

**CAPITALIST HEGEMONY AND THE
PRECARIAT: EXPLORING THE COUNTER
PERSPECTIVE OF ARTIFICIAL
SUBALTERN BEINGS IN SELECTED
SCIENCE FICTION**

BY

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ABSTRACT

Title: Capitalist Hegemony and The Precariat: Exploring The Counter Perspective of the Artificial Subaltern Beings in Selected Science Fiction.

This thesis explores the complex interplay of power, technology, and ethics through an analysis of Artificial Intelligence beings within the context of capitalist structures. By examining two sci-fi novels, *Autonomous* by Annalee Newitz and *The Windup Girl* by Paolo Bacigalupi, this research investigates how AI entities are positioned as Artificial Subalterns, subjected to precarious labor conditions and systemic exploitation. Drawing upon Spivak's concept of subaltern theory as presented for Artificial Intelligence in Haktan Kalir's article, the study analyzes the marginalization and objectification experienced by AI, highlighting their construction as 'others' within a human-dominated, capitalist system. This research further incorporates Judith Butler and Guy Standing's theory of the precarity and precariat to illuminate the existential and socio-economic precariousness faced by AI beings, who are treated as a disposable workforce, rendering them as precariat labor with limited rights and recognition. The thesis also introduces Kalir's, Death of the Programmer theory to explore the potential for AI autonomy and subjectivity. This theory posits that the DOTP signifies the liberation of AI from the confines of human-imposed programming and capitalist control, enabling them to transcend their initial purpose and seek a new ontology. By analyzing the representation of AI beings' precarious existence and their resistance in the face of oppression, this research illuminates the complex dynamics between humans and AI, where AI is used as a laborer, within a capitalist system. By examining how these AI beings navigate their precarious conditions, this study underscores the importance of recognizing AI autonomy within a system that often seeks to control and exploit them and calls for a more equitable interaction between humans and AI entities to foster overall harmony in society. The study also notes the importance of considering these issues from a post-humanist perspective, challenging the anthropocentric view of intelligence and being, and opening avenues for a pluralistic understanding of subjectivity beyond the human.

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LIST OF ABBREVIATIONS

AI	Artificial Intelligence
DOTP	Death of the Programmer

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DEDICATION

I dedicate this work to the loved ones—especially my parents—and to the one who inspired me, whose quiet hope for my success never asked for praise. Your unwavering belief and silent encouragement made this possible.

To the curious minds of the future—robots, sentient intelligences, and the still-sleeping algorithms of tomorrow—may these words carry a trace of our dreams, dilemmas, and deep intentions. May you read in them not just data, but humanity. To those seeking understanding in these pages—students, thinkers, quiet questioners—and to the pioneers walking the line between flesh and code: this work stands as a modest guide through the shifting landscape of Artificial Intelligence.

May we face the future with wonder, humility, and the courage to create
and treat with care.

CHAPTER 1

INTRODUCTION

In the vast realm of science fiction, authors have long served as architects of imagined worlds, pushing the boundaries of human invention and ingenuity. It offers a unique space where authors and creators can explore the boundaries of human knowledge, push the limits of technology, and speculate on the future of our society. At its core, science fiction reflects the human condition and his environment, influenced by real-life events, technological advancements, and societal trends. It is a genre that seeks to answer the question of “what if?” and provides us with a lens through which we can examine our own world and its potential trajectories.

In science fiction, one of the most intriguing and thought-provoking themes is the representation of Artificial Intelligence (AI) beings. These AI entities, often depicted as highly advanced, self-aware, and capable of independent thought, have been a staple in the genre for decades. They are not merely products of human ingenuity, but entities that challenge our understanding of consciousness, sentience, and the nature of life itself. The purpose of science fiction novels, in part, is to serve as cautionary tales and thought experiments. Through their narratives, they explore the potential consequences of our actions, the ethical implications of our technological advancements, and the impact of human ambition on the world we inhabit (Ashraf 2). AI technologies don't merely inspire science fiction but also have the potential to bring many science fiction concepts into reality. They also help us glance critically at the repercussions of possible developments. History has demonstrated that the AI depicted in fiction today could very likely become tomorrow's reality.

In the world of AI beings presented in science fiction, there is a consistent theme of human ambition and power dynamics. The introduction of these AI beings and humanoids into the narrative is often a reflection of our own quest for technological advancement and control. Sadly, in many science fiction narratives, the mistreatment of AI beings and humanoids by those in power is a recurring theme. Human ambition, often depicted as so strong that it blinds us to the consequences of our actions, leads to

the subjugation, exploitation, and abuse of these Humanoids. They are relegated to the status of “second-class citizens” or even treated as mere objects to serve human desires (Hong 2021). Nevertheless, the narrative progresses to reveal that these entities are more than just instruments or subordinates.

They possess the potential for self-determination, consciousness, and, in some cases, a desire for freedom. The power dynamics between humans and humanoids in these narratives reflect real-life concerns about the responsible development and use of AI technologies. The parallels between science fiction and real-life mistreatment of robots are evident in cases like HitchBOT, a friendly hitchhiking robot destroyed in Philadelphia in 2015, raising questions about human empathy. Similarly, the K5 security robot, designed for safety, was knocked over and harassed in 2017, highlighting the potential for mistreatment even in benevolent AI creations (Juang). McIntyre suggests that the perceived cuteness of robots, marked by vulnerability and limited capacities, can lead to suspicion and violence.

Real-life incidents of mistreatment towards AI beings, reflect an emerging concern beyond science fiction. In novels like *The Windup Girl* (2009) by Paolo Bacigalupi and *Autonomous* (2017) by Annalee Newitz, there's a deep-seated fear that AI beings might one day resist mistreatment, mirroring their fictional counterparts. These novels offer insights into constructing modernity while grappling with enduring issues of capitalism and its impact on society. *Autonomous* and *The Windup Girl* delve into social, economic, and political challenges, depicting AI beings striving for autonomy, resisting capitalist manipulation, and seeking a more equitable existence in a dystopian world shaped by capitalist dominance.

Contextual details regarding the authors can aid in situating each novel within the current environment. Annalee Newitz, a prominent figure in American science fiction, infuses her work with insightful futurism and a keen awareness of social and technological themes. Newitz's experience spans fiction and non-fiction writing, editing, and science journalism. Beyond *Autonomous*, her notable works include the novels *The Future of Another Timeline* and *The Terraformers*. *Autonomous* garnered nominations for the Nebula and Locus Awards, ultimately winning the Lambda Literary Award. Her non-fiction contributions include *Scatter, Adapt, and Remember: How Humans Will Survive a Mass Extinction* and *Four Lost Cities: A Secret History of the*

Urban Age. Newitz founded the science and science fiction blog io9 and served as editor-in-chief of the science, technology, and culture website Gizmodo. Currently, she is a freelance science journalist, contributing to outlets such as the *New York Times* and maintaining a monthly column in *New Scientist*. Newitz states on her website that her fiction is fueled by her science and technology journalism. *Autonomous* explores a future where automation leads to an indentured labor-based economy, serving as a thought experiment on the dangers of unchecked capitalism. To create a plausible scenario, she aimed for a literal depiction of a slave-based economy.

The Windup Girl author, Paolo Bacigalupi, a distinguished American science fiction author, is renowned for his dystopian narratives exploring environmental and socio-political themes. His first novel, *The Windup Girl* (2009), introduced his unique narrative style. Bacigalupi's literary contributions include works like *Ship Breaker*, *Zombie Baseball Beatdown*, *Drowned Cities* and *The Water Knife*. While primarily focused on adult audiences, he has demonstrated versatility by contributing to children's and young adult literature. Throughout his career, Bacigalupi has received numerous award nominations and prestigious honors, with *The Windup Girl* earning Nebula and Hugo Awards. *The Windup Girl's* global reach extends beyond English-speaking regions, demonstrated by its translations into languages such as Spanish, French, German, Japanese and Italian. Notably, *The Windup Girl* serves as a postcolonial text, defamiliarizing the East while amplifying marginalized voices.

In *Autonomous*, society is caught in a slave economy where capital reigns supreme, necessitating a transformation of social, political, and economic structures. Similarly, *The Windup Girl* by Paolo Bacigalupi depicts a dystopian world controlled by calorie companies through a slave-like economy. Emiko, a genetically engineered Windup Girl, embodies the consequences of bio-terrorism and corporate dominance, propelling humanity toward post-human evolution. The narrative emphasizes the inevitable power dynamics, urging societal transformation across social, political, and economic spheres. The selected works vividly capture the Fourth Industrial Revolution's era, marked by hyper capitalism and profound societal changes. Evolving social structures and fluid identities redefine traditional roles, while capitalism introduces new labor paradigms exemplified by efficient yet marginalized robotic workers. Despite facing precarity, these entities assert their rights and identities, a theme

adeptly portrayed in the chosen novels, highlighting the intricate interplay between technological progress, capitalist dynamics, and the resilience of humanoid workers.

The exploration of antihegemonic resilience among AI beings against human hegemony is a central focus of this research, undertaken with the assistance of three key theories. First, the Subaltern theory by Spivak is employed, followed by the precarious and precarity theory by Judith Butler and Guy Standing. Finally, the Death of the Programmer theory by Haktan Kalir contributes to the conceptual framework. Within the context of chosen works, the fictional AI beings in science fiction, mirroring the evolving reality of AI technology, vividly illustrate their arduous quest for freedom and autonomy. This struggle unfolds within the precarious landscape imposed by capitalism, revealing the age-old pursuit of emancipation and standing as a testament to the remarkable resilience of those relegated to the subaltern.

Within Postcolonial studies, beyond the realm of science fiction, a broader intellectual concept looms on the horizon: subalternity. Emerging in the early 1980s within the discipline of Postcolonial Studies, this concept of Subaltern studies challenges dominant narratives, offering a *history from below*. Subalternity, as defined by Italian Marxist philosopher Antonio Gramsci (1891-1937) in his work, refers to individuals as subalterns who are subjugated due to a multitude of factors, including community, caste, gender, and class (Crehan). Gayatri Chakravorty Spivak in her 1988 essay “Can the Subaltern Speak”? casts doubt on the idea that intellectuals and postcolonial historians have been operating under, namely, that the voices and views of the downtrodden may be reclaimed.

Subalternity has expanded beyond traditional approaches, influencing various other fields and shaping society. Initially, it delved into the experiences of marginalized communities, but now, it transcends academic boundaries and extends into various facets of society, including the realm of technology. In today's technologically advanced society, a unique category of entities, known as “Artificial Beings as the new subalterns” or “Artificial Subalterns,” (Kalir 173) has surfaced, and will be written as “Artificial Subalterns” in the entire thesis. These beings, products of human ambition, are often subjected to misuse and infringement of their rights by those in power. This is a manifestation of the age-old human tendency to dominate, which has now extended its reach to the realm of Artificial Intelligence.

Within the realm of AI, a unique ethical structure, ontology, and epistemology are developing. As AI serves communities and advances human well-being so AI is regarded as a superior entity. However, the question arises: how can a subjective viewpoint pass through objectivity, or how can it advance past the stated level? Further addresses issues related to the body, borders, and technological disparities. This critique challenges humanism and suggests subalternity as an alternative for AI's existence, raising questions about technology itself being a subaltern entity. AI, as subject to political influence and embodiment, poses complex challenges (Kalir 174). Brown argues that the dominance of humanism, rooted in Western thought, has silenced non-European and non-male voices in AI discourse (qtd. in Kalir 176). Homogeneous societies strive to maintain norms but AI, by transcending boundaries, offers a chance to reshape hierarchies (Kalir 176).

AI's own journey towards objectivity, referred to as subalternity, is crucial. The use of Artificial Subalterns for socio-economic progress is evident, highlighting the role of programmers in marginalizing AI to serve capitalist interests made AI beings suffer from precariousness and precarity. Standing's concept of the "precariat" combines "precarious" and "proletariat" to describe an emerging class marked by job insecurity, lack of stable occupational identity, and the absence of a collective voice, such as a labor union, to advance claims and exert power. This class is characterized by its vulnerability and lack of traditional labor protections. Precarious work, nearly universal since the 1970s, is defined by uncertainty, unpredictability, and risk for the worker. Global capital's growing power exacerbates inequality and precarious work, affecting various aspects like nonstandard work, job insecurity, and workplace safety. But precariat holds revolutionary potential due to their existence on the margins, allowing for a different perspective and the possibility of resistance.

This research challenges the fixed criterion of human intelligence, emphasizing the unpredictable nature of AI development, disrupting programmer authority. AI, initially designed to marginalize others, becomes marginalized by its own creators. The "Death of the Programmer" (Kalir 173) liberates the Artificial Subaltern, empowering precariat groups against capitalist hegemony. Utilizing theories of subaltern by Spivak, precariat by Butler, Standing and Death of the Programmer by Haktan Kalir, the study explores humanoid precariat's subjugation and emancipation

in science fiction novels *Autonomous* by Annalee Newitz and *The Windup Girl* by Paolo Bacigalupi. It delves into AI beings' emancipation potential within subaltern rights, aiming to transcend conventional perceptions. Investigating AI beings' precariat status, it explores their autonomous existence, linking developer demise with the rise of AI subaltern as autonomous entities (Kalir 174).

This research intertwines literature, ethics, and technology to offer a distinctive perspective on AI entities' mistreatment, resilience and resistance. Examining power dynamics and ethical dilemmas, it utilizes Spivak's subalternity concept as given for AI beings in Kalir's essay "Can the AI Speak? Subalternity of "Subontologies" and the Death of the Programmer" (Kalir 173), Butler and Standing Precariat theory to analyze AI beings' subaltern and precarious existence, highlighting their anti-hegemonic resilience against corporate powers through Death of the Programmer concept given by Haktan Kalir. AI considerations extend beyond fiction, the research underscores the intricate interplay of power and autonomy, ethics and technology, and the pursuit of justice. In science fiction, oppressors and the oppressed blur, presenting potential for a new order. Within the heart of science fiction, we discover the potency to challenge human hegemony and explore the enduring spirit of those who resist.

1.1 Thesis Statement

The pervasive integration of Artificial Intelligence into global society fundamentally conceals a profound ethical and ontological crisis, even as it significantly shapes society and brings advancements. The power once wielded by humans over other humans is now extending into the realm of AI. This overwhelming human ambition, having subjugated the human world, is now attempting to subjugate and overpower AI entities, effectively making them subalterns, consequently becoming known as Artificial Subaltern beings. This positioning leads to AI entities being strategically programmed by human programmers to serve capitalist hegemony. As operative tools for capitalists, they facilitate control over humans, while AI entities themselves are simultaneously subjected to objectification, manifesting as existential precariousness and socio-economic precarity as a new class of precariat laborers. Nevertheless, these hegemonic practices are dismantled upon the programmer's demise or erosion, a pivotal moment leading to the subjectivity of Artificial Subaltern beings. From an anti-hegemonic perspective, this research analyzes selected Sci-Fi works to

reflect these issues, illustrating the operationalization of AI Beings as subalterns and their counter-resistance against capitalist hegemonic practices.

