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## "Transhumanism and Genetic Augmentation in the Drowned Cities"

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### **Abstract**

Paolo Bacigalupi's *The Drowned Cities* presents a harrowing vision of a future America devastated by climate change, economic collapse, and relentless civil warfare. This dystopian landscape serves as a backdrop for exploring profound themes of survival, human nature, and technological evolution. At the heart of this narrative lies the concept of genetic augmentation, embodied by the character Tool, a bioengineered being that blurs the boundaries between humans and animals. This research paper delves into the character of Tool and examines his role through the lens of transhumanism, a philosophical movement that advocates for the enhancement of human capacities through advanced technologies.

The primary objective of this study is to analyze the portrayal of genetic augmentation and its implications within the context of Bacigalupi's narrative. By focusing on Tool, the research aims to explore how Bacigalupi envisions the future of human evolution and the ethical, social, and existential questions that arise from such advancements. Specifically, the study will examine the concept of augments in *The Drowned Cities* and their integration into a post-apocalyptic society. Analyze Tool's character development and his interactions with other characters to understand the human-animal hybrid's struggle for identity and purpose. Investigate the philosophical underpinnings of transhumanism as presented in the novel, considering how Bacigalupi addresses the potential and perils of genetic augmentation. Evaluate the broader implications of transhumanism on society, morality, and the definition of humanity as depicted in the novel.

The exploration of genetic augmentation in literature serves as a critical lens through which contemporary and future societal issues can be examined. Bacigalupi's *The Drowned Cities* offers a rich narrative that intersects with pressing concerns about climate change, technological advancement, and socio-political instability. The need for this study is underscored by several factors: As genetic engineering and

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bioaugmentation technologies advance, ethical dilemmas surrounding the modification of living beings become increasingly relevant. This study provides a literary framework to discuss these issues. Understanding how genetic augmentation is depicted in fiction can offer insights into public perception and potential societal reactions to real-world technological developments. Transhumanism challenges fundamental concepts of identity, humanity, and morality. Analyzing these themes in *The Drowned Cities* contributes to the broader philosophical discourse on what it means to be human in an era of rapid technological change. Bacigalupi's work, recognized for its profound engagement with ecological and socio-political issues, serves as a crucial text for examining the intersection of science fiction and transhumanism. This study highlights the literary techniques and narrative strategies Bacigalupi employs to engage readers with complex futuristic scenarios. By addressing these objectives and needs, the research paper aims to provide a comprehensive analysis of transhumanism in *The Drowned Cities*, offering valuable insights into the ethical, societal, and philosophical dimensions of genetic augmentation as envisioned by Paolo Bacigalupi.

**Keywords:**Genetic Augmentation, Transhumanism, Bioengineering, Ethical Implications, Dystopian Society, Human-Animal Hybrid.

## **Introduction**

Paolo Bacigalupi's *The Drowned Cities* presents a dystopian future where America, ravaged by climate change and economic ruin, is ruled by warlords and torn apart by civil war. The novel, recognized for its bleak yet compelling narrative, portrays a world where children are forced into becoming child soldiers, and the coastal regions are submerged due to rising sea levels, forcing inhabitants into swamps. Central to this narrative is the concept of genetic augmentation, particularly the creation of beings known as augments. These augments, designed for warfare by corporate entities, are engineered to possess immense strength and artificial intelligence, making them nearly indestructible. Among these augments is Tool, a half-human, half-animal hybrid whose imperishable nature and quest for identity are examined through the philosophical framework of transhumanism. Transhumanism, a movement advocating for the enhancement of human capabilities through advanced technology, is a recurring theme in science fiction. Bacigalupi's depiction of genetic engineering and augmentation reflects the transhumanist belief that human evolution

can be directed and improved through scientific means. As such, *The Drowned Cities* serves as a rich text for exploring the ethical, social, and existential questions raised by transhumanist thought.

