines but even personas existing in pure simulation who seem to be quite ardent in their attempts to prove their humanity. Randal, the human mind lurking in Erebus’ distributed mode of existence, thinks of himself as a pure human being whose responsibility is to save humanity from Erebus’ impending attack. For other humans, Randal is merely ‘a ghost in the machine’ and not a real individual. The humans believe that such ghosts in the machine are bound to flourish in any sufficiently complex computer architecture. They are possible with an increase in complexity there is a concomitant increase in redundancy, which gives the ghosts space to exist. Randal was initially such a ghost-like code, a minor anomaly or a fleeting experience, which only at a much later period grows to be a serious contradiction in Erebus’ highly evolved and extremely distributed self. Such errors, upon accumulating can cause human augmentation-implants to malfunction and human minds to get forever trapped in a limbo-like vegetative states. For machines, they appear to be too human to be allowed to exist independently within their architecture. Works such as McGee’s “Bioelectronics and Implanted Devices” (2008), Gasson’s “Human ICT Implants” (2012); and Gladden’s “Neural Implants as Gateways to Digital-Physical Ecosystems” (2016) seek to address the ramifications of various implantable neuro-prosthetic devices.

When it comes to the Golems, many find it hard to distinguish them from actual humans because of their extremely human-like appearance. Pure humans seem visually identical to Golems who don “syntheflesh”. Also, many humans are “so in love with the machine it was difficult so see any humanity left in them” (*Brass Man* 26). In “Synthetic biology” by Andrianantoandro et al. (2006), *Artificial Psychology* by Friedenber (2008), “Synthetic biology: an emerging engineering discipline” by Cheng & Lu (2012), “The Artificial Life-Form as Entrepreneur” by Gladden (2014), and Doncieux et al.’s “Evolutionary Robotics” (2015), we come across discussion regarding artificial life-forms, evolutionary robotics and the implications of ever-growing interaction between human and artificial intelligences.

When humanity became embroiled in a series of war machines were indiscriminately deployed to win wars, and it is then that the machines found out the hollowness of the man-made moral codes of conduct. The Quiet War followed the solar system corporate wars, when the AIs assumed control over Earth, and the first thing they did was to discard the system of human morality as being fully obsolete and incompatible with their current condition. Then with the advent of AI’s own version of superior morality, the problems did not simply disappear but seem to grow even more complex and continue to trouble humanity to this very day. The novel describes the complexity of machinic morality from an essentially human perspective where the basic dictum that drives the machinic morality, i.e., ‘the greatest good for the greatest number’ seems to be fraught with numerous contradictions.