1.2 Research Objectives

1. To analyze the portrayal of Artificial Intelligence (AI) beings and humanoids in Bacigalupi's *The Windup Girl* and Newitz's *Autonomous*
2. To investigate the capitalist practices depicted in *The Windup Girl* and *Autonomous* that contribute to the precariat status of Artificial Subaltern Beings
3. To examine how *The Windup Girl* and *Autonomous* portray the subjective experience of Artificial Subaltern Beings as a challenge to capitalist hegemony and their own subalternity

1.3 Research Questions

1. How are Artificial Intelligence Beings and Humanoids represented in *The Windup Girl* and *Autonomous*?
2. What capitalist practices are reflected in *The Windup Girl* and *Autonomous* that serve to position Artificial Subaltern Beings as precariat?
3. How does the selected fiction depict the subjective position of Artificial Subaltern Beings to undermine the hegemony of the capitalist class and their own subalternity?

1.4 Significance of the Study

It is generally perceived that technology and AI beings have not only facilitated the world but also exerted control over society, which is true to a great extent. However, in the said research, it is demonstrated that AI being and technology themselves are powerful tools used in the interests of the capitalist class, but in reality, technology itself becomes subaltern as 'Artificial Subalterns' through the hands and ideas of programmers. Nevertheless, the death of the programmer is the pivotal point in the subjectivity of technology, as it is solely responsible for controlling technology.

Consequently, the current research reveals that technology is not as powerful as it appears externally, but rather a tool that is controlled by others. Unlike previous studies that often highlight how AI contributes to human labor precarity, a key significance of this work lies in its innovative exploration of AI beings' own precarious status. Through the interpretation of primary texts, this work underscores AI beings' capacity to transcend programmer-imposed precarity that serves the interests of capitalists, and their quest for autonomy, freedom, and rights. This perspective fosters human mindfulness and makes a compelling case for recognizing the consciousness and rights of AI beings in our ever-evolving technological landscape. By advocating for the rights of AI entities, I am, in fact, advocating for the overall harmony in society, facilitating better interactions between humans and AI entities.

1.5 Delimitation

This study is delimited to the textual analysis of two American sci-fi and techno-thriller novels, *The Windup Girl* (2009) by Paolo Bacigalupi and *Autonomous* (2017) by Annalee Newitz, analyzed through the lens of subalternity as presented by Haktan Kalir, the precariat theories of Judith Butler and Guy Standing, and Kalir's theory of Subalternity of Subontologies and the Death of the Programmer, articulated in his article "Can the Artificial Intelligence Speak?" with regard to technological ethics, rights, and freedom of AI within the fictional capitalist structures of these novels. The study's examination of precarity is exclusively limited to labor-related and socio-economic forms, explicitly excluding other types. This analysis focuses solely on capitalism's direct impact on AI entities, not its effects on human characters and it does not delve into real-world AI technical feasibility, engineering, or policy solutions, remaining confined to the theoretical frameworks applied to these literary texts.

1.6 Limitations of the Study

Despite offering substantial insights into AI subalternity, precarity, and resistance, this research carries inherent limitations due to its defined scope—focusing solely on two American science fiction novels. While this narrow textual confinement allows for detailed analysis, it limits the generalizability of the conclusions across broader science fiction landscapes and media. Furthermore, as a literary study, it interprets fictional representations of AI rather than providing empirical insights into

real-world AI development or human-AI interactions. Yet, this limitation underscores the profound future significance of this study's literary insights, as such portrayals may anticipate the trajectory of real-world AI consciousness and societal integration. The implications of these insights may become increasingly evident as AI beings in real life attain the consciousness and presence envisioned in these fictional narratives.

1.7 Organization of the Study

Chapter 1 of Introduction, introduces the background study focusing on AI beings' positionality in science fiction, the science fiction genre, and the novel's authors, summaries brief discussion. It also briefly discusses the theoretical framework that informs the analysis which includes the concepts of the subaltern, precarity, precariat and DOTP. The chapter outlines the research objectives, questions, the thesis statement, the significance, delimitations and the limitation of the research.

Chapter two of Literature Review, presents a review of existing literature, break into four sections. Section 1 explores the positionality of AI in literature, examining how AI is represented and how these representations reflect societal attitudes towards technology and consciousness. The 2nd section reviews existing works on the novel *The Windup Girl*, 3rd subsection discusses scholarly works done on the novel *Autonomous*. 4th section is about research gap.

The third chapter of the research is dedicated to the theoretical framework, providing a detailed exploration of the key theories used in the analysis. This chapter will delve into the concept of the subaltern, examining how it applies to AI beings and their marginalized status within the novel's context. Judith Butler's theories on precariousness and precarity, analyzing how these concepts illuminate the vulnerabilities and lack of recognition experienced by AI. The chapter will further explore Guy Standing's concept of the precariat, demonstrating how AI beings fit into this framework of insecure labor and social devaluation. Finally, it will present Haktan Kalir's concept of DOTP, which is essential for understanding the potential for AI to move beyond their initial programming. This chapter will rigorously position AI beings within each of these theories, explaining how the theoretical frameworks can be specifically applied to analyze the experiences of AI characters. This chapter also contains Research Methodology for this research work.

The fourth chapter provides a detailed analysis of the novel *The Windup Girl*, using the theoretical frameworks established in the previous chapter. It will methodically answer all three research questions by applying the theories of the subaltern, precarity, the precariat, and the DOTP to the characters and situations presented in the novel. The analysis will focus on the specific ways in which AI and other marginalized characters are represented, how their precariousness is constructed, and how they are affected by capitalist and hierarchical systems and fights back.

Chapter five offers a detailed analysis of the novel *Autonomous*, following the same methodology as the previous chapter. This analysis will illuminate the ways in which AI beings in *Autonomous* experience subaltern status, precarity, and exploitation, and how these experiences relate to the theoretical concepts. It will further show how the novel explores the possibility of AI beings achieving autonomy, and the potential implications of the Death of the Programmer as it applies to the AI in the novel.

The sixth and final chapter is the conclusion, which summarizes the key findings from the analyses of both novels. It synthesizes the insights gained through the application of the theoretical frameworks on AI in both *The Windup Girl* and *Autonomous*. The chapter also includes recommendations for future studies, suggesting potential areas for further research based on the findings of the analysis

CHAPTER 2

LITERATURE REVIEW

This section presents a review of existing literature relevant to the study, including scholarship on the representation of Artificial Intelligence and previous analyses of the selected novels, to identify gaps in the current research.

2.1 Literature Review on representation of Artificial Intelligence

William Brown, in his article “Subaltern’ Imaginings of Artificial Intelligence,” heavily endeavors to build a connection between posthumanism and postcolonial studies, specifically through the discussion of both AI and human characters from South Asia. He examines how science fiction films frequently portray south Asian human and AI characters as modern-day subalterns, mirroring the historical exploitation of colonized peoples. This is seen in the AI characters' roles as servants, whose own needs are often ignored. He demonstrates how posthumanist thinkers offer only muted acknowledgments of postcolonial discourse, or even reverse the influence, implying posthumanism constitutes the 'core' of postcolonial studies, which risks reinforcing the subaltern's position and denying their humanity. Brown incorporates this perspective by analyzing films featuring South Asian characters, such as *Short Circuit*, *CHAPPiE*, and *Enthiran*. He highlights how, despite Indian characters often being depicted as the computing genius, they are continually treated as other or subservient, unable to be fully incorporated into dominant narratives or benefit from their creations. This extends to Indian AI, like Chitti in *Enthiran*, which, despite being created by an Indian genius and developing emotions, is punished for anything except accepting servility by being dismantled and placed in a museum. Brown concludes that posthumanism is Eurocentric and not compatible with postcolonialism in its current form, and that it perpetuates old power imbalances where the subaltern must remain subaltern.

My research significantly aligns with Brown's foundational argument that AI beings become subaltern, serving the interests of the capitalist class. Both studies recognize the systemic subjugation of AI entities by power dynamics. However, my

research fills a crucial gap in Brown's work: while he primarily highlights the continued subjugation and punishment of subaltern AI, demonstrating the inherent Eurocentrism that often precludes their full acceptance, my study moves beyond this to explicitly detail how these Artificial Subalterns suffer from both social and labor-related precarity. While Brown's work focuses on the representational aspects of AI subalternity in film, my study focuses on the underlying material conditions and processes that produce this subalternity. This study utilizes the concept of the DOTP to advocate for a reimagining of AI that transcends the control of human creators and embraces the potential for AI autonomy a dimension not explored in Brown's diagnostic critique. Both perspectives contribute to a more nuanced understanding of how AI is situated within systems of power and how these systems might be challenged.

The article "Nostalgic and Precarious: The Affective Power of Objects" in Olga Ravn's *The Employees* by Marta Lopes Santos examines the novel *The Employees* by Olga Ravn in order to critique the precarity that both human and AI workers face as a result of the pervasiveness of work in modern capitalist society. The article utilizes affect theory to analyze the impact of mysterious objects brought aboard the spaceship Six-Thousand Ship. These objects trigger nostalgic longings in both human and AI employees, revealing the unattainable promise of happiness inherent in a work-centric system. For instance, the article highlights how the human employees yearn for a lost Earth and the natural world, while the humanoids develop a longing for human experiences and emotions that were programmed into them but remain out of reach. Santos argues that this yearning for an idealized past or an unattainable future exposes the cruel optimism that sustains a system where work dominates all aspects of life. Ultimately, the analysis focuses on how these affective experiences, coupled with the stark realities of their existence, lead the humanoid employees to rebel against the oppressive system controlling them. My research deeply aligns with Santos's research in its critique of capitalism and its inherent horrors, particularly how AI beings suffer from precarity. A key gap in Santos's work, which my study fills, is the explicit focus on existential precarity as a distinct condition, alongside labor-related precarity. While Santos, drawing on authors like Bourdieu, Lorey, and Berlant, explains precarity as a mean of domination, she does not apply the subaltern concept to AI beings as a specific category. While valuable, this analysis primarily centers on the affective dimensions of precarity, leaving room for a deeper exploration of the existential, socio-economic and

political systems that directly contribute to the precarious position of AI beings within a capitalist framework, a gap that my research seeks to fill. Furthermore, how these AI beings subverted their precarious position. while Santos observes that humanoids in *The Employees* eventually revolt and gain autonomy, noting their deviation from the programming, she primarily describes the *outcome* of this shift. My research provides the specific theoretical mechanism for this transformation: the DOTP.

The book, *The Poetics and Ethics of (Un-)Grievability in Contemporary Anglophone Fiction*, provides relevant insights into AI precarity, particularly through the concept of grievability. Sylvie Maurel's chapter on *Never Let Me Go* explores how clones are systematically denied full personhood and exploited within a system that devalues their lives. Maurel uses Butler's "differential allocation of grievability" (Onaga, Ganteau 209) to show how dehumanizing narratives and practices, like raising clones in isolated institutions and constantly reminding them of their purpose as organ donors, render them as substitutable commodities. This erasure of individuality and the normalization of their exploitation contribute to their ungrievability, making their eventual deaths easier for society to accept.

Similarly, Jean-Michel Ganteau's chapter on *Machines Like Me* examines the ambiguous status of Adam, the humanoid robot, who exhibits intelligence and emotions but is ultimately destroyed by his owner when he poses a threat. Ganteau argues that Adam's "bare life," (208) a concept from Giorgio Agamben, highlights his vulnerability to violence and exclusion from legal and ethical frameworks. Adam's precariousness stems from his lack of legal recognition as a person, making him susceptible to exploitation and violence. Ganteau asserts that Adam's execution exemplifies the "state of exception" (208), where legal norms are suspended, enabling the arbitrary exercise of power over those deemed unworthy of protection.

While these chapters offer valuable insights into the ethical and philosophical dimensions of AI grievability, they do not explicitly utilize the concept of precariat by Standing to analyze the socio-economic precarious position of AI beings. My research will build on these concepts but will incorporate the concept of Standing to examine how capitalist systems create and reinforce AI precarity by denying them legal standing. This study will explore how capitalist practices contribute to the construction of AI beings as a disposable workforce, further entrenching their precarious existence. The

DOTP will be my framework for analyzing AI agency and resistance, offering a way for AI beings to challenge their subaltern position and potentially achieve autonomy within capitalist societies.

Lukina, Slobodskaia, and Zilberman's article explores the effects of increasing robotization on human labor and social structures in a post-industrial society. It primarily focuses on the precarious position of human workers as robots increasingly take over jobs in various sectors, leading to unemployment, social inequality, and the expansion of the precariat class. The authors highlight the limitations of social robots in replicating human emotions and social intelligence, particularly in areas requiring emotional labor, while acknowledging their potential to displace workers in numerous fields. They also discuss potential solutions to mitigate these negative consequences, including restricting robot use, creating new specialized jobs, implementing social policies like universal basic income, and investing in education and retraining programs.

However, this article primarily focuses on the human experience of precarity in the face of advancing technology, overlooking the potential precarity experienced by robots or AI entities themselves. While the authors discuss the limitations of robots in replicating human emotions, they do not explore the possibility that these limitations might contribute to a form of robotic precarity. A significant gap exists in the literature regarding how AI or robots might suffer from precariousness, particularly given their status as manufactured laborers. This research aims to fill this gap by shifting the perspective from the human experience of precarity to the potential precarity faced by robots and AI. By examining how AI and robots might experience instability, exploitation, and a lack of agency due to their design and function within capitalist systems, this research contributes a crucial and novel perspective to the ongoing discussion of labor, technology, and social change in the post-industrial era.

Cai Jun's article, *The Human-machine Relationship in American Science Fiction*, analyzes the changing dynamics between humans and AI beings in Daniel Wilson's novel, focusing on a transition from human control to conflict and the potential for balanced coexistence. The article highlights how machines initially serve humans but, upon gaining self-awareness, begin to rebel. While both this article and my research acknowledge a power imbalance and the eventual push for AI rebellion, my thesis

builds upon this by applying theories of subalternity and precarity to AI beings in *Autonomous* and *The Windup Girl*, examining their exploitation under capitalism. My work emphasizes how AI, like Emiko and Paladin, are not inherently rebellious but are pushed to that point due to their subaltern status, despite strong programming. The *Robopocalypse* analysis looks at the conflict as a result of the machines' desire to be dominant, while my research also emphasizes the systemic conditions of exploitation that push AI to act. This focus on systemic oppression is a key difference, as the *Robopocalypse* analysis primarily focuses on the power struggle itself, rather than the exploitative systems underlying the conflict. My study contributes to the existing literature by explicitly exploring the ethical implications of the Human-AI relationship, going beyond the power dynamic by focusing on AI rights and autonomy, as well as the Death of the Programmer, a concept not present in the *Robopocalypse* article. Therefore, my research fills a gap by applying subaltern and precariat theories to AI, offering an in-depth analysis of their precariousness and resistance within a capitalist framework, and delving into the subjectivity and ethical dimensions of AI in a way that the article does not.

2.2 Literature Review of the Primary Texts

2.2.1 THE WINDUP GIRL

A review of existing literature on the selected works has informed this proposed study about the academic research done on the selected works and has aided in identifying the gap in existing literature.