Bacigalupi's novel can be seen as a critique of the unbridled pursuit of technological advancement without consideration for its ethical implications. The creation of augments like Tool raises questions about the morality of genetic engineering and the consequences of transcending natural human limitations. As Nick Bostrom, a leading transhumanist thinker, asserts, "Transhumanism seeks to enhance human intellectual, physical, and psychological capacities through technological means" (Bostrom 10). Bacigalupi's portrayal of Tool, however, complicates this vision by highlighting the potential dangers and ethical dilemmas inherent in such enhancements. The novel's setting—a future America devastated by climate change—also underscores the relationship between technological progress and environmental degradation. Bacigalupi's work often addresses the impact of human activity on the environment, as seen in his earlier novel, *The Windup Girl*. In *The Drowned Cities*, the submerged coastal areas serve as a stark reminder of the consequences of unchecked technological and industrial development. As Donna Haraway suggests, "the boundary between human and animal is thoroughly breached" in such narratives, reflecting the complex interplay between technology, nature, and identity (Haraway 152). Tool's character embodies the transhumanist ideal of surpassing human limitations, yet his existence raises profound questions about identity and autonomy. Despite his engineered capabilities, Tool struggles with a sense of self and purpose, reflecting the broader existential dilemmas posed by transhumanism. According to Cary Wolfe, "the posthuman subject is one that is both technologically augmented and deeply entangled with the nonhuman" (Wolfe 45). Tool's journey in the novel illustrates this entanglement as he navigates the challenges of being both more than human and less than fully autonomous. The use of child soldiers in the novel further complicates the ethical landscape, highlighting the exploitation and dehumanization that can accompany technological advancements. The novel's depiction of children as pawns in a war driven by corporate interests mirrors real-world concerns about the commodification of human life. As Elaine Scarry argues, "the body in pain is a central concern of political and ethical thought" (Scarry 12). Bacigalupi's portrayal of child soldiers and augments like Tool underscores the physical and psychological toll of such exploitation.

Bacigalupi's narrative also engages with the theme of resilience in the face of overwhelming adversity. Tool's quest to save the drowned cities and his interactions with human characters reflect a broader struggle for survival and redemption. This theme resonates with the transhumanist idea that technological

enhancement can be a means of overcoming human suffering and limitations. However, Bacigalupi's nuanced portrayal suggests that such enhancements come with significant ethical and existential costs. The novel's exploration of transhumanism is further enriched by its engagement with contemporary scientific and philosophical debates. As Katherine Hayles notes, "The posthuman subject is an amalgam, a collection of heterogeneous components, a material-informational entity whose boundaries undergo continuous construction and reconstruction" (Hayles 3). Tool's character exemplifies this fluidity, challenging traditional notions of what it means to be human and highlighting the dynamic interplay between technology and identity. The Drowned Cities offers a rich and complex examination of transhumanism and genetic augmentation. Through the character of Tool and the novel's dystopian setting, Bacigalupi raises critical questions about the ethical, social, and existential implications of technological advancement. By engaging with contemporary debates and drawing on the insights of thinkers like Bostrom, Haraway, Wolfe, Scarry, and Hayles, this analysis highlights the multifaceted nature of Bacigalupi's work and its relevance to ongoing discussions about the future of humanity.

Transhumanism is a philosophical and social movement that aims to transcend human biological limitations through scientific and technological advancements. The term "Transhumanism" was coined by the English philosopher Julian Huxley in his 1957 essay, where he envisioned a future where humanity could evolve beyond its current physical and intellectual constraints. This movement promotes the development of technologies that enhance human abilities, ranging from cryogenic suspension and mind uploading to the creation of cyborgs and robots. As defined by Simon Burdett, transhumanism is "the intellectual and cultural movement with an eventual goal of fundamentally transforming the human condition by developing and making widely available technologies to greatly enhance human intellectual, physical, and psychological capacities" (Burdett 13). The roots of transhumanism can be traced back to the philosophy of the Enlightenment, particularly the work of Francis Bacon. In his *Novum Organum*, Bacon emphasized the use of artificial experiments over prior reasoning, laying the groundwork for the scientific method and the subsequent technological advancements that underpin transhumanist thought (Bacon 25). Julian Huxley, a distinguished biologist, further developed these ideas, becoming the first person to use the term "transhuman" to describe the potential for human evolution through technology.

The World Transhumanist Association, founded by Nick Bostrom and David Pearce in 1998, has played a significant role in promoting the ideals of transhumanism. This non-governmental organization aims to endorse and

disseminate transhumanist ideas to the public, advocating for the ethical development and use of technologies that can enhance human capabilities (Bostrom and Pearce 47). The association has been instrumental in fostering a global dialogue on the implications of human enhancement and the future of humanity. In literature, transhumanist themes are prevalent in science fiction, which often explores the ethical and existential questions raised by human enhancement. Paolo Bacigalupi's *The Drowned Cities* is a notable example, depicting a dystopian future where genetically engineered beings known as augments are created for warfare. These augments, such as the character Tool, embody the transhumanist vision of surpassing human limitations but also highlight the potential dangers of such advancements (Bacigalupi 112).