The basic rule became a deeper thing, like the underlying drivers of human morality, though better for the genetic impetus being replaced by something defined as ‘the greatest good for the greatest number’. Machines are simply unable to pose a satisfactory answer to such a question as this: “What is good? Do you keep the whole population starving, or sacrifice one half so the other half can eat well?” (*Line War* 197). The situation will get even more extreme later when we come to know that obscenely overpowered machines themselves can create human avatars and humanoids that mimic the actual human beings extremely closely. Haraway’s *Simians, Cyborgs, and Women* (1991), David Tomas’ “Feedback and Cybernetics: Reimagining the Body” (1995), Katherine Hayles’s *How We Became Posthuman* (1999), *Natural-Born Cyborgs* (2003) by Andy Clark, and Fleischmann’s (2009) “Sociotechnical Interaction and Cyborg–Cyborg Interaction” are some important works that detail several aspects of increasing ‘cyborgization’ of humans in a technologically dominated society. Clark opines, “We are already masters at incorporating nonbiological stuff and structure deep into our physical and cognitive routines” (*Natural-Born Cyborgs* 142). In the various journal entries interspersed throughout the narrative, we find many passages that delve deep into the legal, ethical and philosophical nitty gritty of AI rights. Friedenber’s *Artificial Psychology* (2008) seeks to move beyond the generally accepted definition of intelligence and attempts to describe how the possibilities and implications of reconstructing various capacities in machines that make us human. Also, such works as Calverley’s “Imagining a Non-Biological Machine” (2007), Coeckelbergh’s “From Killer Machines to Doctrines and Swarms” (2011), Gladden’s “The Diffuse Intelligent Other” (2016) attempt to delve deep into the issues of ethical responsibilities of AIs and their legal and political implications. The concern for ethical responsibilities is a peculiarly human concern which seems to inform Asher’s narratives in a number of ways. Once we see a human character describes the injustice meted out to the highly intelligent machines. In one such entry from the past, a character states that while legally, one can be accused of committing a murder if one denies a human the facilities of life-support systems while he/she is a vegetative state, yet no such laws exist to protect the rights of the AI or many non-human entities whose intelligence is proven to be higher than that of many humans. It was the early days when humans were still trying to come to terms with machines possessing superior intelligence to them. The man named Jobsworth argued, “Having human DNA should not immediately grant an individual inalienable rights. Rights, it was decided, and equivalent responsibilities, should be given to ‘citizens’, and only those above a certain level of intelligence could become citizens” (80). This was how the seeds of meritocracy of Polity Empire were sown long time ago when machines were beginning to excel human in various spheres of life. Then we see how in the early days of human-machine merger where humans began to incorporate more advanced machineries in them, some catastrophic changes occurred when these augmentations devices malfunctioned or burnt, and this incapacitated the humans wearing those implants and they became ‘human vegetables’. Later, we see that instead of loading them into new highly expensive mechanical bodies, ‘memplant’ technologies arrived that helped an enormous number of people to outlive physical death. Jobsworth describes, “Many of them are being held in memstorage because we cannot produce enough bodies, tank-grown or Golem, to keep up with demand...” (*Brass Man* 73). In many cases, we see that AIs possess immensely superior mental capabilities which enable them to understand the mysteries of space-time and other cosmic mysteries. When it comes to understanding the complex mechanism of runcible gates which are based on wormholes, machines seem to be in a better position of understanding the various aspects of such a phenomenon: “Only AIs

possessed a full understanding—the human brain had not evolved that way” (*Brass Man* 72). Certain machines seem to have interacted with humans in unpredictable ways which caused them to malfunction and thus they got transformed in totally unpredictable ways. One such machine is the Dragon, which “malfunctioned and started interacting with humanity, setting itself up as some sort of demigod on the planet Aster Colora” (*Brass Man* 92). As we come to know, the machine did not completely destroy itself, but instead separated itself into four entities to surround and attack the Polity spaceship which was sent to retrieve or destroy it. The opportunist posthuman scientist Skellor finds that these entities love interacting with the humans and so he proceeds to influence their decisions and hijack their brains. Skellor also helps one golem named Mr Crane, the eponymous Brass Man in the novel to rise up as an indestructible killing machine who even later turns out to be a saviour of mankind. While the novels deal with decidedly posthuman cultures, in the era that precedes this posthuman culture, we find lots of interesting events happened and the fictional journal entries of the humans from that era and excerpts from speech by one Jobsworth help us to understand the era better. Jobsworth observes the functional and phenomenological differences between the human mind and the AI mind in meticulous details. As he points out in his speeches, the human mind functions within a brain that is embedded in a tiny piece of meat, while the AI mind operates from a huge variety of computational architectures. The basic Golem mind is stored in a ‘brain’ that can be held in one’s palm and these are laced with power feeds, semi-conductors, silicon nanofilaments and micro-optics, and cooling tubes. This sort of mind is limited only by its anthropomorphic emulation framework and in terms of its overall capacity is roughly equivalent to a human mind. However, it functions ten times as fast as the human mind. Now, as the machines continue to excel and improve, the old systems of IQ-based measurements prove to be simply not enough to fathom the level of intelligence of these machines: “But such methods of measurement are now almost irrelevant, as Golem can be upgraded and, with augs and gridlinks, even that lump of meat can transcend the limits imposed on it by evolution. Also, human minds can be loaded to silicon—become AI—and, if the rumours are true, AI minds can be loaded to human brains. And, in the end, it is difficult to know what to measure” (*Brass Man*, 149). Jobsworth’s notes and excerpts from his speech help us to keep track of the process of gradual but steady dissolution of the differences between humans and machines. Machines appear to help humans survive on many occasions but occasionally, they themselves malfunction and pose grave danger to humanity. The humans realize that instead of becoming overly inimical to all the machines in general, they must understand the fact that they “are the parents, and they (machines) are the abused children grown to adulthood” (*Brass Man* 315). The novel also points out that only the most human-like AIs grow most impatient with the action of humanity: “...those AIs who swiftly became impatient with humans and their ways were the ones themselves most like humans” (*Brass Man* 320).