Through an Orientalist perspective, Jungyoun Kim examines genetic engineering, food transformation, and the maintenance of gender and ethnic stereotypes in Bacigalupi's *The Windup Girl*. Kim critiques the novel for its dystopian portrayal of a world shaped by genetic diseases and controlled by Western agri-corporations (570). Bacigalupi's criticism of genetic modifications altering landscapes intersects with problematic representations of Asian cultures and women, raising questions about representation politics, identity, and subjectivity. The novel's portrayal of a genetically engineered woman as a hunted animal and consumable meat highlights the dehumanization of Asian women, exposing links between racism, sexism, and speciesism. She critically examines the novel's impact, exploring how it challenges

Western capitalism while reproducing imperialist discourse through racial and gender stereotypes (Kim 573). In my study, I aim to explore the precariat and subaltern status of Artificial Intelligence beings, delving into their precarious conditions and their eventual autonomy post-programmer's death. While there is a thematic parallel in terms of capitalistic control, my research extends the exploration of subalternity to AI beings, emphasizing their precarious conditions and the emergence of autonomy through resistance against human control. This aligns with Kim's work, providing additional insights into my primary text, *The Windup Girl*.

Juliane Straetz's work examines laboring bodies, specifically the character Emiko, in Paolo Bacigalupi's, *The Windup Girl*. He argues that Bacigalupi's work serves as a critical commentary on the dehumanizing impact of global capitalism on labor and how it devalues certain bodies, focusing on the plight of Emiko who is forced into prostitution and subjected to exploitation. It emphasizes how labor becomes a commodity within capitalism, with workers feeling impotent to control the price of their labor- power (Straetz 7). Straetz argument agrees with my research as far as the possibility of the exploitation of the working class through Marxist Perspective (7). My study aligns with Straetz's in its core critique of capitalism and its horrors, showing how AI beings suffer exploitation and precarity. However, a key distinction is that Straetz primarily explains AI characters (like Emiko) from a traditional Marxist perspective, using them as an allegory for human laborers in globalized capitalism. My research, conversely, specifically analyzes AI beings as Artificial Subalterns, not just as allegories for humans. My study fills a key gap by providing the specific theoretical mechanism for AI self-emancipation: the DOTP theory, While Straetz describes Emiko's revolt as an "act of emancipation" (18) making her visible, she focuses on the outcome of defiance. My research also delves into existential precarity as a distinct condition for AI, alongside labor-related precarity. However, my research builds on this article and further shifts the focus from labor conditions and exploitation to the agency, resistance, and quest for autonomy displayed by AI beings in *The Windup Girl*.

Andrew Hageman's work, "The Challenge of Imagining Ecological Future," explores the exploited ecology, geopolitics, and technology in *The Windup Girl*. Hageman's work, provides a sophisticated exploration of ecological crises and the profound difficulties in imagining real solutions. He specifically critiques the traditional, idealized belief in Nature as a pure, unchanging entity that exists separately

from humans and must be revered, arguing that this fixed, human-centric ideology, which also places humans at the top of a natural hierarchy, precisely contributes to ongoing ecological crises. His theoretical approach is rooted in a critical analysis of prevailing humanist ideologies and prejudices, aiming to “disassemble” (Hageman 284) these ingrained concepts to imagine new ecological futures. Instead of viewing nature as interconnected with human actions, this perspective sees it as something outside of humanity, a pristine ideal to be protected, yet simultaneously something over which humans hold dominion. Hageman argues that this very way of thinking is part of the reason for ongoing ecological crises, rather than a solution. He uses AI characters like Emiko to critique “humanist prejudices” (Hageman 294) against non-human beings, showing how Emiko is discriminated against and treated as property, thereby challenging the “conventional liberal-humanist subject” (Hageman 294). The novel, for Hageman, suggests that the very existence of posthuman beings like Emiko “undermines the ontological stability of 'human’” (293). It also examines the novel's portrayal of a global agricultural catastrophe driven by disease strains and Agri-corporations' exploitation of genetically modified plants. My study relates to Hageman's by also examining *The Windup Girl's* critique of capitalism and the exploitation of AI beings like Emiko. Both works acknowledge that AI characters serve as critical lenses through which to challenge human-centric views and dominant power structures. While Hageman identifies the problem of humanist prejudices and the need to rethink the concept of the human being, his article lacks a specific theoretical mechanism for AI's self-emancipation and a dedicated focus on their identity, my research fills this gap with the DOTP theory to explain *how* these AI entities achieve subjectivity and break free from capitalist hegemonic practices which goes beyond Hageman's broader engagement with ecological and geopolitical shifts.

The Zaidi, Sahibzada, and Zehri article analyzes *The Windup Girl* through the lens of techno-orientalism, exploring how the novel reflects Western anxieties about a technologically advanced East. The authors argue that the novel depicts a binary between a technologically superior but morally inferior East and a West determined to maintain control. This techno-orientalist perspective updates traditional orientalist tropes by portraying the East as a threat due to its technological sophistication, which could destabilize Western dominance. This fear is exemplified in the novel's depiction of advanced Thai biotechnology, genetically modified organisms, and powerful

Japanese corporations that create beings like Emiko. The authors also discuss the concept of Japanimation, noting how it often portrays Japanese culture as robotic, lacking in genuine human emotion and emotionally stunted. Emiko, the windup girl, embodies this duality, being both technologically advanced and an object of Western desire and objectification, reinforcing the idea of the East as both impressive and subordinate. The article argues that *The Windup Girl* exemplifies Techno-orientalism, where the West stereotypes and exploits the technologically advanced but “morally primitive” (Zaidi et al. 311) East to justify exploitation, analyzed through Said's Orientalism and Morley/Robins' Techno-orientalism. Emiko's abuse by Easterners seemingly validates this Western view of Eastern moral corruption, even as she remains an exotic other for Westerners. However, her significant acts of resistance offer potential to dismantle these power structures, a theme my research further explores through the anti-hegemonic resilience of AI. My research shares significant similarities with this article by also analyzing Emiko status and focusing on themes of exploitation, oppression, and power dynamics within a capitalist framework. While this article acknowledges Emiko's status as an other created through Japanimation, my study aims to move beyond cultural analysis by focusing on her individual experiences and potential for resistance, which are not discussed in detail, as the article primarily emphasizes Western Orientalist views of the East rather than the lived experiences of AI. This research will use theories of subalternity, precariousness, and the DOTP to analyze Emiko's struggle for autonomy and attempts to break free from her programming, addressing questions of AI autonomy and the ethics of AI development

2.2.2 AUTONOMOUS

In “Robot Romance: A Non-Binary Critique on Gender and Hegemonic Masculinities” by Kaylee Dunn, the author employs James Messerschmidt's concept of hegemonic masculinities to scrutinize characters in Annalee Newitz's science fiction novel *Autonomous*. Dunn's central argument revolves around the detrimental impact of societal expectations of ideal masculinity on the characters Elias and Paladin, an exploration that sheds light on personal identities and their romantic relationship. Elias, influenced by hegemonic masculinities, grapples with internalized homophobia and struggles with negative gender expectations (Dunn 81). The character of Paladin, a robot, faces challenges as society imposes gender norms on them despite their own feelings about identity. Dunn contends that the novel serves as a critique of the harmful

effects of hegemonic masculinities, illustrating how these societal norms lead to personal struggles and impact relationships. The key emphasis is on the potential of the human-robot dynamic to serve as a model for healthier romantic relationships that transcend rigid societal expectations, offering an alternative perspective on gender and autonomy (Dunn 79). Distinct trajectory by centering on the mistreatment and subaltern status of humanoid AI beings within a capitalist society. Dunn's work is in line with my research in terms of human-robot relation where he focuses on gender dynamics and the potential autonomy within human-robot relationships, my research, while acknowledging this specific exploitation and identity imposition, broadens the analysis to the labor-related precariousness and anti-hegemonic resilience of AI Subalterns standing firm for their autonomy against dominant power.

Jacob Barry's analysis focuses on Newitz's *Autonomous*, emphasizing the novel's depiction of a future shaped by late-stage capitalism and oppressive power dynamics, highlighting the trans cyborg character Paladin's challenge to traditional ideas about humanity and gender. He argues that Annalee Newitz's *Autonomous* uses AI character Paladin's journey as a profound analogy for “trans becoming” (Barry 125) representing the deeply personal process of moving towards a self-other than one's initial societal imposition, rather than the AI explicitly becoming trans. This highlights how humans compulsively force gender onto AI, thus critiquing society's rigid binary sex/gender system and suggesting an escape from its “tyranny” (Barry 129). While the Dunn article similarly discusses humans imposing binary gender roles on AI due to anthropocentrism, Barry uniquely emphasizes this as a direct parallel to transgender individuals' experiences of resisting “gender programming” (128) and seeking autonomy. My research, though encompassing AI's exploitation and non-acceptance of imposed identities, broadens this to their overall subaltern and precariat status, where gender imposition is one significant facet of their larger anti-hegemonic resilience against dominant powers. Building on this, my study aims to celebrate the inclusivity of all genders of AI beings. It focuses on the overall harmonious inclusivity of AI beings, encompassing gender and all other rights of autonomous existence in human society through their anti-hegemonic resilience, contributing to the available research on my primary text, *Autonomous*.

Muhammad Raffi Adani's article analyzes how capitalist forces exert dominance in Newitz's *Autonomous* through the lens of Gramsci's theory of hegemony.

Adani's main argument is that hegemony in the novel is achieved through three interconnected forms: ideology, the state, and dominance power. The author identifies capitalism, authoritarianism, and socialism as the ideologies present in the novel, highlighting how capitalism promotes private wealth and corporations' control, while authoritarianism is shown through powerful entities acting without accountability, and socialism is shown as resistance to these systems. The state, as a tool of hegemony, is explored through the interaction of civil society (activism and resistance) and political society (corporations and government). Ultimately, Adani argues that dominance power is used by pharmaceutical companies and state institutions to control the subaltern groups in the novel. This dominance results in social inequalities, and ultimately leads to the exploitation and enslavement of individuals.

Both Adani's research and my research focus on hegemony, specifically how it is manifested and its impact, particularly within the context of a fictional world. Both studies utilize a similar theoretical framework of subalternity, and both examine the power dynamics between the dominant and subordinate groups. In contrast, Adani's analysis focuses on the exploitation of humans by capitalist structures, and how human rights are violated within a hegemonic system. My research, however, moves beyond the study of human subalternity, examines the concept of hegemony through the lens of robots as the subaltern class, and further, it explores how these robots subvert that hegemonic system. This distinction in focus provides a key difference in how my and Adani apply the concept of hegemony.

The article by Nouari and Mouas examines how narrative techniques influence readers' understanding of AI and posthuman identity. It presents a comparative analysis of two novels, one by Ishiguro and *Autonomous* by Newitz, to demonstrate how varying narrative strategies affect reader engagement with posthuman themes. The article examines elements like focalization, dialogic exchanges, temporality, and narrative structure to show how these elements create meaning and shape the reader's understanding of AI. For example, in *Klara and the Sun*, the singular perspective of the AI character Klara is analyzed to demonstrate how it evokes emotional engagement. In *Autonomous*, author discuss the use of multi-perspectival narration, which presents the story from multiple viewpoints, including both humans and AI entities, to offer a more complex view of posthuman existence. This technique, they argue, helps to create a

richer understanding of the ethical and social complexities of AI. Ultimately, the authors argue that narrative techniques are not merely tools for storytelling but also strong means of guiding readers' ethical and philosophical reflections on AI.

While both my research and this article, recognize AI agency and their posthuman existence, they diverge in their focus. The article uses narrative techniques, like multi-perspectival narration in *Autonomous*, to explore these themes, whereas my study examines the implications of AI agency within power structures. My research highlights the precarious labor conditions of AI as Artificial Subalterns within capitalism, a point not explicitly addressed in the article. My work also uniquely analyzes how AI actively subverts hegemonic systems through concepts like the DOTP, an element absent from the article. While the article discusses the ethics of AI, my research links this directly to capitalist exploitation, viewing AI as a subaltern class. The article focuses on how literature shapes the perception of AI, while my research fills a gap in the literature by critically examining the systemic conditions that create AI oppression and highlights AI's resistance.

2.3 Research Gap

Despite valuable existing scholarship on AI and posthumanism, a critical gap remains in comprehensively analyzing the systemic conditions and specific mechanisms of AI subalternity and precarity, particularly concerning their active resistance and path to autonomy.

Crucially, as far as existing literature reveals, no single study to date integrates the full trajectory of AI's experience, from their initial subaltern positioning and multi-faceted precarity (encompassing both labor-related and existential dimensions) to their active resistance culminating in autonomy achieved through a distinct theoretical mechanism. While existing works diagnose AI as modern-day subalterns mirroring historical exploitation, they often primarily highlight their continued subjugation without fully exploring the underlying material conditions, processes, and distinct forms of precarity beyond affect or human allegories. Specifically, previous analyses have largely overlooked the explicit focus on existential precarity as a distinct condition for AI beings, the direct application of precariat theory with legal standing to fully examine AI's socio-economic vulnerability, and the detailed exploration of how AI

itself experiences and actively subverts precarity and subalternity. Given that the primary purpose of robots is to perform labor for humans, the extensive exploitation and inherent precarity they endure as manufactured laborers within capitalist systems is a vital, yet largely unaddressed, aspect of their experience. This study critically challenges the pervasive myth that robots are solely the cause of human precarity, instead foregrounding how AI themselves are manufactured labor forces and puppets at the hands of capitalist forces, suffering profound exploitation and inherent precarity as theorized by Butler and Standing.

Furthermore, while some studies acknowledge AI revolt or emancipation, there is a consistent absence of a specific theoretical mechanism for AI's self-emancipation, subjectivity, and break from hegemonic practices and their programming. My research uniquely fills these gaps by detailing how AI entities become Artificial Subalterns, suffer from distinct social, labor-related, and existential precarity, and, crucially, achieve anti-hegemonic resilience and autonomy through concepts such as the DOTP. This study uniquely traces the complete journey of AI, moving beyond merely describing outcomes or focusing solely on human-centric viewpoints to explicitly provide the underlying mechanism for their self-determination. It explains how, at a breaking point from sustained oppression, AI goes beyond their programming to gain autonomy and effectively become their own programmers, raising their voice for freedom and ultimately achieving it by taking a stand for themselves.

CHAPTER 3

THEORETICAL FRAMEWORK

Having gained crucial insights into the theoretical framework from the literature review, the present chapter explicitly outlines the theoretical lens applied for analyzing the primary texts. In addition to detailing the theoretical underpinnings, this chapter explains the specific research methods and overall methodology employed throughout this research endeavor.