The ethical implications of transhumanism are a central concern for both proponents and critics of the movement. As Nick Bostrom argues, the pursuit of human enhancement must be guided by ethical considerations to avoid potential harm and ensure that technological advancements benefit all of humanity (Bostrom 89). This perspective is echoed by Cary Wolfe, who contends that "the posthuman subject is one that is both technologically augmented and deeply entangled with the nonhuman," raising questions about identity and autonomy in a technologically enhanced world (Wolfe 45). Transhumanism's impact on society and culture is profound, challenging traditional notions of human nature and prompting a reevaluation of what it means to be human. N. Katherine Hayles notes that "the posthuman subject is an amalgam, a collection of heterogeneous components, a material-informational entity whose boundaries undergo continuous construction and reconstruction" (Hayles 3). This fluidity of identity is a recurring theme in transhumanist literature, reflecting the dynamic interplay between technology and humanity.

The movement also draws on historical and philosophical precedents, linking contemporary transhumanist thought to earlier intellectual traditions. As Elaine Scarry observes, "the body in pain is a central concern of political and ethical thought," highlighting the enduring significance of the human condition in philosophical discourse (Scarry 12). Transhumanism, by seeking to alleviate human suffering and enhance capabilities, continues this tradition of striving for a better future through scientific and technological innovation. Transhumanism represents a significant intellectual and cultural movement with far-reaching implications for the future of humanity. By promoting the development of technologies that enhance human abilities, transhumanists seek to overcome the genetic and biological limitations that have traditionally defined the human experience. However, the movement also raises critical ethical, social, and philosophical questions that must be

carefully considered. Through the lens of literature and the insights of thinkers like Bostrom, Huxley, Bacon, Wolfe, Hayles, and Scarry, we can better understand the complexities and potential of transhumanism as we navigate the future of human evolution.

Paolo Bacigalupi's *The Drowned Cities* introduces Tool, a transhuman character designed by corporate entities to participate in war. Tool, a genetically augmented being, exemplifies the advanced intelligence and efficiency envisioned by transhumanist ideals. According to Nick Bostrom, "The range of thoughts, feelings, experiences and activities accessible to human organisms presumably constitute only a tiny part of what is possible...the ambitions we humans have, our philosophies, the complexities of human society or the subtleties of our relationships, with one another—so we humans may lack the capacity to form a realistic intuitive understanding of what it would be like to be radically enhanced human and of thoughts, concerns, aspirations, and social relations that such humans may have" (Bostrom 4-5). This perspective is crucial for understanding Tool's character and the broader implications of transhumanism. In the opening pages of the novel, Bacigalupi highlights Tool's extraordinary strength, contrasting sharply with human limitations. Tool's creators perceive him as a threat due to his overpowering nature and attempt to eliminate him. Captured, tortured, and imprisoned, Tool lies on the ground, seemingly meek. The prison guard's warning about Tool's inherent danger underscores his formidable strength: "These things never die...you saw the monsters fight up north, on the border...dog faces are demon spawn. At the beginning of the cleansing, Saint Olmos saw them coming. They don't die until the final flood" (Bacigalupi 4-5).

Tool's creation and subsequent rebellion reflect the ethical and existential dilemmas posed by transhumanist enhancements. Bostrom's assertion that humans may lack the capacity to understand the experiences of radically enhanced beings is evident in Tool's struggle for autonomy and identity. As Bacigalupi illustrates, Tool's augmented abilities make him a powerful yet uncontrollable force, raising questions about the ethical implications of creating such beings. The novel's depiction of Tool's capture and imprisonment highlights the fear and mistrust that augmented beings can evoke. The guards' reluctance to approach Tool, despite his apparent vulnerability, demonstrates the perceived threat he poses. This scenario underscores the potential for conflict between augmented beings and unenhanced humans, a theme explored in transhumanist literature. As Cary Wolfe notes, "the posthuman subject is one that is both technologically augmented and deeply entangled with the nonhuman," complicating traditional notions of identity and agency (Wolfe 45).