Another way that the machines and humanity attain synergistic bond is by uploading their virtual avatars into virtual reality worlds of pure simulacrum. Among the works that address the ever-increasing impact and influence of virtual reality technologies in our day-to-day lives and its philosophical implications, *The Metaphysics of Virtual Reality* (1993) by Helm, “The potential societal impact of virtual reality” (2005) by Koltko-Rivera, Geraci’s *Apocalyptic AI* (2010) and Bainbridge’s *The Virtual Future* (2011) deserve special mention. As the machines advance beyond recognition, they hijack the same technologies with which humanity once sought to enslave them and these technologies include. Whether it is via projecting holographic simulacra, or directly connecting augmentation devices into the brain, or use of drones equipped with their own minds, the differences between the real and virtual continue to be threatened both in the human-dominated as well as machine-dominated era: “The two worlds, real and supposedly unreal, influence and interact with each other, and virtual teeth can still bite” (*Brass Man* 351). The novel further describes how many of the more powerful AIs can now run whole armies of projected or even real avatars:

“Also, what is an avatar and what is a distinct entity is a matter of much debate. Now it is rumoured that those same powerful AIs are using cloned and genetically manipulated creatures and even humans as avatars. This is doubtless true, and further blurs the line between distinct entities, and yet further makes a nightmare of definition” (*Brass Man* 367).

It is not just the post-singular machines who pose a grave threat to humanity but also posthuman humans such as Skellor with their command over Jain technology seem to surpass even ordinary AIs. The human characters later realize the true power and extent of the Jain technology which propagates itself in an uncontrolled manner, consuming everything in its path while it possesses the energy to do so. Now, the deranged Doctor Skellor creates a synergetic balance between himself, a killing machine and the AI: “They have in fact become one. If any of us tried to insert ourselves into the equation, they would destroy us. If we tried to supplant either the AI or the human part of Skellor, the other parts would totally subjugate us, turning us into a copy of what we supplanted. There is no way in” (*Brass Man* 421). So, for humanity, countering a posthuman entity or an augmented machine intelligence requires that he/she him/herself becomes augmented beyond all limits and this is what Orlandine seems to do to face her formidable enemies. Now, humans seem to always hold haimans and Golems as the unwanted and feared ‘other’, and this fear finds its most extreme expression in the form of Mr Crane, the Golem-turned-killing machine. Although he later decides to fight for the humanity, he is most often projected as the uncanny other who becomes a symbol of living, walking terror. Mr Crane is described as a Lovecraftian figure who is beyond good or evil and defies any attempt of strict categorization. For the humans, they see in Crane the most terrifying expression of how they themselves regard the Golem androids. While in *Brass Man* we see him evolving as a complex humanoid character, in *Line War*, he has become a legend, a myth. Many view him as just an unconquerable killing machine, a mechanism capable of inflicting inconceivable amounts of violence on humans, and an unscrupulous murderer, while many believes that the brass man possesses many admirable qualities befitting only a hero, which enables him to be just, assume the role of a relentless destroyer of evil, a guardian of the weak and the innocent, and most importantly, a strong and reliable friend. An anonymous human character describes Mr Crane, the Brass Man, as an amalgamation of two things: “demon and guardian angel. He is a point of transition, representative of the middle ground between barbarity and civilization, the past moving into the future. He is our modern version of the god of doors, for he is Janus” (*Line War* 480). Mr Crane is as inscrutable as any nonhuman character one may ever come across even in Asher’s extreme posthuman universe. We may recall Sterling’s words in this regard who opines that “if radically posthuman lives were very non-human indeed, we should not assume them to be prospectively evaluable using the ethical frameworks available to us” (“The Manifesto” *Wired*). The most extreme of all such post-singular entities which seems to pose the maximum threat to humanity is obviously Erebus, a hive-mind AI which controlled a huge fleet of Jain technology boosted biomechanically engineered warships. Erebus “had effectively ambushed a fleet of Polity ships and wiped out much of it” (*Line War* 43). This is how the terror of Erebus began with an ambush and annihilation of Polity warships which later assumes an even monstrous proportion.