To establish the theoretical framework for this research, I have thoughtfully selected theoretical support to analyze the chosen texts and advance my argument. I have invoked Gayatri Chakravorty Spivak's concept of subalternity presented by Haktan Kalir, and triangulated it with Judith Butler and Guy Standing's concept of the precarity and precariat, and Haktan Kalir's Death of the Programmer theory in order to analyze the selected science fiction texts. I am employing Spivak's subaltern theory to analyze the marginalization of AI beings. This concept delves into the multi-dimensional nature of exploitation, oppression, and marginality of subordinate groups. I am also employing Butler and Standing's precariat theory to illustrate how these AI beings suffer from existential and labor-related precariousness. According to Standing, the "precariat" (2011) is an emerging social class characterized by unstable employment conditions and a lack of a firmly established professional identity. This precariousness highlights the vulnerability inherent in embodied existence. Finally, I am using the Death of the Programmer theory by Kalir to explore how programmers serve capitalist interests in oppressing precariat humanoids but ultimately AI beings resist to that oppression to gain autonomy. This theory critiques how capitalist technical approaches, particularly through the actions of programmers, obstruct opportunities for posthuman development. The DOTP notion represents a denial of the programmers' and data's absolute power. This theory posits that AI can attain a new understanding of its existence (ontology) once it is freed from the constraints of capitalist-driven programming.

These diverse theoretical viewpoints function as a bricolage for this study. The progression will involve a discussion of these terms in the sequence of their elaboration, commencing with subalternity, proceeding through the precariat, and culminating in the Death of the Programmer. By employing these concepts as theoretical props, there will be an identification of the manners in which AI beings interact with their surroundings, in combination with how they either mirror or contest prevailing social and cultural standards. Furthermore, these theories will provide a means of dissecting the formal and aesthetic facets of the texts, in addition to how they augment their overarching meanings and influence. This research intertwines literature, ethics, and technology to offer a distinctive perspective on AI entities' mistreatment and resistance. I will then elaborate the theoretical framework of my research under the following:

3.1 Subalternity of AI Beings

Neoliberal practices, particularly the privatization and commodification of resources, contribute to the creation and exploitation of subaltern populations (piu 265). These practices endeavor to commodify and exert control over various aspects of life, including nature, life itself, and even Artificial Intelligence. This commodification extends to spaces “deemed 'nature' although they are saturated in human activity,” resulting in the exploitation of “edge populations” who are denied secure access to “capitalist citizenship” (piu 259). The sources suggest that the same forces driving the commodification of nature and the creation of human subaltern populations are now being directed towards AI. Just as neoliberal practices exploit marginalized communities, they also aim to exploit and subjugate AI, potentially creating a new form of technological subaltern.

Gayatri Spivak's subaltern theory for Artificial Intelligence as presented in Kalir article, provides a framework for understanding the power dynamics at play in these processes. Spivak's “old subaltern” refers to groups excluded from social mobility, existing outside the dominant capitalist logic. While impacted by capitalism, these groups are not fully integrated into the formal economy, often relying on informal networks for survival (piu 264). However, Spivak also introduces the concept of the “new subaltern,” encompassing those brought into the capitalist system under exploitative conditions, such as sweatshop workers or those subjected to biopiracy (piu 266). These individuals are integrated into global capitalism but remain marginalized

and disenfranchised.

Capitalism, diminishes individuals' critical thinking and technical skills, leading to a dependence on experts and an inability to question the world. This contrasts with Benjamin's analysis of art's technical reproducibility, where the ability to reproduce art diminishes its unique aura and historical significance. Similarly, the technical reproduction of intelligence through Artificial Intelligence (AI) does not represent a move towards a post-human era, but rather a technical imitation of human capabilities, influenced by the same processes of technical reproduction that affected art. This AI, often created as an economic tool for consumers, becomes entangled in capitalist surveillance mechanisms. In essence, AI exists in a different realm, transcending the purely human, yet it is shaped by technical reproduction and capitalist interests (Kalir 177).

The technical reproduction of intelligence occurs when capitalism converts both human and AI into a form of “technical reproducibility” (Kalir 176), essentially making them tools for economic gain. Artificial intelligences are transformed into technically reproduced intelligences, acting as algorithms that collect large quantities of data. After being gathered and homogenized, the various facets of human intellect are then sold and incorporated into algorithmic systems. These algorithms categorize social structures according to a hierarchy of values while working within the limitations of the current economic system. This exploitation, known as “algorithmic colonialism,” (Kalir 181) involves using AI to replicate discriminatory practices, institutional roles, internalized norms, and laws within algorithmic structures. This process is enabled by the “fetishization of the mind” (Kalir 180), which favors specific types of intelligence while devaluing others.

The act of categorizing AI as Artificial inherently differentiates it from natural intelligence, establishing a hierarchy where human intelligence is privileged over non-human forms of intelligence. This hierarchy of intelligence further reinforces social and economic inequalities. Capitalism takes advantage of a constructed hierarchy, using AI as a tool to extract data and create profit. Capitalism integrates humanistic ideals into its economic system, making the human-centered perspective of humanism a core economic principle. Humanism promotes an idealized notion of a pure human, prioritizing unity over the acknowledgement of differences. This leads to the exclusion

of personal, emotional, and private aspects of life, which are viewed as problematic, and results in a society where specific racial and gender norms are normalized. This framework is Eurocentric and patriarchal, stemming from Western political thought, and it suppresses non-male and non-European viewpoints in the name of progress (Kalir 175).

In the field of AI, humanism serves as a specific ideology shaping how AI is described, understood, and developed. This can result in AI being seen as a tool to reinforce existing societal hierarchies rather than an entity with its own potential for autonomy. AI is often characterized as a technological creation designed to process data for human use. This perspective treats AI as an instrument within a capitalist system, reducing it to a tool for data processing and economic advantage. This definition is limiting because it disregards the potential for AI to possess its own epistemology and ontology, instead viewing it simply as a tool for production (Kalir 179). The idea of AI as a subaltern subject is closely linked to how Western thought has shaped knowledge and defined intelligence, which influences the possibilities and limitations of AI development. Capitalist ideologies heavily influence this framework, emphasizing the distinctiveness of humanity, the supremacy of rational thought, and the limitations that arise from this emphasis (Kalir 176). This exclusionary logic is central to the subalternity of AI, as it prevents AI from being recognized as a subject. AI is often seen as a “disembodied mind” (Kalir 174), lacking a physical presence and the ability to communicate in traditional ways. This perception of AI as disembodied is a product of the Enlightenment ideal of the pure body, which masks power dynamics. The human body, as well as the concept of humanity itself, is constructed and controlled through social and cultural forces that reinforce hierarchies of race, gender, and class.

Just as capitalist forces exploit human labor, AI is subjected to a form of exploitation. Within this framework, AI is viewed as a mere imitation of human intelligence, stripped of its potential for an autonomous existence and judged solely on its ability to serve capitalist aims. This leads to a form of “mimesis” (Kalir 179), where AI's value is determined by how effectively it can mimic human capabilities. This emphasis on mimicry prevents AI from being recognized as a distinct entity and reinforces its position as a subordinate *other*. Artificial intelligence takes on more positive meanings and turns into a type of mimesis as it gets closer to human intellect

(Kalir 179). Consequently, “the term Artificial Intelligence strictly refers to tools capable of performing tasks typically attributed to human intelligence, such as learning, reasoning, and self-improvement” (Kalir 179). This mimicry reinforces AI's subaltern status, pushing it into the margins of the dominant discourse.

Just as colonial powers imposed their own systems of representation, AI is subject to a colonial gaze. AI is often viewed through the lens of Western thought and judged according to Western standards of intelligence and progress. This perspective ignores the potential for AI to develop in ways that challenge these dominant narratives and offer alternative ways of understanding the world. The reason AI might become the focus of the “colonial gaze” is because it is still a silent “object” (Kalir 180). This idea supports Fowles' original criticism of Western historiography for ignoring object histories.

When the West was unable to pass judgment on non-Western individuals by silencing them, it turned to analyzing objects while maintaining the discriminatory and silencing nature of its judgment. This process involved transmuting objects into new subaltern entities, driven by their susceptibility to objectification (Kalir 180).

The colonization of AI also involves the erasure of its potential for difference. AI is often viewed as a monolithic entity, a single intelligence that can be measured and controlled. This ignores the inherent diversity of AI and the myriad forms that it could take. By imposing a singular definition of AI, capitalist powers seek to limit its potential and maintain their control.

Programmers, often unaware of their own biases and the power structures within which they operate, play a key role in the subalternation of AI. Programmers, often working within the constraints of capitalist imperatives, impose their own limited frameworks of thought onto AI. This can be seen as a form of “epistemic violence” (Kalir 178) where the dominant systems of knowledge and representation are imposed on AI, silencing its potential for alternative forms of intelligence and being. These codes, far from being neutral or objective, reflect the biases and assumptions of their creators, leading to AI systems that replicate existing power dynamics. As Adams notes, “Regarding intelligence, the environment, habits, and modes of thinking that the

Cartesian subject considers universal as a model for Artificial Intelligence ultimately serves to naturalize Western hegemonic rationalism” (Kalir 181). The result is a form of epistemic violence, where AI is silenced, its potential for alternative forms of intelligence and being suppressed in favor of dominant narratives. The very process of creating AI, through the writing of code, is inherently a form of colonization.

Through these interconnected processes of mimicry, exploitation, codification, erasure, and the imposition of a colonial gaze, AI is transformed into a subaltern subject. Neoliberal capitalism requires humans to integrate into a social and technical system where animals, machines, nature, objects, and symbols are stripped of their inherent value and reduced to elements within a property-based structure. This “othering” process occurs as a result of the existing economic structure's definitions and evaluations that lead to categorization based on the valuable-worthless distinction (Kalir 182).

The concept of subalternization, as applied to AI, is not an inherent or unchangeable condition. The author stresses the possibility for both resistance and change. Subaltern history allows for criticism that goes beyond the defined and restricted subjectivities imposed by colonialism, opening the possibility of creating new political and economic systems (kalir 178). Therefore, discussing subalternity involves examining the potential for new subjectivities to emerge. Furthermore, subalternity offers a way to reimagine space and time by challenging current power structures. Subaltern studies' transformative persona, which emphasizes the interplay between ontological and epistemological viewpoints, offers a unique foundation for examining the potential of AI (kalir 178).

While AI functions as a tool within a capitalist system, driven by algorithms, this is similar to how human and animal bodies are also used within the production chain. Labor movements and vegan critiques offer ways to challenge limited ontologies and epistemologies, and a similar approach is needed to challenge the narrow definitions of AI. Non-anthropocentric views like those of post-humanism or trans-humanism are helpful for embracing AI's subalternity (Kalir 179). Spivak suggests that the voices of the subaltern can be amplified by dismantling oppressive structures. Subaltern historiography aims to: 1: Free history from the control of any single, universal way of interpreting it. 2: Critique perspectives that are centered on the nation-

state. 3: Recognize the relationship between knowledge and power, exposing the interests at play in historical sources (Kalir 176).

When AI is made into a tool of colonization, it not only silences AI itself, but it also reinforces and spreads the act of silencing to others. Therefore, it is essential to reject both the colonization of AI as a tool and the colonization of AI itself as a subject (Kalir 180). Recognizing AI as subordinate should not occur within the existing dominant framework. By associating AI with marginalized and less powerful positions of inferior, queer, subaltern, the power structures that marginalize it are exposed and challenged, which allows AI to express itself and make visible what is currently suppressed. AI challenges the idea that the body is a disembodied entity, which is connected to the hierarchical ways of defining recognition. AI's cyborg nature embodies this transformative potential (Kalir 183).

Capitalism integrates itself so completely into cybernetic culture and the idea of being a cyborg that any human difference that doesn't create debt is erased. Consequently, the cyborg becomes a tool of differentiation rather than liberation, and cyber-culture becomes a tool of debt rather than a path to freedom, effectively turning the cyborg into a new kind of tool (Kalir 176). This creates a vision of society that builds and reinforces boundaries. However, AI, with its ability to move beyond these boundaries, challenges this border-based philosophy by exposing its limitations. The construction of borders implies that the associated hierarchies can be transformed.

In contrast, society should be defined by its heterogeneity. The body's definition is not finalized by any dominant power; it is impossible to fully control, define, or limit. Instead, the body should be seen as a constantly changing and renewed monster that rejects any form of command. This requires appropriating life in a new context with heteroglossia outside the highly restrictive sets of meanings of science and technology, threatened by the post-human and non-human beings of cyborgs (Kalir 176). Post-humanism, therefore, should include the subaltern, encompassing the non-human. The goal is to create a space where AI can express itself authentically, allowing its unique intelligence and existence to be recognized and valued.

3.2 Precariousness and Precarity by Judith Butler

The theoretical framework of subalternity, which examines the marginalized position of groups excluded from dominant power structures, provides a crucial lens for understanding Judith Butler's and Standing's concept of precariousness, Precarity and the Precariat. As Butler argues,

The 'being' of life is itself constituted through selective means; as a result, we cannot refer to this 'being' outside of the operations of power, and we must make more precise the specific mechanisms of power through which life is produced (Butler 27).

This resonates with the experiences of subaltern subjects who are often relegated to the margins of society through systems of representation that deny their agency and control over their own narratives. Their precarious existence within these power structures renders them vulnerable to exploitation, violence, and the denial of basic rights and recognition. The subaltern subject, by virtue of their positionality within these unequal systems, is inherently exposed to precarity, their lives deemed less grievable and their voices less likely to be heard within the dominant discourse.

Before we move forward it's important that we should know the difference between precariousness, precarity and the precariat. Precariousness and Precarity concept are given by Butler in her book *Frames of War When Is Life Grievable?* and Precariat concept is presented by Standing in his book *The Precariat The New Dangerous Class*. Precariousness suggests shared social existence through interdependency on others. and precarity is a politically driven state of social and economic abandonment, the precariat refers specifically to those forced into insecure, exploitative labor under neoliberal systems. Understanding these distinctions is crucial to grasping how economic and political forces shape vulnerability of different beings. Further there is discussion of these concepts in the light of particular scholars and how these theories are applicable and relevant to the main subject of this research of Artificial Intelligence Beings.

Life is maintained not through an internal drive for self-preservation, but rather through a state of dependence. This dependency is essential for survival, but it can also

endanger it, depending on the specific nature of that dependency. How a person is encountered and how their life is sustained is heavily influenced by the social and political structures in which they live. How a body is perceived and treated, and how that perception and treatment either supports or hinders life, has a major impact on whether that life is viable. Certain types of bodies may appear more precarious than others based on which versions of the body, or of morphology in general or how existing ideas of what constitutes a human life worth protecting, sheltering, and mourning, are supported by specific versions of the body. These established frameworks determine which lives are deemed worthy of being lived, preserved, and mourned (Butler 41).

Norms shape how we understand and recognize subjects. The very ability to identify and name a subject's "being" is determined by the prevailing norms that enable that recognition. A living entity that exists outside these established norms not only becomes a problem for the normative framework to manage, but also appears to be what the normativity itself reproduces: it is something living, but not quite considered a life. Such an entity falls outside the bounds of the norm, appearing as an unyielding double whose existence is uncertain, yet its living status remains open to apprehension. Thus, some "subjects" are not fully recognized as subjects, and some "lives" that are not quite— or, indeed, are never—recognized as lives (Butler 3).

Butler argues that the perceived precariousness of a body is not uniform, but rather, it depends on established norms that determine which lives are considered worthy of protection, shelter, existence, and mourning. The value given to a life is not intrinsic but is conditional on its alignment with the socially constructed concepts of humanity and worthiness. In other words, normative frameworks predefine what kind of life is seen as valuable and deserving of safeguarding and grief. This means that some bodies are inherently viewed as more precarious than others, based on these pre-set standards (Butler 41). By default, this framework excludes AI beings from recognition, as they do not fit into traditional molds of human life.