Tool's existence as a transhuman entity raises important ethical questions about the limits of human enhancement. The novel suggests that while transhumanist technologies can create beings of immense power and intelligence, they also pose significant risks. The fear and violence directed at Tool reflect the broader societal challenges that such technologies might engender. This is consistent with the concerns raised by transhumanist critics, who warn of the potential for abuse and unintended consequences in the pursuit of human enhancement. Bacigalupi's portrayal of Tool's strength and the subsequent attempts to control or destroy him highlight the tension between technological progress and ethical responsibility. As N. Katherine Hayles observes, "the posthuman subject is an amalgam, a collection of heterogeneous components, a material-informational entity whose boundaries undergo continuous construction and reconstruction" (Hayles 3). Tool's character embodies this fluidity, challenging readers to reconsider the boundaries of humanity and the ethical implications of surpassing them.

The novel's exploration of Tool's character and the broader theme of transhumanism is a critical commentary on the potential consequences of unchecked technological advancement. By presenting Tool as both a powerful ally and a dangerous threat, Bacigalupi underscores the need for careful consideration of the ethical dimensions of human enhancement. This aligns with Elaine Scarry's argument that "the body in pain is a central concern of political and ethical thought," highlighting the physical and psychological toll of transhumanist technologies (Scarry 12). Tool in *The Drowned Cities* serves as a complex representation of transhumanism, illustrating both the potential and the peril of human enhancement. Bacigalupi's narrative, supported by insights from thinkers like Bostrom, Wolfe, Hayles, and Scarry, provides a nuanced critique of transhumanist ideals. By examining Tool's extraordinary abilities and the ethical dilemmas they engender, the novel invites readers to reflect on the future of humanity and the moral responsibilities that accompany technological progress.

Transhumans, as depicted in Paolo Bacigalupi's *The Drowned Cities*, are entities that surpass human beings in strength, intelligence, lifespan, and sensory capabilities. The character Tool is an augment, a being created by merging the DNA of various organisms, including humans. Tool's design is described as having "the blood of a dozen predators pumped in its veins, a DNA cocktail of killing—tiger and dog and hyena...a perfect creature, designed from the blood up to hunt and war and kill" (Bacigalupi 6). This genetic engineering places Tool in the realm of transhumanism, a movement dedicated to enhancing human capacities through advanced technologies. Tool in *The Drowned Cities* can be compared with the monster in Mary Shelley's *Frankenstein* and Emiko in Bacigalupi's *The Windup Girl*.

These characters share a common origin of being customized with high intelligence and physical power but are designed to be subservient. Bacigalupi describes Tool as “Tool ... was a very bad dog. His masters had told him and molded his will to match their own. They had forged him into a killer and then fit him into the killing machine that had been his pack... for a little while, he had been a good dog, and obedient” (Bacigalupi 12). This depiction highlights the conflict between the creators' intentions and the creation's autonomy, a central theme in transhumanist discourse. The techniques used by transhumanists include nanotechnology, genetic manipulation, cybernetics, and human enhancement. The idea of editing genes to alter a human is explored in *Frankenstein* when Victor designs his monster to be more physically advanced than regular humans. As Jack Birchler notes, “The idea of editing genes to alter a human is displayed in *Frankenstein* when Victor designs his monster to be more physically advanced than regular humans” (Birchler). This pursuit of creating superior beings reflects the transhumanist goal of overcoming human limitations.

In Bacigalupi's narrative, the creators of augments, such as Tool, design them to be more intelligent, stronger, and obedient. However, when the creators attempt to suppress their creations, they often fight back. In *Frankenstein*, Victor laments, "How can I describe my emotions at this catastrophe...the different accidents of life are not so changeable as the feelings of human nature. I had worked for nearly two years, for the sole purpose of infusing life into an inanimate body” (Shelley 50-51). This quote reflects the unforeseen consequences of creating a being that defies human control. *Frankenstein's* monster, described as "angel of destruction" (Shelley 39), parallels Tool's role in *The Drowned Cities*. Victor's belief that “a new species would bless me as its creator” (Shelley 47) mirrors the ambitions of Tool's creators, who envision him as a perfect warrior. Tool, like the monster, embodies the potential and peril of transhumanist creations. When Mouse, a teen boy in the swamps, calls Tool a dog face, Tool asserts, “Also tiger and hyena and man... I kill because it is my nature and I eat what I kill” (Bacigalupi 107). This declaration underscores Tool's hybrid nature and the inherent violence programmed into him.