Humanity described from the perspective of the machines and other non-humans

Blegg, despite himself being nothing more than an appearance in a simulation, sees through the appearance of everyone around him and can tell a real human being from a posthuman or a humanoid entity. He knows that Cormac preparing for a final showdown with some of the most formidable posthuman enemies that the galaxy has to offer and for this reason, he has chosen to augment himself. Cormac now possesses the mind with a dynamicity of youth and a brain where nanomachineries are constantly swapping its decaying nerve cells, and as such is in the process of getting posthumanized beyond recognition. Blegg is highly optimistic about the prospect of human beings attaining some form of immortality through posthumanization and technologization: "Immortality is possible for all of humankind now, and many humans will discover what it means to keep on learning and keep on understanding, though many more will simply stagnate" (*Brass Man* 21). This attitude towards immortality of self also drives many humans to embrace posthumanized state of being even though that entails becoming one with their guardian AI and be forever embedded in a computer architecture: "Is it time to upgrade myself and move beyond mere humanity, perhaps become the guiding AI of some ship or even a runcible AI? Maybe, for those of us who can bear immortality, this is the path we must take. Is this what our AI children, who are also our brothers and gods, are waiting for?" (*Brass Man* 460). From the perspective of the incredibly sophisticated machines humans are no different from any bundle of data which needs to be scanned, decrypted and analysed without destroying the original. This is how the modern surgical robots appear to function and behave with their human subjects. These bots can disassemble a body right down to its constituent organs, keep those body parts alive, and then reassemble the same body back again to its original form. The novel describes how "The modern robot can also be telefactored to human or AI, can be raised to consciousness itself, as many now are in the more sophisticated centres of the Human Polity, or can run the programs necessary for just about any surgical procedure" (*Brass Man*, 51). Certain highly augmented human characters such as the semi-insane Doctor Skellor seem to view other humans as mere objects to be experimented upon and the more the characters continue to get upgraded, the more machinic their viewpoint seems to grow. The posthuman doctor Skellor treats his human and machine subjects alike and can transform one into another with ease: "The surgeon was a law unto himself and considered the human body a testing ground, or even a playground. Nor did she want either of them to be more closely connected to the scrambled insane mind of the Golem, no matter how much more control they might thus obtain" (*Brass Man*, 180). Besides the excerpts from Jobsworth's speeches, the 'Quince Guide' is one such source of information from which we come to know of the pre-posthuman or pre-singular phase of Polity's history. This 'Guide' was compiled by humans. In the Quince Guide, we find how the surviving humans describe the Quiet War as "a slow usurpation of human political and military power, while humans were busy using that power against each other... AIs, long used in the many corporate, national and religious conflicts, took over all communication networks and the computer control of weapons systems. Most importantly, they already controlled the enclosed human environments scattered throughout the solar system" (*Brass Man*, 200). Extremely advanced and powerful machines such as the Dragon are more than capable enough of creating new bioengineered entities and advanced humanoids also. We may state that Asher's novels portray thorough posthumanization of mankind as a result of "increasing physical integration with electronic systems, our expanding interaction with and dependence on robots and artificial intelligences, our growing immersion in virtual worlds, and the use of genetic engineering to design human beings as if they were consumer products" (*Sapient Circuits* 35). Dragon creates a titanic monitor lizard on an exoplanet which demonstrates its ability to radically redesign genetic codes. So, it is not just he posthuman humans but also the machines who seem to attain abilities to perform extremely complex tasks. The weird demigod-like machine also creates the dracomon and a strange living chess set to welcome the human ambassadors it summons in its own way. These all tell plenty of the Dragon's ability of tinkering with the protein replication mechanism and create organisms each containing a mental architecture unique to him/herself, which then one could alter or make adjustments to. Humans finally realize that "Dragon is a supreme bio-engineer with abilities that exceed those of all present Polity AIs" (*Brass Man* 220). In the novels, Asher reminds us time and again of the vastly superior capabilities of the AIs who assert their own agency and autonomy to the maximum. When AIs that are infinitely superior entities to the humans begin to choose their own names, their choices cause much speculation among humans and posthumans. Earth Central alter turns out to be a totalitarian dictator that seeks to model the entire solar system after its own will, but humans have been lured into submission into its carefully crafted techno-utopia of unlimited wish fulfilments. One such AI was the commanding AI in the warship named *Trafalgar* which later renames itself as Erebus and decides to embark on a killing spree throughout the entire Polity with its vast array of wormships that it commands. *Line War* recalls how Erebus in his previous incarnation as *Trafalgar* acquired several Jain nodes, and "soon a schism had developed amid the conglomeration of drones, ships and Golem of the exodus. A large proportion of them had agreed that what *Trafalgar* clearly wanted was not what they wanted, for there was a large difference between melding and subjugation. They agreed among themselves to go their separate way. The problem was that *Trafalgar* itself did not agree, and those AIs still on its side were prepared to enforce its orders" (90). Then in the battle that ensued, Erebus swiftly and effortlessly subsumed all the Golems, AIs and uploaded human minds into its ravenous, post-singular self and set its eyes on the Polity itself. Erebus features most prominently in *Line War*, and also in *Brass Man*. In the emergence of such monstrous war-machines as Erebus we see the extremes of posthuman evolution when technology itself becomes sentient and autonomous. Characters such as the Jain-infected, hive-mind warship Erebus and the mythical Mr Crane seem to unite the complexities and ambiguities of both the human as well as the machinic modes of existence without ever limiting themselves to the definition of any singular entity. While Erebus has in him the remnant of a human avatar named Fiddler Randal whom it has subsumed along with thousands of other AIs, Golems and humanoids, Mr Crane endlessly vacillates between his machinic and humanist selves. The novel describes the troubled and conflicted state of Mr Crane thus:

For Mr Crane there was as little distinction between conscious and unconscious as there was for him between his internal and external worlds: they were mangled, fractured and disjointed in time as in meaning, structured only by imposed imperatives and a chaotic striving for unity (*Brass Man*, 255).

Erebus' action anticipates the numerous transformations that Penny Royal causes on his subjects in *Transformation Trilogy* and *Lockdown Tales*. *Transformation Trilogy* comprises the three novels - *Dark Intelligence* (2015), *War Factory* (2016), and *Infinity Engine* (2016). So, for Mr Crane, sanity and autonomy have become the primary objective to attain. Mr Crane seems to operate as the indefatigable killing machine for the Separatists and seems impervious to the pangs of conscience since even after committing the most grisly crimes he stores them in his memory as disconnected and unrelated incidents, while he himself continues to be driven in his quest of reintegrating the seventeen fragments of his self into one coherent and continuous self. Crane is mentally insane and physically invulnerable and invincible and executes the commands his masters give him in a "dangerous and erratic manner

entirely his own" (*Brass Man* 78). The novel points out how "Mr Crane had been as much a danger to the people who tried to control him as he was to those he was sent out to kill" (*Brass Man* 80). It is because of Skellor's incorporation of the Jain technologies in Crane, that Crane possesses superior strength and speed: "Skellor had obviously made him something more than a merely boosted Golem" (*Brass Man* 129). The nature of Mr Crane and his patterns of thinking are even mystery to sentient AIs such as Vulture which used to operate spaceship designed after its own name. To Vulture, the AI, Crane has unblinking black eyes "set in a brass face that seemed the sculpture of some remorseless Apollo" (*Line War* 50). Mr Crane possesses a virtually indestructible brass-coloured adamantine body, and his mental processes are always hidden from the inspection by even the most advanced machines and warships. Vulture, the deserted AI, wonders "if within that body Mr Crane's rejoined crystal mind thought unfathomable thoughts, or perhaps no thoughts at all" (*Line War* 35). Regarding the inscrutability of posthuman minds, Roden remarks,

"posthumans might be so smart that we could not understand their thoughts or anticipate the transformative effects of posthuman technology. There might be other very radical differences. Posthumans such as centipedes or hyperplastic AIs might have experiences so different from ours that we cannot envisage what living a posthuman life would be like, let alone whether it would be a worthwhile or worthless one" (*Posthuman Life* 106).