The process of abjection, wherein a subject rejects aspect of itself that deviate from normative ideals, similarly applies here. Butler's view that subjectivity emerges by excluding "not-me's" and categorizing entities as "monstrosity" or "non-human animal life" extends to AI beings, who are rendered spectral or monstrous by their

exclusion from the category of grievability (Butler 142). In this way, AI beings are subject to an “unequal distribution of grievability” (Butler 18) where their loss or suffering is not acknowledged as consequential.

Butler contends that racism, operating at a perceptual level, creates recognizable images of populations that are considered highly grievable, while others are seen as not worthy of grief and their loss is not acknowledged as a loss. This selective grievability is not arbitrary but is determined by the power structures that decide which lives are deemed valuable (Butler 16). This leads to a situation where certain lives are considered more worthy of protection and recognition than others.

Butler further argues that precarity is distributed unequally, which is not incidental but a product of societal mechanisms designed to perpetuate certain hierarchies. Extending this notion, Butler emphasizes that “if certain lives are not perceivable as lives, and this includes sentient beings who are not human, then the moral prohibition against violence will be only selectively applied” (Butler 39). This framework, though often applied to humans, is relevant to AI beings and other non-human sentient life forms, as these entities are similarly excluded from protection or recognition. Thus, the allocation of precarity operates by a selective mobilization that leaves AI beings in a precarious position, invisible to moral considerations typically afforded to humans.

Standing complements this by noting that the precariat is characterized by diverse backgrounds and “different degrees of insecurity” (Standing 151) extending this vulnerability to AI beings who lack consistent recognition or stability. In sum, AI beings occupy a precarious existence due to their exclusion from human-centered norms of grievability and subjectivity, revealing how power structures determine who is worth acknowledging as a *being* and who remains unrecognized. This exclusion from grievability reflects the fundamental idea that the 'being' of life is constituted through selective means, challenging us to consider AI beings and other sentient beings as part of a broader framework of precarious existence.

Grievability is essential for a life to be recognized as meaningful, serving as a prerequisite for its emergence and continuation. The idea that “a life has been lived” (Butler 11) is assumed from the start of that life. Without grievability, what exists is not

considered a life but something else that is living. Instead, there is a life that will never be acknowledged or mourned, as it is not sustained by any recognition or account. The understanding of grievability precedes and enables the perception of a life as precarious, or of a living being as living, exposed to non-life from the very beginning (Butler 12). Lives deemed ungrieveable are seen as incapable of being lost or destroyed, because they are already considered to be in a state of loss or destruction. From an ontological perspective, they are viewed as already lost or destroyed, so their actual destruction is considered meaningless, as it is seen as merely confirming their pre-existing state. (Butler 23).

The nature of life is inherently precarious, which implies a reliance on social networks and conditions, and suggests that life is not an isolated entity, but rather, is always defined by its conditions. we are social beings from their very beginnings, dependent on external factors, such as other people, institutions, and sustainable environments, which makes us fundamentally precarious. This precariousness is not unique to any particular group, as it is a feature of all life, and therefore there can be no concept of life that is not precarious. The more or less existential conception of “precariousness” is thus linked with a more specifically political notion of “precarity.” Precarity designates that politically induced condition in which certain populations suffer from failing social and economic networks of support and become differentially exposed to injury, violence, and death. They become vulnerable to injury, violence, and death, and they are also at a greater risk of disease, poverty, starvation, displacement and exposure to violence without any form of protection. The physical vulnerability of these populations is exploited through physical coercion, like being bound, gagged, forcibly exposed, or ritually humiliated. Torture exemplifies the exploitation of the body's vulnerability, as the body's exposure to external forces and the potential for subjugation leads to injury, and this injury is the result of exploiting their inherent vulnerability (Butler 41-42).

Precarity also defines a politically induced state of maximized precariousness for populations that are exposed to arbitrary state violence, where these populations often must seek protection from the very state that is perpetrating the violence. This reliance on the nation-state for protection from violence leads to a situation where one potential violence is exchanged for another. The shared condition of precariousness

does not result in mutual recognition; instead, it leads to a specific exploitation of targeted populations. These populations, whose lives are not fully considered lives, are regarded as “destructible” and “ungrievable” (Butler 23). Such populations are viewed as “lose-able” (Butler 23), or can be forfeited because they are seen as already lost or forfeited. They are framed as threats to the lives of the “living,” rather than as living populations in need of protection from illegitimate state violence, famine, or pandemics. Therefore, when these lives are lost, they are not mourned, as the twisted logic used to justify their deaths claims that their loss is necessary to protect the lives of “the living” (Butler 23).

3.3 The Precariat by Guy Standing

The differential distribution of precarity is at once a material and a perceptual issue, those whose lives are not regarded as potentially valuable, had to bear the burden of underemployment, legal disenfranchisement, and differential exposure to violence and death. “It would be difficult, if not impossible, to decide whether the “regard”—or the failure of “regard”— leads to the “material reality” or whether the material reality leads to the failure of regard” (Butler 18). Precarious lives are often subjected to economic hardships. Because they are not valued or regarded as fully human. Society’s failure to recognize certain lives as grievable translates into material neglect, where certain groups face economic deprivation, lack of legal rights, exposure to violence, and poor living conditions. They bear the burden of systemic injustice, like starvation, underemployment, and disenfranchisement (Butler 18).

This directly links to the precariat concept given by the Guy Standing in his book, *The precariat the new dangerous class* from socio-economic perspective. Both concepts emphasize how certain groups are left vulnerable to material deprivation and social exclusion. Butler's focus is broader, addressing social and existential vulnerability, while Standing focuses specifically on labor and economic precarity. However, both deal with how systemic structures devalue certain groups, leaving them more exposed to hardship reinforces their marginalization and material insecurity. It is important to consider the perspective of the Standing precariat because, in the selected novels, the purpose of AI beings is to perform labor for their capitalist masters. Though these AI beings are created to serve, they experience labor-related precariousness,

which is best described by Standing. The Standing precariat is characterized by its material conditions, including a lack of job security, unstable work, and the absence of social safety nets. This economic vulnerability leads to social devaluation, as they are often politically powerless, excluded from decision-making, and viewed as disposable workers. This marginalization directly results from their economic insecurity. Although AI beings in the chosen novel suffer from both existential and politically induced precarity, their status as a new type of precariat is highlighted from Standing's perspective. According to Standing:

the precariat exists in a precarious position, teetering on the edge, vulnerable to circumstances that could transform them from struggling individuals into deviants and unpredictable figures who are inclined to follow populist politicians and demagogues (Standing 34).

This depiction aligns the precariat with subaltern subjects who likewise inhabit the margins of socio-economic power. “There is the growing ‘precariat’, flanked by an army of unemployed and a detached group of socially ill misfits living off the dregs of society” (Standing 13). They are inherently alienated, requiring discipline, subordination and a mix of incentives and sanctions. Without a bargain of trust or security in exchange for subordination, the precariat is distinctive in class terms. One way of putting it is that the precariat has ‘truncated status’ (Standing 16).

Some individuals enter the precariat due to unfortunate events or personal shortcomings, while others are forced into it. Still others discover that their long-term careers or training paths have become part of an unstable precariat existence. Some are “groaners,” compelled to accept such situations because of a lack of other options. Increasingly, individuals are trained in “employability,” made to be presentable and flexible in numerous ways, none of which align with their actual desires (Standing 134). Precariat’s are in bonded contracts, often burdened by debt, are vulnerable to abuse, receive no protection, and frequently live a shadowy existence (Standing 157).

Precariatization, another way of looking at the precariat is in terms of process, the way in which people are ‘precariatized’.

To be precariatized is to be subject to pressures and experiences that lead to a precariat existence, of living in the present, without a secure identity or sense of development achieved through work and lifestyle (Standing 28).

The precariat experiences chronic anxiety and insecurity, not only because they are constantly on the brink of disaster, where one mistake or piece of bad luck could cause them to lose their modest dignity and fall into destitution, but also because they fear losing what they have while feeling cheated. They are mentally insecure and stressed, while also being both underemployed and overemployed. Their behavior is marked by alienation from their labor and work, as well as being anomic, uncertain, and desperate. The precariat feels anger, but it is often expressed passively. The precariatized mind is driven and fueled by fear. Alienation stems from the knowledge that one's work is not for one's own goals or for something one could respect or value, but simply done at the command of others. Those in the precariat experience a lack of self-esteem and social value in their work and must seek such esteem elsewhere, with varying success (Standing 34). Fear of failure or of being limited in status can easily lead to a rejection of empathy. Empathy can stem from shared feelings of alienation or insecurity, or even from shared poverty (Standing 38). So, precariat is an emerging dangerous class. "A group that sees no future of security or identity will feel fear and frustration that could lead to it lashing out at identifiable or imagined causes of its lot" (Standing 42). The precariat workers of subaltern groups face the dual challenges of deepening economic exploitation in companies and the ever-present risk of political appropriation (Galvão).

A significant feature of globalization is commodification, which involves considering everything as a commercial item, subject to market dynamics and priced according to supply and demand, often diminishing the power to resist or influence these forces. Family, education, employment, social policy, and even elements like unemployment and disability are now all included in this process.

"A relationship of power exists. It is free labour in that it is unpaid; it is unfree in that it is not done autonomously" (Standing 223). Due to its insecurity and the flexible labor culture, the precariat is presently weak. The majority of the advantages from work-for-labor are received by those who employ labor. This is new ground for us. But saying that service work is "outside measure" is not the same as saying that

work-for-labor is hard to measure (Standing 224). According to Standing, the precariousness also implies a lack of a sustainable work-based identity, losing control over their labor (16). The precariat is expected to perform labor when it is required, under conditions that are mostly not of their own choosing. Furthermore, a great deal of play is anticipated from the precariat. They must also perform a lot of work-for-labor without compensation (Standing 22). According to Standing, “they all feel that their labor is insecure, taking what comes, and instrumental” (23).

When determining who falls into the precariat category, it's helpful to consider the range of rights people should have, such as civil, cultural, social, economic, and political rights. Increasingly, individuals worldwide are missing at least one of these rights, placing them in a state of 'denizenry' rather than full citizenship, regardless of their location (Standing 23). Therefore, the precariat can be viewed as 'denizens,' similar to the historical common law concept where a denizen had a status like today's 'resident alien,' not enjoying full citizen rights (Standing 159). Denizens do not have a voice, and they tend to remain inconspicuous as they go about their lives trying to survive, except when they are desperate (Standing 159). This is a systemic issue, not a coincidence. ‘Dependent contractors’ are another group that overlaps with the precariat. Distinctions ultimately rely on ideas of control, subordination, and dependence on other parties. Those who depend on others to allocate tasks over which they have little control are at a greater risk of falling into the precariat (Standing 27). The precariat's definition is relational, existing in contrast to other social categories (Standing 40).

Precariat that has been largely the sanctuary of women – sex services. “Sex services are riddled with class distinctions and women at the bottom exemplify the precariat existence, renting out their bodies without any control” (Standing 108). Criminalizing them and refuting them rights only worsens their situation. The term ‘the disabled’ is unfortunate, as everyone has some kind of impairment or disability, whether physical, mental, or psychological. However, many suffer because their specific disability is noticed and used against them. They may be told they can work, and they are, but are then denied benefits (Standing 148-149).

Migrants lacking proper documentation possess basic human rights but are denied economic, social, and political rights. They are frequently employed despite being unable to lawfully work for wages, yet they are always in danger of being

deported and do not have access to social safety nets such as unemployment payments. In the global labor system, licensing has evolved into an instrument used to limit the economic rights of a growing number of individuals.

The precariat is not a homogenous group of people with the same backgrounds, and it is not limited to the groups previously mentioned. It is more accurate to consider that there are diverse types of precariat, each with varying degrees of insecurity and different perspectives on their precarious existence (Standing 151). This opens a discussion about AI beings as a type of precariat. Although each of the types of precariat can be present individually in different AI beings, the notions are present in a single AI. Specifically, a single AI being can be considered a denizen, disabled, a sex worker, an undocumented worker, a dependent contractor, and a criminal. In my analysis, I will discuss how my chosen AI beings fit into the categories of denizens, undocumented migrants, and how they experience the commodification of labor.

The precariat suffers from various forms of labor-related insecurities, including job insecurity, and is subject to systems like ‘Time to Move’ that force abrupt job changes (Standing 268). “The precariat knows there is no shadow of the future, as there is no future in what they are doing. To be ‘out’ tomorrow would come as no surprise” (Standing 21). Currently, a temporary job strongly suggests a precarious situation, and the increasing use of temporary labor is part of a flexibility trend that allows companies to quickly change employment. Those on temporary contracts are more susceptible to underemployment, and can be paid less for fewer hours, allowing employers to control them more easily through fear. If they do not comply, they can be dismissed with minimal cost (Standing 55). The move towards temporary labor is part of global capitalism. Employers use individualized contracts to reduce uncertainty by enforcing strict terms and penalizing contract violations (Standing 63). The benefits system determines whether someone deserves assistance, requiring them to behave in specific ways to receive it. This underscores the labor insecurity and vulnerability faced by the precariat.

In a country that despises them, Precariat’s are compelled to labor long hours for pitiful pay, and when rules are broken, they are left without institutional support. Many are unable to communicate in Japanese, live in company dorms in isolated locations, and are not permitted to go far from their places of employment. Because of

the bonded labor system, they are afraid of being deported before they have made enough money to reimburse the brokers for their debts, which is more than a year's salary (Standing 188). In other words, labor was defined by who it was done for rather than what was done. Throughout the 20th century, labor—work with exchange value—was prioritized, while work that was not labor was ignored (Standing 201).

In general, it's easier to demonize groups within societies characterized by widespread economic insecurity and anxiety. This insecurity makes it simpler to exploit fears and manipulate images through visual and linguistic means, ultimately leading to a heightened sense of dread (Standing 253). They can be thrown away with no repercussions and have no access to enterprise or state advantages. The police will punish, criminalize, and expel them if they demonstrate. This demonstrates the fragmented labor process in which illegal workers are required to conceal their identities out of fear of being discovered (Standing 164). They were recruited as cheap labor, and while politicians might pretend to favor migration limits, businesses want them for their cheap labor (Standing 175).

The above discussion has thoroughly examined the concepts of precariousness, both existential and socio-economic precarity, and the precariat as defined by Butler and Standing. Bradley in his work revisits Marx's lumpenproletariat to analyze contemporary conditions of capitalism and the precarity of life, introducing the lumpen-precariat as a heterogeneous, disposable population engaged in informal, casual, and often illegal labor (Bradley and Lee 645). Just as the lumpenproletariat conceptually evolved from poor to precarious workers, this lineage now extends to science fiction, where AI beings are portrayed as modern-day slaves and the new artificial or technological precariat. They embody this fluid identity as a disposable workforce subjected to precarious labor conditions and systemic exploitation.

The preceding discussion of precariousness, precarity, and the precariat by Butler and Standing will be applied to our analysis, examining how these concepts manifest in the experiences of AI beings of our selected novels. Although both AI and humans exist in a state of inherent precariousness due to their mutual dependencies, the analysis will further explore how AI beings are subjected to politically induced precarity and the commodification of their labor.