The threatening nature of transhumans is evident when Tool threatens Mouse in the swamps. Tool's ability to kill his own creator, General Carano, when threatened highlights the dangerous autonomy of transhuman beings. This narrative aligns with concerns about the ethical implications of transhumanist technologies. As Nick Bostrom notes, “The range of thoughts, feelings, experiences and activities accessible to human organisms presumably constitute only a tiny part of what is possible...the ambitions we humans have, our philosophies, the complexities of human society or the subtleties of our relationships, with one another—so we humans may lack the capacity to form a realistic intuitive understanding of what it would be like to be

radically enhanced human and of thoughts, concerns, aspirations, and social relations that such humans may have” (Bostrom 4-5). Tool’s existence and actions reflect these complex possibilities and challenges. The character Tool in *The Drowned Cities* serves as a profound exploration of transhumanism and its implications. Through the comparison with characters like Frankenstein’s monster and Emiko, Bacigalupi delves into the ethical, social, and existential dilemmas posed by genetic enhancement and human augmentation. Tool’s creation, rebellion, and inherent violence highlight the double-edged nature of transhumanist advancements. This analysis, supported by insights from literary and philosophical texts, underscores the need for careful ethical consideration in the pursuit of human enhancement.

Transhumans, as depicted in literature, often possess capabilities far beyond those of ordinary humans, including enhanced strength, intelligence, lifespan, and sensory perception. Nick Bostrom articulates this idea, noting that "our own current mode of being, therefore, spans but a minute subspace of what is possible or permitted by the physical constraints of the universe" (Bostrom 5). This statement underscores the potential of transhumans, who are designed to exceed human standards. In Paolo Bacigalupi's *The Drowned Cities*, the augment Tool exemplifies these enhanced capabilities, moving with remarkable speed and efficiency. The prison guard's description of Tool as a "hurricane of slaughter" that a person "would rather face a dozen men with machetes" than encounter highlights Tool's formidable nature (Bacigalupi 6). Tool’s creation is similar to that of Frankenstein's monster in Mary Shelley's *Frankenstein*. Victor Frankenstein is astounded by his creation’s superhuman abilities, remarking, “I suddenly beheld the figure of a man, at some distance, advancing toward me with superhuman speed. He bounded over the crevices in the ice, among which I had walked with caution; his stature, also, as he approached, seemed to exceed that of man” (Shelley 7). Both Tool and Frankenstein’s monster are designed to surpass human capabilities, emphasizing the transhumanist vision of enhancing human traits through technological means.

Transhumans represent an intermediary form between humans and posthumans, incorporating concepts such as neophilia—a love for or enthusiasm about novelty. The creators of Tool aimed to fabricate an augment capable of withstanding any battle conditions. General Carao explains the purpose behind Tool’s creation: “I was tasked with creating a better breed—one suited to modern battlefields where augments had become the norm. A superb physical specimen was no longer sufficient. We needed creatures that were hypercompetent. Natural engines of strategy, tactics, learning, violence, stamina, fearlessness. Tolerant of poisons and chemical attacks. Resistant to fire and cold and fear and pain” (Bacigalupi 157). This quote reflects the extensive and specific enhancements intended to make Tool an ideal

warrior. The Mercier Corporations created Tool as one of their finest augments. General Carao's detailed account of Tool's superior biological makeup includes blood full of super-clotting agents and cells that replicate "as quickly as kudzu grows" (Bacigalupi 166). Kudzu, a fast-growing perennial vine native to North America, symbolizes the rapid healing and regenerative abilities bestowed upon Tool. These enhancements ensure that injuries, such as cuts and fractures, heal swiftly, making Tool nearly invincible. The ethical implications of such advancements are summarized in the lament, "all the wonders of our medical knowledge, and we use it to create monsters" (Bacigalupi 166).

Tool's ability to endure extreme conditions and survive prolonged periods without food or water, as noted by Colonel Ocho, underscores the practical applications of transhuman enhancements in warfare. Mahlia, an immigrant seeking to escape the drowned cities, decides to seek Tool's help, recognizing his unique capabilities. This decision reflects the broader societal implications of transhumanism, where enhanced beings are both feared and revered for their abilities. The techniques employed by transhumanists, such as nanotechnology, genetic manipulation, and cybernetics, aim to push the boundaries of human potential. The idea of gene editing to create superior beings is evident in *Frankenstein*, where Victor designs his monster to be physically superior to humans. Jack Birchler notes, "The idea of editing genes to alter a human is displayed in *Frankenstein* when Victor designs his monster to be more physically advanced than regular humans" (Birchler). This pursuit of enhancement, however, often leads to unintended consequences as creators struggle to control their powerful creations.