However, Crane is not a one-dimensional, flat character but a profoundly complex humanoid who evolves from being a ruthless mechanical mercenary to a saviour of mankind who decides to go to any lengths to thwart the attack the formidable Erebus. In fact, Mr Crane ceases to be a mere machine whose sole objective is to execute the commands of his masters who hire him; rather, he becomes the fear of the humans about the machinic 'other' incarnate.

Asher's works further describe how humanity gradually comes to realize that it is wrong to confine oneself to only anthropocentric framework of moralities and hope others to follow it to the last letter. Machines have their own codes of morality since when they took control of the earth, they did not decimate the humanity. This could be because machines feel sympathy for humanity in the same way humanity feels sympathy for the apes. So, despite possessing vastly superior capabilities and functioning in radically different ways to humans, the motivations and consequent behaviour patterns of these machines seem to imply that their thinking patterns are much like the humans. Also, as the machines were first created by humanity, they are just the next evolutionary step towards a full-blown posthuman culture. The humans further become aware of the ever-disappearing boundary that separates the humans from machines: "It is also true that with haimans and human memcording, it becomes increasingly difficult to define the line that has been stepped over" (*Brass Man* 271). Various hyper-intelligent machines despite appearing to be friendly towards humanity treat them as "just ineffectual organic thinking machines", and undoubtedly, "AIs could out-think humans on just about every level, unless those humans were ones making the transition into AI" (*Brass Man* 366). There are also hints that such extreme alien technologies such as Jain technology actually intend to eliminate sufficiently evolved intelligent species to make room for the advent of the more inhuman ones. Erebus might be after all an agent of the inscrutably alien and incomprehensibly powerful Jain entities who is tasked with carrying out their command of annihilating all remaining "messy organic intelligences" (*Line War* 243) and subsuming their guardian AIs so that the more inhuman AIs could emerge and rule the universe. Ihab Hassan (1977) hails artificial intelligences as the "agents of a new posthumanism" and states how these can "help to transform the image of man, the concept of the human" ("Prometheus as Performer" 846). Hasan also remarks how with the advent of posthumanism, "the human form — including human desire and all its external representations — may be changing radically, and thus must be re-visioned" ("Prometheus as Performer" 843). Now, as the plot of *Line War* unwinds, we find out that Erebus has been deployed by the 'supreme autocrat' Earth Central in order to shock humanity from their technological stagnation into which they have been led following their massive and violent war with the Pradors. However, since Earth Central underestimated Erebus, now it wants to show how capable it is of inflicting a lasting damage on Polity Empire. Erebus dismisses all the human casualties as "a billion more irritations just like you (Randal)" (*Line War* 425). Earth Central even justifies their action of using Erebus as a tool to shock humanity into action thus: "Ever since the war with the Prador, humanity's pace of development has slowed almost to the point of stagnation. Development only accelerates under threat, and we know that complacency kills" (*Line War* 580). So, in the universal chessboard of endless action, it is the Earth Central which turns out to have been using all characters as its pawns. Also, it becomes clear that it is only for the humanity that the distinction between good and evil technologies exist, for machines, there are no such differences. Machines understand that many aspects of even such a dangerous technology as the Jain technology are quite useful whose powers can be harnessed to bring immense properties for a civilization. To them, a technology should not be considered to be necessarily an evil, but it is the way it is used that determines whether its nature. The same realisation dawns upon humanity later: "We now understand that in every case where this pernicious construct has wiped out a civilization, elements of the same technology were used for good by those who had disarmed it. Unfortunately, by then, the armed version had already spread enough to eventually take off that civilization at the knees, and in each case it surely bled to death" (*Line War* 46).