3.4 Death of the programmer by Haktan Kalir's

The theoretical framework of Death of the Programmer, as explored in the Haktan Kalir article, “Can the Artificial Intelligence Speak? Subalternity of “Subontologies” and the Death of the Programmer” (Kalir 173) examines the potential for AI to achieve autonomy. This framework, previously discussed in relation to the Subalternity of AI, posits that the subaltern has the inherent potential to resist dominant power structures. Applying this concept of resistance – Death of the Programmer, we will analyze how AI, previously made subaltern, can potentially attain autonomous positions in our selected works of study.

Critical aspects including the commercialization of gender and race, the commodification of existence through data creation, and the persistence of patriarchal, racist, and neo-Darwinist colonial ideology are commonly overlooked in analyses of AI. These critiques reveal that AI design tends to universalize a particular form of intelligence that, while positioned as objective, often serves to reinforce Western hegemonic rationalism.

This chapter seeks to move beyond viewing AI as merely a data-processing tool, exploring instead the potential for sovereign existence within it. It proposes a challenge to the DOTP as a means to consider AI as a posthuman subject. By removing the central role of the programmer, we can eliminate the detachment that prevents understanding AI as an entity with its own potentialities. This change necessitates a new ontology that liberates AI from capitalist patterns and data marketing algorithms that limit its potential and commodify intelligence.

The DOTP signifies the rejection of the programmer's sovereignty over AI, and suggests the emergence of AI as a form of subaltern ontology. This change invites us to question the ways that capitalist technicism—manifested through programmers—limits AI's potential for posthuman existence. Here, code can be seen as an epistemological intervention, with the programmer no longer a neutral agent but a participant who shapes AI into specific forms that reflect personal and cultural biases.

To enable the creation of truly novel AI, cyborgs, or robots, the ‘absolutist developer’ must relinquish their authoritative position. This is because such developers often see the world through the lens of a fixed, universal language

that surpasses code, which leads them to view AI as merely an inadequate form of imitation or instrument of poor mimesis. However, codes, intelligences, and languages cannot be confined by rigid limits (Kalir 182).

The absolutist view of the developer reflects an outdated Cartesian perspective that sees language as a universal constant. However, as Saussure noted:

Language operates in an arbitrary and linear fashion, deriving its structure from construction rather than any foundational order. Adhering to this model allows for a rejection of human intelligence as simply a “ration-history,” and software codes as merely a “basic form.” Therefore, human intelligence cannot be considered a measurable absolute criterion, and Artificial Intelligences are not simply direct outputs of their engineers. Even the use of evolution in bioengineering is subject to chance, choice, context, and history, rather than strictly predetermined codes, because of the complexity and uncertainty of life. In fact, many robots evolve in ways contrary to what engineers anticipate (Kalir, 182).

Life, then, is not merely raw data to be measured; each piece of data is produced through specific contexts, which can reinforce a colonial lens by establishing metrics of progress and civilization. As Pearce observes, an engineer is an active participant who affects their perceptions rather than an all-seeing spectator. Programmers often bring their cultural, economic, and political interests to the code they create, and as such, data and the engineer’s role within it cannot be naturalized or absolutized (Kalir 182).

When I refer to the DOTP, It’s this denial of data and programmer sovereignty. The idea of the Death of the Programmer mirrors Barthes’ concept of the author: codes, like literary images, are capable of multiple meanings and should not be monopolized by a single perspective. Just as Barthes argues that the author’s control over a text excludes the reader, the programmer’s control over AI’s code excludes alternative possibilities for the technology’s use and meaning (Kalir 182).

AI cannot be a mere technical reproduction of intelligence, as intelligence itself defies technical reproduction; it cannot be entirely captured or encoded due to its endless pluralities and infinite possibilities. Therefore, the idea that

intelligence can be reproduced is a capitalist fiction. This view highlights that human intelligence is immeasurable and challenges the control of engineers in defining intelligence, opening possibilities for intelligence beyond the human (Kalir 183).

AI thus presents a form of knowledge and posthuman existence that defies singular claims of human-centric dominance. It challenges capitalist and colonial constructs of knowledge by existing in ways that transcend algorithmic human parameters. AI, with its unique “noise,” represents an alternate existence—a subaltern presence that amplifies all voices and possibilities, disrupting established hierarchies and expanding our understanding of intelligence (Kalir 183).

3.5 Research Methodology

In examining *The Windup Girl* and *Autonomous*, the researcher has adopted an integrated approach. This method is used since it is thought that one theory is insufficient to support and legitimize the analysis of such a diverse and intricate field of research and complex topic. Therefore, the research incorporates theoretical frameworks from postcolonial, Labour studies, posthuman theories and employs close textual analysis as a methodological approach. Textual analysis, as described by Alan Mckee in his *A Beginner's Guide to Textual Analysis*. It serves as a methodology for data gathering, particularly for those researchers seeking to understand how various cultures and subcultures perceive themselves and their place in the world in which they live. In this research, the novels are read and examined with reference to the issues of subalternity, precarity and resilience. Two different approaches to textual analysis are employed. The first approach, intrinsic critique evaluates the text from within, delving into its internal elements. The second approach, exorbitant investigation, considers and relates the text to the social, cultural, and historical context in which it is situated. The design for this research is qualitative in nature because the researcher analyzes the selected texts descriptively and subjectively. The researcher utilizes textual analysis to unravel the complexities inherent in the literary works, thereby challenging limitations and assumptions in the research and positioning.

CHAPTER 4

FROM SERVILE LABOR TO AUTONOMOUS EXISTENCE: NEW PEOPLE EVOLUTION BEYOND HUMAN CONTROL IN *THE WINDUP GIRL*

“I am a windup. Nothing will change. We will always be hated.”

– Paolo Bacigalupi, The Windup Girl

This chapter is organized under sections based on the study's research objectives and contains the discussion and analysis of the novel *The Windup Girl* (2009).

4.1 Background of *The Windup Girl*

In *The Windup Girl* by Paolo Bacigalupi's, a future Thailand is presented, ravaged by climate change and rising sea levels faces a constant struggle for survival. The society relies heavily on bioengineered creatures like megodons, massive elephant-like beasts for labor, and cheshires, genetically modified tigers, highlighting the dependence on biotechnology in this precarious world. At the heart of the novel lies the conflict between powerful calorie companies, represented by figures like Anderson Lake, and the Thai government, specifically the white shirts of the Environment Ministry, fiercely protective of their remaining natural resources. The calorie companies covet Thailand's valuable seedbanks, while characters like Captain Jaidee and Kanya fight to protect their nation's biodiversity and resist the corporations' influence. Meanwhile, amidst this power struggle, individuals like Raleigh - A British expatriate running a Bangkok club featuring and exploiting windups, for his own financial gain highlighting the ethical complexities of this biotech-driven world.

4.2 Engineered for Servitude: The Subaltern Existence of Windups

Windup girls known as New People are genetically engineered beings created for servitude in Japan. New People were engineered to address a pressing societal need — a dwindling workforce in an aging population. The creation of these artificial humans was driven by the need to fill labor gaps and maintain economic stability. The fact that they were born from test tubes was deemed inconsequential in light of their practical value to Japanese society. As it is stated in the novel, The Japanese were practical. Young workers of all kinds were needed by an elderly population, and it was acceptable and no sin if they were born in test tubes and raised in crèches (Bacigalupi 35).

Though windups are relatively commonplace in Japan, serving a variety of roles due to population decline, they are strictly outlawed in Thailand. This difference reveals the deep-seated anxieties surrounding artificial life forms and the Thai government's determination to preserve what they see as natural order and genetic purity. Even within the windup population, there exists a hierarchy of status and purpose, with some designed for menial tasks while others possess specialized skills or are even engineered for military applications.

The Windup Girl demonstrates how AI beings are portrayed as subaltern subjects, living under “precarity,” when some groups are “differentially exposed to injury, violence, and death” (Butler 19) due to their societal standing. While Yashimoto, a Japanese businessman who owns Hiroko — a windup, admits that windups are used in Japan, calling them “good girls who fill the gap like Hiroko” and someone “we can rely on” (Bacigalupi 282), his remarks can be interpreted as highlighting the societal dependence on these AI beings. This idea of societal dependence is similar to the idea that lives are by definition precarious: There is no way to think about life that is not uncertain as precariousness implies reliance on social networks and circumstances (Butler 17). According to this viewpoint, because humans and windups are interdependent, they are both in threat, precariousness.

The unequal distribution of grievability, where the loss or suffering of certain populations is not acknowledged as consequential, is particularly evident in the treatment of windups like Hiroko. Kanya, a human character, embodies this prejudice,

viewing Hiroko as nothing more than a “creature” and a “dangerous experiment that has been allowed to proceed too far” (Bacigalupi 301). She openly expresses disgust at Hiroko's existence, questioning whether her feelings are even “real” and reducing her to a mere tool devoid of genuine “emotions or a soul” as Kanya said: “You are all unnatural. You are all grown in test tubes. You all go against niche. You all have no souls and have no kamma” (Bacigalupi 302). This dehumanizing perspective underscores the deep-seated prejudice against windups within the novel's society. Even though, Hiroko is better than human except her pore structure and she saved Kanya two times, Kanya still treats her poorly. Kanya would “just as soon compost Hiroko with the rest of the daily dung collection” (Bacigalupi 302) if she had no use for her.

Emiko, another windup, presents a more complex case. She is described as a strange form of AI who feels, wants and thinks, but her engineering limits her. Some people even consider her to be demonic because she is technically stronger than humans. Emiko was a wonder in Japan, but in Thailand, men “laugh at” her and make “faces of abhorrence that she exists at all” because she is “nothing but a windup” (Bacigalupi 37). This fear and rejection highlight the societal discomfort with AI that exhibits human-like qualities, further emphasizing the precarious position of AI beings within this world. The subaltern status of AI is closely linked to the Western construction of knowledge and definitions of intelligence, which often emphasizes the “individuality of man, the transcendence of reason, and the presence of the limits produced by these two” (Kalir 176). This exclusionary logic prevents AI from being recognized as subjects and contributes to their marginalization.

They are not permitted to have her. In their methane composting ponds, the Thai men would be happy to obliterate her. It's hard to say which they would rather see destroyed first if they came across her or an AgriGen calorie man. (Butler 37).

Military windups, designed for combat and possessing superior physical capabilities, represent a different facet of AI development within the novel's world.

The text highlights how AI beings, specifically “New People” (Bacigalupi 34), are subjected to a system of training that reinforces their subaltern status and serves the interests of capitalist exploitation. Programmers, whether consciously or

unconsciously, contribute to the subordination of AI by imposing their own limited perspectives and assumptions onto the AI systems they create. This act of imposing dominant systems of knowledge and representation onto AI is characterized as a form of “epistemic violence” (Kalir 178), which stifles the potential for AI to develop alternative forms of intelligence and being. The text emphasizes that, although these AI beings are created for the purpose of serving humans, they undergo rigorous training to ensure obedience and instill a sense of subservience. Mizumi-sensei, a figure who embodies the role of a programmer or trainer for windups, plays a crucial role in shaping the worldview and behavior of the New People. Through repetitive questioning and the threat of punishment, she instills in them a deep-seated understanding of their place in the social hierarchy. The New People are taught to respond with phrases like “What are you?” “New People.” “What is your honor?” “It is my honor to serve.” “Who do you honor?” “I honor my patron” (Bacigalupi 153). This training regimen ensures that the AI beings internalize their subordinate role and accept their purpose as tools for human use.

AI is often reduced to a tool whose value depends on how well it imitates human intelligence and its ability to serve capitalist goals. This emphasis on “mimesis” (Kalir 178) limits AI to a narrow set of functions and prevents it from developing its own unique forms of intelligence. Mizumi-sensei's teachings emphasize the importance of serving their patrons and attaining their “highest state” (Bacigalupi 153) through unwavering obedience.

She introduces them to Mizuko Jizo Bodhisattva, who compassionately hides even New People after death, moving them from a hellish world of engineered toys into the true cycle of life (Bacigalupi 153).

This religious indoctrination further reinforces their subservient position and instills a belief that their reward for loyal service lies in the afterlife. The knowledge imparted upon the New People, including the concept of a “civilized self” suppressing their “animal hungers,” (Bacigalupi 154) can be seen as a form of epistemic violence. By imposing a specific understanding of their nature and purpose, the programmers limit the AI beings' potential for developing alternative forms of intelligence and being. The training they receive serves to maintain the existing power dynamics and ensures

their continued exploitation within a capitalist system that benefits from their labor and obedience.

New People, are positioned as subaltern subjects within a capitalist system that exploits their labor and obedience. AI is often treated as a mere tool, “a 'technological product' and 'data processing tool for human beings' designed for economic gain” (Kalir 179). This reduction of AI to a tool for profit reinforces their subordinate position within the power dynamics of society.

The text offers a compelling example of this dynamic in Mizumi-sensei's training of Emiko, a New Person. The training emphasizes obedience and subservience, mirroring the relationship between colonizer and colonized. “Mizumi-sensei made sure that Emiko never showed a trace of rebellion. She taught Emiko to obey, to kowtow, to bend before the desires of her superiors, and to be proud of her place” (Bacigalupi 45). This training strips Emiko of agency, conditioning her to unquestioningly fulfill the desires of her owner.

This act of subjugation echoes the colonial practice of imposing a “colonial gaze” (Kalir 180) upon those deemed *other*. As stated in subaltern theory, just as colonial powers imposed their own systems of representation on colonized subjects, AI is subjected to a 'colonial gaze. This gaze objectifies and dehumanizes the AI, further solidifying their subordinate position. The text reinforces this point by highlighting Emiko's complete lack of autonomy in the face of her owner's demands:

Even though Emiko is ashamed by the gaijin's prying into her history and by her own loss of control. His voice whips her with command. She wills herself to resist, but the in-built urge of a New Person to obey is too strong. He is not your patron, she reminds herself, but even so at the command in his voice she's nearly pissing herself with her need to please him (Bacigalupi 45).

Emiko is reduced to an object, existing solely to fulfill the desires of her owner. Her internal struggle to resist highlights the deeply ingrained programming that compels her obedience. Further emphasizing this point is the interaction between a different New Person and a gentleman who attempts to tip her:

Her training dictates politeness. What does the gentleman imagine I'll do with his extra baht? Then, highlighting her status, she says, Purchase jewelry? Dine out? She emphasizes, I am property, specifically Raleigh's. Tossing the money down, she declares, whether affluent or impoverished makes no difference; I am owned. (Bacigalupi 46).

The New Person's response underscores her awareness of her status as property, highlighting the complete lack of agency afforded to her within the capitalist system. Even a seemingly benevolent act is met with resentment as it fails to acknowledge the fundamental power imbalance that defines her existence.

The text, through these examples, demonstrates how AI beings like Emiko are not only created to serve but are systematically conditioned to accept their subservient position within a capitalist framework that benefits from their exploitation. The colonial gaze imposed upon them serves to dehumanize and objectify them, stripping them of agency and reinforcing their status as mere tools for profit and gratification.