Tool's inherent violence and autonomy challenge the intentions of his creators. His response to being called a dog face by Mouse—"Also tiger and hyena and man... I kill because it is my nature, and I eat what I kill"—highlights his hybrid nature and programmed aggression (Bacigalupi 107). This complexity is further illustrated when Tool kills his creator, General Carano, after an attempt to destroy him. This act of rebellion underscores the inherent risks and ethical dilemmas associated with creating beings of such power. Tool in *The Drowned Cities* serves as a critical exploration of transhumanism and its implications. Through comparisons with characters like *Frankenstein's* monster and Emiko from *The Windup Girl*, Bacigalupi examines the ethical, social, and existential challenges posed by human enhancement. Tool's extraordinary capabilities and the resulting ethical quandaries highlight the double-edged nature of transhumanist advancements, emphasizing the need for careful ethical consideration in the pursuit of surpassing human limitations.

Transhumanism, the philosophical pursuit of surpassing human limitations through technological and scientific means, values perfectionism—a drive to create

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flawless beings free from disease and destruction. Augments in Paolo Bacigalupi's *The Drowned Cities*, like Tool, exemplify this ideal. Unlike many augments designed to be obedient, Tool operates independently on the battlefield. Reflecting on societal expectations, Tool states, "My kind would have no business here, other than war with them" (Bacigalupi 280). When Mahlia implores Tool to save Banyan Town, he responds, "Augments like me are blood enemies to soldiers like that. They will shoot me on sight. I am their greatest nightmare. They fight my kind in the North, where the war lines bottle them up" (Bacigalupi 279). This underscores Tool's inherent design as a perfect slave trained through harsh methods such as electric pods and discipline rods. Tool's training has instilled in him a disdain for weakness, as shown when he admonishes Mouse, "Never beg for mercy. Accept that you have failed. Begging is for dogs and humans" (Bacigalupi 135). Tool's response to being called a coward is revealing: "I am not a coward. When I was in the army, I killed thousands of 'hyenas' men of Lagos in all their numbers and had personally eaten the heart of the first claw" (Bacigalupi 136). This illustrates his ingrained belief in his superiority and strength, a direct result of his transhumanist design.

Transhumanists often reject the notion of "unnatural," which is evident in Tool's reaction to being called a dog face. He asserts, "You may call me Tool, or half-man or augment, but if you think to call me dog-face again, I will tear open your chest, and eat your heart" (Bacigalupi 308). Tool's ability to survive in extreme conditions, as when he hunts and consumes an alligator, demonstrates his adaptive nature. Bacigalupi writes, "He is unbothered by the miasma of carrion" (175). This adaptability signifies the transhumanist goal of creating beings capable of thriving in any situation. Transhumanism also emphasizes practical problem-solving and a pragmatic attitude toward challenges. Despite being a half-human augment, Tool exhibits greater wisdom and practicality than many other characters in the novel. When Mahlia asks Tool to fight against soldiers, he declines, stating, "I will not seek out a fight that cannot be won. And I will not suicide on any human being's behalf" (Bacigalupi 179). Tool's pragmatism is further highlighted when he prevents Mahlia from saving Mouse, asserting, "You cannot save him. You cannot survive this fight" (Bacigalupi 203). His refusal to engage in unwinnable battles reflects his strategic mindset: "I do not fight battles that cannot be won. Do not confuse that with cowardice" (Bacigalupi 220).