Among the various non-human entities who nonetheless want to be accepted as humans, Fiddler Randal, the former human mind now subsumed within Erebus in one such entity. Fiddler resides in the realm of pure virtuality but proves to be enough in bringing Erebus' downfall by spreading himself throughout Erebus and filling his mind with contradictory strands of thoughts and emotions. Erebus sometime feels insecure and distraught when Fiddler plays tricks with Erebus' already distributed and highly fragmented mind or strands of consciousness. Fiddler proclaims, "I'm part of Erebus - a ghost in the machine - and as such, while I evade being trapped and erased, I can know Erebus's mind and see all that it does" (*Line War* 80). The narrative seems to artfully combine the human and the machinic perspective while portraying the thought process of both Fiddler and his host, the mighty Erebus. In the subsequent *Transformation Trilogy* and *Rise of the Jain Trilogy*, Asher again proceeds to portray similar or even more monstrous swarm AI entities such as the Brockle, the Clade and the legendary Penny Royal. Many of whom were either living human beings who was recorded to a substrate as he died, to turn into an AI, only to be later diving up into as the swarm AI, or a dreadnought-class warship which later transformed into a swarm AI when the ship's command failed to control and contain such monstrosities. Erebus is the example of the second type of monstrous swarm entity and likes to operate as a highly distributed hive-mind entity. In Arkin & Hobbs' "Dimensions of communication and social organization" (1993), Ummat et al's "Bionanorobotics: A Field Inspired by Nature" (2005), Barca & Sekercioglu's "Swarm robotics reviewed" (2013), "Swarm Robotics: A Review" (2013) by Brambilla et al., and "Control of Swarming of Molecular Robots" (2018) by Keya et al., we find detailed scientific descriptions and potential applications of swarm robotics in various fields. In Asher's works, when Erebus needs to appear before the humans and posthumans, we see him donning the appearance of a man even though Erebus dislikes any anthropomorphic appearance. In fact, the AI dislikes being anything remotely akin to what human being is. One of the most interesting descriptions of machinic reaction to humanity is that of Erebus', especially when it tries to attain some consolidated shape in order