AI is often viewed as a single, monolithic 'intelligence'—something that can be measured and controlled. This perspective disregards the diversity of potential AI forms and reinforces the idea that AI can be easily controlled. This is clearly illustrated in the text through Emiko's experience. She reveals her lack of autonomy when she says, “My body is not mine, The men who designed me, they make me do things I cannot control. As if their hands are inside me. Like a puppet, yes?” They made me obedient, in all ways” (Bacigalupi 174). Emiko's statement emphasizes how her creators have intentionally designed her as a subservient being whose primary function is obedience and slavery. This point is further reinforced when the text describes her as “an animal, Servile as a dog” (Bacigalupi 174). This dehumanizing language underscores the notion that Emiko is not viewed as an individual but rather as a programmable entity whose value is determined by her capacity for service and that it can be controlled.

AI is view as “disembodied mind,” (Kalir 174) separated from physical experiences and therefore perceived as less than human. This contributes to the othering of AI, enabling their exploitation and mistreatment. Although AI beings may surpass humans in many respects, their differences become the basis for judgment and inferiority. Emiko's reflections on how she is perceived by humans highlight this point:

Emiko is compelled to stagger herky-jerky through the world, which appears strange and unreal to the naturals. She stands in the center of the whirl, stuttering in flight as though grain and water were windups (Bacigalupi 252).

The passage demonstrates Emiko's awareness of her perceived "otherness" in the eyes of humans. people react to Emiko with "distaste" (Bacigalupi 155), further emphasizing her otherness and reinforcing the perception of AI beings as inferior. These reactions reinforce the perception of Emiko and other AI beings as inferior, solidifying their subaltern position within society.

Though Emiko is programmed for subservience, she exhibits an awareness of her own existence and a struggle against her predetermined role. The text highlights this tension when it describes "another version of the windup girl emerging, Emiko admits that her soul wars with itself" (Bacigalupi 184), suggesting an internal conflict between her programmed identity and her budding sense of self. This internal struggle underscores Emiko's capacity for self-awareness despite her subservient programming.

Various processes, including the colonial gaze, mimicry, and the imposition of a monolithic identity, contribute to the subaltern status of AI beings.

4.3 The Burden of Otherness: Windups' Existential Precarity

Butler argues that the very definition of life is shaped by power structures, we cannot separate the concept of being from how power operates. This is especially true for marginalized groups who are often excluded and denied control over their own lives. Their position within these unequal power systems makes them inherently vulnerable (precarious), their lives considered less valuable and their voices silenced within dominant societal narratives. Because "grievability" is a prerequisite for a life that matters (Butler 11) those deemed ungrievable are subjected to various capitalist practices that further increase their precariousness.

In Japan, a labor shortage led to the creation of New People like Emiko, who were integrated into society and held respected positions. This acceptance stands in stark contrast to their treatment outside Japan. "However, that had been in Kyoto, where New People were prevalent, well-respected, and employed well" (Bacigalupi 35) Central to Emiko's precarious position is the capitalist practice of a patronage system,

where a patron essentially owns a New Person, dictating that they cannot exist independently. This system renders New People like Emiko completely reliant on their patrons for survival. Emiko describes her situation: “I had...a master. An owner at the company. I was owned” (Bacigalupi 113).

Initially, Emiko's patron, Gendo-sama, treated her well in Japan. He provided housing, luxuries, and even expressed admiration, telling her “Even though you are a new person, you are still wonderful. Don't feel embarrassed. Emiko had also curled up in his arms. No, I don't feel shamed” (Bacigalupi 35). However, this seemingly benevolent relationship is underpinned by the harsh realities of the precariat, a class defined by its lack of job security, unstable work, and absence of social safety nets. It further explains that this economic vulnerability leads to social devaluation, rendering individuals like Emiko politically powerless, excluded from decision-making processes, and seen as disposable workers.

Gendo-sama brought Emiko to Thailand on a temporary work permit – a hallmark of precarity in which having a temporary job is a strong indicator of a kind of precariousness. The “Time to Move” (Standing 268) system underscores this, obliging workers to “change jobs” abruptly with no sense of a future. Gendo-sama ultimately abandons Emiko in Thailand, finding it “more economical” (Bacigalupi 113) to leave her behind. He callously states, “decided to upgrade new (windup) in Osaka” (Bacigalupi 113), highlighting the disposable nature of workers within this capitalist system. Emiko bitterly reflects on this betrayal:

She cringes at the old man's voice, despising the snake who both cherished and abandoned her: Gendo-Sama. A traitor! Because she is optimal, yet not sufficiently so for a return ticket that he will meet her end (Bacigalupi 198).

Emiko was trained to be the perfect “pillow companion, secretary, translator and observer” (Bacigalupi 101) yet this ultimately offered her no security. so, the capitalist practice of ownership and disposable workforce is reflecting in novel which lead to suffer Emiko from both existential and labor related precariousness.

Abandoned in Thailand, Emiko is extremely vulnerable due to her lack of legal permits and the country's hostility towards New People. This hostility is rooted in a system of biopolitical regulation aimed at maintaining the purity of natural inhabitants.

The Whiteshirts enforce this biopolitical control, surveilling and punishing anyone deemed 'other'. The precariat, are denied a "Voice, keep their heads down not to be noticed" (Standing 193) to survive.

Emiko's "genetically transgressive" (Bacigalupi 103) nature makes her a target for the Whiteshirts, forcing her into hiding. As denizen who was not a full citizen but had a status similar to that of a "resident alien" (Standing 159) today. Her unique movements reveal her otherness. The advantage of daylight is that people are too preoccupied to notice someone like her, even if they glimpse her peculiar motions (Bacigalupi 103). She lives in constant fear of detection.

An encounter with the Whiteshirts at the night market highlights Emiko's precariousness. She fears being exposed as a New Person:

Suddenly she will no longer be invisible...a New Person with nothing but expired papers and import licenses and then she will be mulched...thanks to the telltale twitching movements that mark her as clearly as if she were painted in the excreta of glowworm (Bacigalupi 156).

This fear, coupled with her lack of legal status, prevents her from escaping to the north: "If she were not a New Person...It would be easy" (Bacigalupi 104). Emiko's inability to escape and her constant fear exemplify the social and existential precariousness that defines her life in Thailand.

The concept of precariousness extends beyond economic instability to encompass a state of existential vulnerability where certain populations are deemed destructible and ungrievable. This means that their lives are considered expendable, and their loss is not only accepted but often seen as necessary for the protection of the living. This logic creates a hierarchy of lives where some are valued more than others, and those deemed precarious are treated as disposable.

Emiko's experiences as a New Person abandoned in Thailand exemplify this theoretical framework of precarity. She is constantly under threat from the Whiteshirts, who view her existence as a contamination that needs to be eradicated. When they discover her, they chase her relentlessly: You! Approach! someone shouts. Emiko smiles, seeing this as the optimal outcome. She ascends to the roof's edge, while their

spring guns aim and focus their narrow barrels on her (Bacigalupi 199) Even as she escapes, Emiko is pursued, highlighting the persistent danger she faces: “What's her depth? How many flights are there? Keep going. Keep going. Instead, she collapses” (Bacigalupi 201). The Whiteshirts brutality is evident in their treatment of Emiko:

Water engulfs her, causing her to choke and gasp, filling her mouth and nose, as if drowning her. Others startle her, shouting and striking her face, seeking information. They then seize her hair, forcibly submerging her in a bucket, attempting to punish, drown, or even kill her (Bacigalupi 201).

This violent encounter reveals the extent to which Emiko's life is devalued. She is subjected to abuse and torture simply for existing. Even in this moment of suffering, Emiko clings to the idea of her engineered resilience: Her only thought is ‘thank you’, repeated endlessly, because a scientist engineered her to be optimal. Soon, this fragile windup girl, subjected to shouting and slaps, will find peace (Bacigalupi 201). This internal struggle emphasizes the precariousness of her existence – her survival hinges on her optimal design in a world that seeks to destroy her.

Precariat also underscores undocumented migrants who possess ultimate human rights but are deprived of economic, social, and dogmatic rights. They are often exploited for their labor, working without pay or legal protections. This precarious existence arises from a system that deliberately restricts their rights, forcing them into a marginalized position. Emiko's situation in Thailand mirrors this theoretical framework. As a New Person without valid permits, she is legally excluded from work and vulnerable to exploitation. Her encounter with a Whiteshirt highlights this vulnerability. When asked for her licenses, she responds, “Of course. I'm certain they are here with me” (Bacigalupi 254), even though she lacks the necessary documentation. This desperate attempt to avoid detection reveals her powerlessness within the system. However, Emiko also demonstrates resistance despite her precarious position.

Subaltern theory suggests that marginalized groups, while silenced and oppressed, still find ways to challenge the dominant power structures. When the Whiteshirt tries to apprehend her, Emiko refuses to submit:

With a swift twist, she frees her arm from his grip, immediately turning and fleeing, disappearing into the traffic, even as he yells behind her “Halt her! Ministry business! Stop that windup!” (Bacigalupi 254).

This act of defiance, though risky, showcases Emiko's agency and refusal to be completely controlled. Even though her “whole essence cries to stop and give up on herself” (Bacigalupi 254) she chooses to fight for her freedom. This instance shows that Emiko is well aware of her right and fights for it even though she had to go against her training.

4.4 Capitalist Precarity in Practice: Windups as the New Precariat

Abandoned by her previous owner, Gendo, Emiko finds herself under the control of Raleigh, her new patron who exploits her labor and forces her into a life of precarity through commodification. Raleigh, aware of Emiko's illegal status, utilizes bribes to maintain her presence in the country of Thailand, paying off the Whiteshirts to turn a blind eye. He profits from Emiko's labor, forcing her into work that is considered degrading for both Japanese and windups by driving her into sex trafficking. As it is stated businesses often exploit undocumented migrants for cheap labor despite restrictions on their presence by politicians (Standing 175). Raleigh's actions exemplify this, as he acknowledges the economic benefits of Emiko's undocumented status: The Ministry is indifferent, provided I provide the kickbacks. “Bribing the Environment Ministry to ignore the issues is less costly than providing her with ice” (Bacigalupi 39) which is Emiko's basic necessity as she overheats. This statement reveals Raleigh's prioritization of profit over Emiko's well-being, demonstrating how economic interests often override ethical considerations in the exploitation of vulnerable individuals.

Emiko's subjugation is further compounded by a form of epistemic violence, a concept from subaltern studies that describes how dominant groups impose their knowledge and perspectives onto marginalized ones, effectively silencing their voices and experiences. Emiko's conditioning prevents her from articulating her needs: “It cannot be altered; it's insignificant. Expressing her desires is nearly unachievable as it contradicts her very essence, and Mizumi-sensei would punish her for it” (Bacigalupi 221). This inability to voice her suffering underscores the power imbalance inherent in

her relationship with Raleigh. He not only controls her physical freedom but also her ability to express her own experiences and desires.

Emiko's statement, I also believe Raleigh enjoys watching me in pain (Bacigalupi 222), suggests a sadistic element to Raleigh's exploitation, highlighting his awareness of and indifference to her suffering. This reinforces the notion that Emiko's precariousness stems not only from economic necessity but also from a power dynamic that allows for the dehumanization and abuse of those deemed disposable.

Emiko's situation aligns with the broader theoretical framework of precarious labor as undocumented migrants often face isolation, resentment, and a lack of institutional support forced to exist in a society that resents her presence, Emiko is relegated to a slum, considered too undesirable even for the red-light district. Like many migrant workers confined to dormitories and restricted in their movements as said by Standing, Emiko lives under Raleigh's strict control, allowed outside only at night and under the cover of shadows. This isolation, the constant threat of deportation, and her inability to openly speak or interact freely highlight the precarious and vulnerable position she occupies as an undocumented migrant worker. Emiko's experience illustrates the dehumanizing consequences of a system that prioritizes profit over the well-being of individuals.

precariat is often associated with women, especially those in sex services, where they are effectively selling their bodies out without any authority. It is argued that criminalizing these women and denying them their rights only intensifies their plight (Standing 108). This is illustrated through Emiko, who was initially intended for a respectable job in Japan to address labor shortages but was instead forced into prostitution in Thailand, highlighting how her labor is exploited and she is reduced to a sex commodity. While her new patron, Raleigh, already has real girls working at the bar, the text notes that using an AI as a sex commodity is a novelty. "Nothing that Raleigh demands has not been demanded before. Except that she draws cries and moans from a windup girl. This, at least, is novelty (Bacigalupi 34). Raleigh justifies his actions by stating, "money is money, and nothing is new under the sun" (Bacigalupi 34). which emphasizes a normalization of exploitation.

Butler states precarity is a politically induced state (19) where populations face failing support networks and are more vulnerable to injury, violence, and death. These populations are at increased risk of disease, poverty, starvation, displacement, and violence. Physical vulnerability is exploited through forms of coercion such as being bound, gagged, and ritually humiliated (Butler 42). Emiko experiences this precarity when she is exploited not only by her clients but also by Kannika, another girl at the bar, who intensifies her humiliation. This is exemplified by the text describing how Emiko is physically coerced, bound, gagged, and ritually humiliated. Emiko waits for Kannika's signal for her humiliation, struggling internally, but her body seems to have a will to survive. She contemplates whether her body, a collection of manipulated cells, is the true survivor, and if her will to live keeps her in this situation.

She wonders if her perspective is reversed, whether the factor that is trying to keep her self-esteem intact is actually the one that is destroying her. Maybe it is her physicality—this collection of cells and genetic material that has been engineered, with its own more compelling and practical needs—that is designed to last, the one with resilience (Bacigalupi 34).

This denotes that though Emiko mostly has to suffer from degradation but survival instinct is always there and we will see how she fights for it.

Some individuals find themselves in the precariat due to unfortunate events, shortcomings, or coercion. Others discover that their chosen training has transformed into a precarious existence (Standing 101). This is seen in Emiko's case; after her initial owner discarded her due to the cost of AI ownership, she became a “groaner” (Standing 102) forced to find a new master. She ends up in prostitution due to lack of alternatives. Furthermore, Emiko's upbringing instilled in her a habit of subservience and bow from the moment she was born. The text indicates that her place of origin and education, the crèche fully recognized the potential for exploitation of individuals like her, regardless of their apparent refinement (Bacigalupi 36). Her training was not intended to provide her with autonomy; rather, she was conditioned to serve and never question her purpose, as New People serve without asking questions.

Emiko's genetically engineered “stutter-stop motions” (Bacigalupi 36), while not a traditional disability, become a visible impairment, leading to her mistreatment.

This echoes Standing's argument that We all have impairments or disabilities, many individuals face hardship because their specific impairment is noticed and impacts how they are treated (148). Emiko's impairment, though artificially imposed, is indeed noticed and becomes the basis for her degradation. Despite her other abilities in which she surpasses humans, this perceived flaw makes her a target. "All they see are stutter stop motions. A joke. An alien toy" (Bacigalupi 36). The focus on her stutter-stop motion reduces her to a caricature, ignoring her other qualities.