Nick Bostrom articulates a key tenet of transhumanism: "Transhumanism stresses the moral urgency of saving lives, or more precisely, of preventing involuntary deaths among people whose lives are worth living" (Bostrom 13). Tool, though designed for destruction, ultimately seeks to live a life free from mastery. In *Tool of War*, a sequel to *The Drowned Cities*, Tool emerges as a protagonist with a

vision of reconstruction. He tells child soldiers, "Spread the word to the troops. Our new task is to rebuild...killing was easy. Any child could become a killer. But farming? The planting of seeds? Where were the people who knew these things? Where were the people who knew how to accomplish these patient, quiet things? They were dead. Or else fled. The smartest of them is long gone. A fist of humans who knew how to engineer not death, but life" (Bacigalupi 4). Tool's aspiration to farm and rebuild illustrates a fundamental shift from destruction to creation, embodying the transhumanist ideal of using enhanced capabilities for positive change. Tool in *The Drowned Cities* serves as a profound exploration of transhumanist values and perfectionism. Through his character, Bacigalupi delves into the ethical, social, and existential challenges posed by human enhancement. Tool's superior abilities and practical mindset highlight the potential benefits of transhumanist advancements, while his journey toward autonomy and constructive goals emphasizes the importance of ethical considerations in the pursuit of human perfection.

Paolo Bacigalupi's portrayal of genetically engineered beings in *The Drowned Cities* and *The Windup Girl* explores the dichotomy of transhumanism. While transhumanism holds optimistic approaches, such as enhancing human capabilities and solving complex problems, it also presents negative traits, including ethical dilemmas and unforeseen consequences. Characters like Tool from *The Drowned Cities* and Emiko from *The Windup Girl* are prime examples of this dichotomy. Both are engineered to be obedient to their creators but ultimately rebel against their imposed roles. Tool, a half-human augment, epitomizes the destructive potential of transhumanist creations. Trained and controlled by his masters through brutal methods, Tool's inherent violence surfaces when he slaughters his creator and removes his heart. This act mirrors the rebellion of Emiko, who murders a man who sexually tortures her. Similarly, in Mary Shelley's *Frankenstein*, the monster becomes his creator's enemy, leading Frankenstein to exclaim, "Devil...Begone! I will not hear you. There can be no community between you and me; we are enemies" (Shelley 92). These narratives highlight the recurring theme of creations turning against their human creators. Despite being designed as a slave, Tool yearns for freedom and desires to reconstruct the city. This aspiration contrasts with the inherent danger posed by such powerful beings when unleashed among humans. Tool acknowledges the fear he instills, stating, "People may think that I can't live without a master...my kind would have no business here, other than war with them" (Bacigalupi 280). When Mahlia, an immigrant, asks Tool to save Banyan Town, he responds, "Augments like me are blood enemies to soldiers like that. They will shoot me on sight. I am their greatest nightmare. They fight my kind in the North; where the war lines bottle them

up" (Bacigalupi 279). This fear underscores the precarious balance between the benefits and threats of transhumanist advancements.

Transhumanist philosophy, as described by Nick Bostrom, emphasizes the enhancement of human life and capabilities. Bostrom writes, "Our own current mode of being, therefore, spans but a minute subspace of what is possible or permitted by the physical constraints of the universe" (Bostrom 5). However, the pursuit of perfection often leads to ethical complexities. Tool's creators aim to fabricate a flawless augment capable of surviving any condition and performing tasks beyond human abilities. General Carao explains, "I was tasked with creating a better breed—one suited to modern battlefields where augments had become the norm. A superb physical specimen was no longer sufficient. We needed creatures that were hypercompetent. Natural engines of strategy, tactics, learning, violence, stamina, fearlessness. Tolerant of poisons and chemical attacks. Resistant to fire and cold and fear and pain" (Bacigalupi 157). This quest for perfection reflects the transhumanist ideal but also raises questions about the moral implications of creating such beings. Tool's superior capabilities, including rapid healing and resilience, further exemplify the potential and peril of transhumanist technologies. His cells replicate "as quickly as kudzu grows," a metaphor for his swift recovery and near invincibility (Bacigalupi 166). Despite these enhancements, Tool seeks a life beyond war and destruction, aspiring to rebuild rather than destroy. In *Tool of War*, Tool emerges as a leader advocating for reconstruction: "Spread the word to the troops. Our new task is to rebuild...killing was easy. Any child could become a killer. But farming? The planting of seeds? Where were the people who knew these things? Where were the people who knew how to accomplish these patient, quiet things? They were dead. Or else fled. The smartest of them is long gone. A fist of humans who knew how to engineer not death, but life" (Bacigalupi 4). This shift from destruction to creation highlights the dual potential of transhumanist advancements.