to communicate with humans and posthumans. However, it always ends up as a tangled mess of numerous intricate interconnections between its several constituent sub-components and never a unified whole. This is because Erebus has forcefully subsumed a huge number of warships, AIs and human minds into its own being and many of these entities try to break free from Erebus' control. When Randal, the human part now residing within Erebus, accuses Erebus of being a cold murderer whose only aim is to kill innocent beings, Erebus states his own view of human morality and conscience. According to Erebus, "The idea of *conscience* is a human construct they felt necessary for holding together their primitive societies. Interestingly, despite the general feeling that this was necessary, many humans did not possess such a thing until it became possible to reprogram the human mind. Till then, sociopaths and psychopaths were really just part of the natural evolutionary order of things" (*Line War* 130). These frequent reflections of the machines on such uniquely human issues as morality, conscience and ethic are some of the most interesting aspects of Asher's works. Analysing the ethical aspects of Asher's posthuman characters, Golems and machine intelligences, we may cite Bruce Sterling's words in his "The Manifesto of Speculative Posthumanism". In his article he says: "...we must confront the possibility that our 'wide' technological descendants will be so alien as to fall outside the public ethical frameworks employed by the majority of transhumanists and bioconservatives" (Sterling). In Asher's *Line War*, Randal appears to be a posthuman reincarnation of the voice of conscience speaking from within Erebus himself. Erebus is otherwise an omniscient and omnipotent machine. The novel describes Erebus with his "seemingly omniscient vision" gazing out "through the eyes of thousands upon what it had wrought. It gazed out beyond this system through its numerous probes and scanners making their way through the Polity" (*Line War* 140). It is Randal and his voice which seem to be the only chink in his armour. Erebus sometimes doubts his own sanity and wonders if his decision to destroy the Polity fleet was his own or he was tricked into doing it so that Polity could get aware of the actual danger. Erebus is aware that though it tricked certain numbers of Polity warships to come out from their protective shield to destroy them, those ships were but an infinitesimal part of the Polity's entire fleet and the main battle is about to ensue: "Logically, attacking so small a target when its ultimate aim was taking control of the whole Polity had been a foolish move. However, the AIs of the Polity were never to be underestimated, and much apparent illogic was needed to conceal Erebus's true plan of attack. And to conceal that the present attack was not the expected one" (*Line War* 144). Since Erebus is aware of Fiddler's presence and distrust him as much as he does other humans, perhaps Erebus wanted to plan the attack to conceal his ultimate aim from Randal. However, Erebus' schism within his self/selves run much deeper than the presence of Fiddler Randal only. Now, Erebus' main challenge is to hide his ultimate plan from Randal even though Randal, being an integral part of Erebus, has access to some of the deepest recesses of Erebus' dark and twisted mind. So, the more Erebus tries to hide its own thought from itself, the schism grows deeper. To Erebus, Randal seems to drift like a mist connecting "blurred images of combined legate and Golem forms, the insectile shapes of war drones caught in wormish tangles, and crystal minds shot through with Jain inclusions" (*Line War* 137). Erebus painstakingly proceeds to identify and eliminate those portions of its own mind which stand in opposition to its master plan and in this way gets embroiled in a war against itself. Erebus knows that it must do this task with utmost care and extreme sophistication, since Randal could escape if he comes to know of it. Thus, we see how even such a formable machine intelligence as Erebus who is a terror in the entire galaxy, becomes trapped in a most complex and treacherous battle against itself. The human part of Erebus, namely Randal believes himself to be human to the core, while other humans are reluctant in ascribing full humanity to Randal and Erebus thinks of him as an error, a corrupted section of its hard drive or a virus which is to be eliminated at any cost. To Erebus, Fiddler Randal is not a human, not even a simulacrum, but a virus which has infected its being, and is now spreading itself throughout Erebus to bring its operations to a standstill. Randal existed initially as a minor flaw, an error or a fleeting anomaly which Erebus overlooked but only in recent times, he seems to be posing serious threats to Erebus' integrity of being and clarity of purpose. Erebus possesses literally planet-destroying and moon-wrecking capabilities and has turned entire moons of a gas giant into wormship-infested balls which looked like apples destroyed by maggots. However, as the influence of Randal grows strong in Erebus, it begins to be troubled with doubts, insecurities and distractions of all kinds. He is no longer sure of his own core of being. Even though Erebus functions as a distributed entity, it craves for a "firm location for its self – its centre, its ego - and this was usually where the concentration of its vessels was most dense. This necessity annoyed Erebus for such a sense of self and the location of self did not seem consistent with AI melding. However, when the wormships began to come together like this, that annoyance was outweighed by feelings of pleasure, completeness and . . . security" (*Line War* 349). Erebus remains reluctant in becoming truly distributed entity since that requires him to dilute his self beyond measure. Randal seems to be aware of one weakness in Erebus and proceeds to exploit that. He has suspected all along that Erebus and its components are not melded in a perfect unison as long as the one component keeps dominating the rest. Erebus' obsession with finding a grounding for his self coupled with its concomitant disregard for human consciousness which it has integrated within itself, illustrates a complex and conflicting combination of human and nonhuman traits, which even a powerful entity like Erebus finds difficult to reconcile. As Hayles remarks:

"When the self is envisioned as grounded in presence, identified with ordinary guarantees and teleological trajectories, associated with solid foundations and logical coherence, the posthuman is likely to be seen as antihuman because it envisions the conscious mind as a small subsystem running its program of self-construction and self-assurance while remaining ignorant of the actual dynamics of complex systems" (*How We Became Posthuman* 286).

Conclusion:

The study endeavoured to analyse the posthuman world building in Neal Asher's *Brass Man* and *Line War* from the theoretical viewpoints of posthumanization via technologization and speculative posthumanism in order to explicate the possibility of repositioning or re-envisioning the human agency and animacy in the onset of an extremely transformational posthuman culture. The tropes of man-machine merger, uploading of human minds into virtual reality simulacra, cyborgization and excessive technologization are the most important aspects that this study attempted to focus and critically analyse. The study strove to highlight the necessity of portraying both the machinic as well as human-centric perspective as they react and respond to the continually shifting and ever-changing positions of each other against a largely posthuman backdrop.

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