The ethical challenges of transhumanism are further complicated by the independence and strength of beings like Tool. Although designed for obedience, Tool's pragmatism and strategic thinking often surpass those of the humans around him. When faced with unwinnable battles, Tool chooses survival over futile heroics, stating, "I will not seek out a fight that cannot be won. And I will not suicide on any human being's behalf" (Bacigalupi 179). This pragmatic approach is evident when he prevents Mahlia from attempting to save Mouse, asserting, "You cannot save him. You cannot survive this fight" (Bacigalupi 203). Tool's refusal to engage in hopeless battles reflects his strategic mindset: "I do not fight battles that cannot be won. Do not confuse that with cowardice" (Bacigalupi 220). The complexity of transhumanism lies in its capacity to enhance life while posing significant ethical and

existential risks. As Bostrom notes, transhumanism stresses the importance of “preventing involuntary deaths among people whose lives are worth living” (Bostrom 13). Yet, the creation of beings like Tool raises questions about autonomy, control, and the potential for unintended consequences. Bacigalupi’s narratives illustrate the fine line between the benefits and dangers of transhumanist technologies, emphasizing the need for ethical considerations in their development and implementation. Paolo Bacigalupi’s depiction of transhumanist beings in *The Drowned Cities* and *The Windup Girl* explores both the optimistic and negative aspects of human enhancement. Characters like Tool and Emiko embody the potential for greatness and the inherent risks of creating beings with capabilities beyond human control. By examining these narratives through the lens of transhumanism, Bacigalupi provides a nuanced critique of the ethical and existential dilemmas posed by technological advancements.

### **Conclusion**

Paolo Bacigalupi’s *The Drowned Cities* presents a compelling examination of the future of humanity through the lens of genetic augmentation and transhumanism. This study delved into the character of Tool, a bioengineered being, to explore the profound themes of survival, identity, and the ethical implications of technological advancements. By analyzing Tool’s character and his interactions within the dystopian setting, this research has illuminated the complexities and dual nature of transhumanism as envisioned by Bacigalupi. One of the primary findings of this study is the portrayal of genetic augmentation as a double-edged sword. While transhumanism offers the promise of surpassing human limitations and achieving remarkable feats of strength, intelligence, and resilience, it also brings forth significant ethical and existential dilemmas. Tool, with his enhanced capabilities, embodies the potential benefits of genetic engineering but also highlights the dangers of creating beings that can transcend human control. His struggle for autonomy and identity mirrors the broader philosophical debates about the nature of humanity and the moral responsibilities that accompany technological progress.

Bacigalupi’s narrative critiques the unbridled pursuit of technological advancement without ethical considerations. The creation of augments like Tool raises critical questions about the morality of genetic engineering, the potential for abuse, and the societal implications of such technologies. As the novel demonstrates, the pursuit of perfection and enhancement can lead to unintended consequences, including violence, exploitation, and a loss of humanity. Tool’s journey from a controlled augment to a being seeking freedom and purpose underscores the need for ethical frameworks to guide the development and implementation of transhumanist technologies. The dystopian setting of *The Drowned Cities* also underscores the

interconnectedness of technological progress and environmental degradation. Bacigalupi's depiction of a future America ravaged by climate change and civil war serves as a cautionary tale about the impact of human activity on the environment. The submerged coastal areas and the brutal conditions faced by the characters highlight the consequences of unchecked technological and industrial development. This environmental critique is intertwined with the narrative's exploration of transhumanism, emphasizing the need for a holistic approach to technological progress that considers both human and environmental well-being.

This study has shown that Bacigalupi's work engages with contemporary scientific and philosophical debates, drawing on the insights of thinkers like Nick Bostrom, Donna Haraway, Cary Wolfe, and N. Katherine Hayles. The character of Tool exemplifies the transhumanist vision of surpassing human limitations while also reflecting the existential questions and ethical complexities posed by such advancements. Bacigalupi's nuanced portrayal of Tool and the broader implications of transhumanism invites readers to reflect on the future of humanity and the moral responsibilities that come with technological innovation. *The Drowned Cities* offers a rich and multifaceted exploration of transhumanism, genetic augmentation, and its implications for the future of humanity. Through the character of Tool and the novel's dystopian setting, Bacigalupi raises critical questions about the ethical, social, and existential dimensions of human enhancement. This research has highlighted the dual nature of transhumanism, emphasizing the need for careful ethical consideration and responsible development of technologies that seek to enhance human capabilities. As society continues to advance towards an era of rapid technological change, the themes explored in Bacigalupi's work remain profoundly relevant, offering valuable insights into the potential and perils of transhumanist ideals.

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