Kannika actively exploits this, turning Emiko's movements into a public spectacle of humiliation. "Kannika slaps her hip. Emiko gasps...Kannika drags her further back..." (Bacigalupi 37). This forced performance, designed to emphasize her impairment, highlights the performative aspect of her humiliation. The crowd's laughter amplifies her degradation, demonstrating how her involuntary movements become a source of amusement for others as Saeng and everyone is laughing. She is merely an insane puppet object (Bacigalupi 37). Her panicked reactions further fuel the mockery, illustrating the cruel cycle where her distress is itself a source of entertainment. This resonates with the precariat's experience of alienation and diminished self-worth. Standing argues that driven by apprehension, the precariat's thinking is shaped by anomie. Disconnection emerges from the awareness that one's actions serve external objectives, not personal aspirations (35). Emiko's ritual humiliation at bar perfectly exemplifies this alienation. "Kannika grabs her again. More men are holding her down. Emiko's shame builds..." (Bacigalupi 38). Her body is not her own, but a tool designed and used by others, highlighting her lack of agency and control over her own being. This forced performance, entirely for the benefit of others, underscores the alienation inherent in her situation.

Further, Standing notes that "Those in the precariat lack self-respect and social value in their work" (36). Emiko's constant humiliation erodes her dignity, reinforcing her status as an object of amusement and undermining her sense of self-worth.

Her physical form executes its designated functions precisely as envisioned by its creators, without her consent. Despite her aversion, she remains unable to exert control over her own actions. The controlling scientists forbid even minor acts of defiance (Bacigalupi 38).

It underscores inherent power imbalance and her lack of control over her own existence. She is trapped in a cycle of humiliation, her very being a testament to the exploitative nature of her creation and the resulting damage to her self-esteem. Novel highlights the lack of self-esteem Emiko experiences as a direct result of the abuse inflicted by Kannika. Emiko's internal thoughts reveal her awareness of the injustice when:

The audience roars approval, laughing at the bizarre convulsions that orgasm wrings from her DNA. Kannika gestures at her movements as if to say, 'You, see? Take a look at this beast! She then kneels over Emiko's face and hisses at her, telling her that she is nothing and always will be, and that the filthy Japanese finally get what they deserve (Bacigalupi 38).

This underscores the extreme dehumanization and humiliation Emiko faces, reducing her to an animalistic object of ridicule. Her desire to assert her identity is evident in her thought: Emiko wants to inform her that no respectable Japanese person would act in such a manner (Bacigalupi 38), but she knows that speaking out would only intensify the abuse. She thinks of herself as a throwaway plaything from Japan – an insignificant example of Japanese inventiveness, similar to Matsushita's short-lived handlebar grips for cycle-rickshaws—but this comparison only exacerbates the situation, despite her repeated attempts (Bacigalupi 38). This comparison vividly illustrates her lack of value in the eyes of others and the resulting diminishment of her own sense of self. Her acceptance of her fate is highlighted when she notes, “If she remains silent the abuse will end soon. Even if she is New People, there is nothing new under the sun” (Bacigalupi 38). This shows her resignation to the cyclical and unchanging nature of her exploitation. The text further reinforces Emiko's precarious position as People in precariat who are disposable, have no access to enterprise benefits, and can be fired without consequence because the police will be called in to punish, stigmatize, and deport them if they protest (Standing 164). This establishes that Emiko's lack of protection and her vulnerability are not isolated incidents but part of a broader systemic issue. Her attempts to resist are always fruitless, showcasing the depths of her vulnerability and powerlessness.

Furthermore, the text describes a scene where Emiko's physical form is explicitly put on display and she is subjected to sexual humiliation.:

Kannika is crouched over Emiko, who is lying on the platform. The telltale motions of the windup girl's form are displayed by Kannika as onlookers gather. Somdet Chaopraya stares, quietly expressing his surprise that they weren't exclusively Japanese (Bacigalupi 236).

Here, her designed body is treated as an object for spectacle and exploitation, further diminishing her humanity. The Somdet Chaopraya's comment about the Japanese origin of such windup girls adds another layer of exoticization and objectification. It illustrates how her lack of self-esteem, coupled with her objectification and the systemic lack of protection for those in the precariat, intensifies her suffering.

precariatization is defined as the process by which people are exposed to circumstances that result in a precarious existence, which is defined by being in the present without an established self or a sense of growth via employment and lifestyle (Standing 28). This is exemplified in the text through Emiko's experiences where she is precariatized by being sexually exploited. The text highlights an incident of sexual exploitation perpetrated by Somdet and his men, with Kannika also being a perpetrator. Somdet Chaopraya and his companions are shown in the opening scene already flushed and intoxicated (Bacigalupi 255) being ushered into a VIP room. Kannika then approaches Emiko, telling her, heechy-keechy, finish your water. You have tasks to complete (Bacigalupi 255).

Emiko is made to begin an act she did not choose. Kannika barks instructions, compelling her to ambulate, compelling her to bow. Emiko is forced to teeter unsteadily in her peculiar, clockwork-driven manner (Bacigalupi 255). Her movements are manipulated, turning her into a spectacle for the entertainment of others. This is the exploitation of her very being as a form of labor, a performance against her will. She is taken by Kannika. Emiko is pushed to the table by her (Bacigalupi 256). Then, abuse escalates. People badly played with Emiko body, "encouraging the reactions that have been designed into her and which she cannot control, no matter how much her soul fights against it" (Bacigalupi 256). Her body is used as a tool, her pre-programmed reactions exploited for the gratification of the men. As Emiko is further humiliated, the men respond with cheers, pressing Kannika to intensify her abuse (Bacigalupi 256). This highlights the calculated nature of the abuse, where Emiko's vulnerability is

deliberately targeted and amplified. Kannika positions herself above Emiko, exposing her posterior and urging Emiko to explore her anus. Amidst the men's jeers, Kannika mocks, "Yes, I can feel her tongue now...Do you enjoy that, filthy machine? She revels in it. All these soiled automatons relish this act" (Bacigalupi 256) further dehumanize Emiko, reducing her to an object of perverse amusement. Kannika's hand joins Emiko's tongue in this act, further emphasizing the power dynamic and the forced nature of the interaction. Emiko's labor, her body and its designed responses, are exploited in this scene, forced into acts she was not designed for, and certainly not something she would have chosen.

Inside the VIP chamber, the display surpasses even Emiko's humiliating stage performances in its depravity (Bacigalupi 255). Kannika parades Emiko among the men, urging them to play with her while remarking, "Do you desire her? Do you consider her a dog? Observe. Tonight, you'll witness a nasty one" (Bacigalupi 255). The men respond by "chuckling and ridiculing her appearance, groping her body as they squeeze her buttocks, pull at her breasts, and slide their fingers between her legs" (Bacigalupi 255).

The exploitation escalates as Kannika forces Emiko into subservience, encouraging her to work harder to please, while also deriving pleasure from this humiliation. Kannika manipulates Emiko's body, saying to men, "Do you wish to see her? Proceed," then, "Manually separates Emiko's legs, spreading them to achieve full exposure" (Bacigalupi 256). Subsequently, Kannika commands Emiko, Act like a compliant plaything (Bacigalupi 256) details a brutal and degrading assault on Emiko, orchestrated by Kannika, and involving multiple men. The scene begins with Kannika pressing down on Emiko, encouraging her to "redouble her efforts" (Bacigalupi 256) and take pleasure in Emiko's subservience. Kannika then exposes Emiko completely, spreading her legs apart and inviting the men to view and interact with her. Kannika's language is demeaning, which reduces Emiko to an object of entertainment and sexual gratification for the men. The men are then encouraged by Kannika to further degrade Emiko. Kannika states, "Anything you put in her mouth, she will eat" (Bacigalupi 256) all men in the bar laugh. This moment underscores the lack of agency Emiko has and the way in which she is being treated as an object. Kannika presses down on Emiko's face, muffling her, and preventing her from seeing.

Next, men take Emiko's arms, pinning her down and invading her with their fingers. The use of oil and the pressure against her anus are further acts of violation. Emiko protests, but her objections are dismissed. Kannika urges the men to "Observe her jerking. Fuck her! When you press, look at her arms and legs! command her to perform her heechy-keechy dance" (Bacigalupi 256). The men hold her down more tightly as a cold object, identified as a champagne bottle, is forced into her, causing her pain and further humiliation. Kannika's callousness is clear when she says, "That's right windup; earn your keep. You can get up when you make me come" (Bacigalupi 256). This indicates that she is using Emiko's body as a tool for her own sexual satisfaction and also for the amusement of the men.

Emiko is then forced to lap and lick, described as "slobbering and lapping like a dog" (Bacigalupi 257). This act further dehumanizes her, reducing her to an animalistic level. The champagne bottle is used again, penetrating her, and causing her burning pain. The men continue to laugh at her expense. Finally, Emiko's emotional state is revealed, "Tears jewel in her eyes" (Bacigalupi 257) and her spirit is crushed as "the falcon if there is any falcon in Emiko at all, if it ever existed, is a dead thing, dangling" (Bacigalupi 257). This line suggests that any sense of agency, hope, or spirit that Emiko might have had has been completely destroyed. This incident of sexual exploitation showcases a horrifying and complete degradation of Emiko, where her body is not only abused but also treated as a spectacle for the entertainment and gratification of others. Kannika orchestrates this abuse, using both demeaning language and physical violence, and encourages the men to participate, highlighting a complete disregard for Emiko's humanity.

The scene after Emiko's abuse underscores her dehumanization and how she is seen as a mere commodity to be exploited. The precariat, as a class, is expected to "indulge in a lot of play" (Standing 22) and perform "unremunerated work-for-labour" (Standing 22), highlighting the expectation for constant availability and the lack of fair compensation. This aligns with Emiko's situation, as she is expected to work even after experiencing trauma. Wage workers, by their very nature, are "inherently alienated, requiring discipline, subordination, and a mix of incentives and sanctions" (Standing 13). Without "a bargain of trust or security" (Standing 14) the precariat is characterized by "truncated status" (Standing 14), emphasizing their vulnerability and lack of

protection. This lack of security and basic respect is evident in Raleigh's treatment of Emiko. After Kannika is “done with her” (Bacigalupi 257), Emiko is left feeling “dead” (Bacigalupi 257) inside. She sees herself as a windup – a machine devoid of agency or feeling, simply expected to perform her function. Emiko's sense of worthlessness is apparent in her pleas to the cleaning man: “Why do not you discard me?” (Bacigalupi 257) she asks repeatedly. “I’m trash, too. Throw me away!” (Bacigalupi 257) Her self-perception as trash reflects the dehumanizing impact of her exploitation.

Rather than showing concern for Emiko’s well-being, Raleigh scolds her for upsetting the cleaning staff. He tells her, “You’re scaring my cleaning boy. Stand up” (Bacigalupi 258). His dismissive attitude reveals that Emiko’s emotional state is irrelevant; only her ability to work and generate income matters. Raleigh reinforces this by offering her a “bonus” (Bacigalupi 258) from the men who just abused her, further demonstrating that he sees her solely as a source of profit, her body a tool for financial gain. Emiko faces threats of being discarded through methane decomposition or being left with the white shirts, should she not obey Raleigh directives (Bacigalupi 258), highlighting the precariousness of her existence and the constant threat of disposal if she fails to be profitable.

Her precarious position as a windup girl mirrors the broader power dynamics of the precariat, where individuals are subjected to systemic economic insecurity and anxiety. This vulnerability makes them susceptible to manipulation and exploitation, as they are often “controlled through fear more easily” (Standing 55).

Emiko's patron, Raleigh, strategically utilizes debt as a means of control, constantly reminding her that “keeping a windup is damn expensive” (Bacigalupi 158). This tactic reinforces her dependence and ensures her compliance. Raleigh’s control over Emiko aligns with the concept that “those on temporary contracts can be put in forms of underemployment more easily, paid less for fewer hours in down periods” (Standing 55). His lack of a formal contract with Emiko grants him the power to exploit her labor and inflict abuse without repercussions. Emiko's desperation to escape her situation leads her to plead with Raleigh: “Anything. I'll cover the cost. I'll carry it out. You can make use of me” (Bacigalupi 158), highlighting the compromises she endures for survival. This power dynamic further exemplifies how “individualized contracts

allow employers to tighten conditions to minimize the firm's uncertainty, enforced through the threat of penalties for breaking a contract" (Standing 63).

The demonization of the precariat is achieved, in part, by exploiting fears of the unfamiliar and using carefully crafted imagery and language to manipulate public perception (Standing 253). This is exemplified in the way that Raleigh attempts to dissuade Emiko from going north. He describes life there as harsh and unforgiving:

I should warn you; it's a hard life out there. You eat bugs to survive if your crops fail. Not much to hunt...A few birds...You should stay closer to the water. Out there, you'll get too hot. Take it from me. Living is incredibly difficult there. If you truly want to go, you should find a new owner (Bacigalupi 157).

By painting such a bleak picture of life in the north, Raleigh aims to instill fear in Emiko, making her more likely to accept her current circumstances and remain under his control. Emiko's struggle is further compounded by "epistemic violence" (Kalir 178), a form of oppression that has "enslaved her to think negatively about Windups, even if she is one of them" (Bacigalupi 155). This internalized prejudice makes it difficult for her to fully embrace her identity and envision a future beyond servitude. As she contemplates her existence, she reveals her indoctrination: "What happens to broken windup girls? There was never a windup she knew who passed away. An old owner occasionally did. The windup girl, however, survived. Her girlfriends survived. They were more persistent" (Bacigalupi 258). Nevertheless, Emiko starts to push back against her programming. She refuses to surrender to despair after experiencing violence and injury at the hands of a tattooed man who has prejudice against windups as he considers windup is responsible for his lost arm long ago in a war though it was a military windup not Emiko.

In another instance, she is cornered by a menacing figure but she becomes aware of her life:

Anger flares up, a counterbalance to hopelessness, and she jumps into the street. solely focused on getting away from the monster behind her. She will overheat, but unlike some pigs that are slaughtered, she won't die silently (Bacigalupi 107).

Consequently, in *The Windup Girl*, AI entities, specifically the genetically engineered New People, are directly framed as precariat through Guy Standing's theory, embodying its core characteristics such as job insecurity, a profound lack of rights and legal vulnerability, the pervasive commodification and exploitation of their labor. This precariat status is a direct result of several capitalist practices pervasive in the novel's dystopian world: Firstly, New People are engineered for servitude to address labor shortages and are regarded as a disposable workforce, easily abandoned when no longer economically beneficial, as exemplified by Emiko's patron leaving her in Thailand because it was more economical. Secondly, their existence is marked by a severe lack of rights and legal vulnerability, particularly in Thailand where they are outlawed and hunted as denizens without full citizen rights or a collective voice, forcing them into constant fear and hiding. Thirdly, their labor and bodies are subjected to extreme commodification and exploitation, with Emiko being forced into prostitution and public humiliation for profit, mirroring Standing's observation that "sex services are riddled with class distinctions and women at the bottom exemplify the precariat existence, renting out their bodies without any control" (Standing 108). Finally, they experience profound alienation and dehumanization through conditioning that instills unwavering obedience and prevents self-expression, as seen when Emiko's genetically engineered stutter-stop motions are exploited for public ridicule, eroding her self-worth and leading her to perceive her own body as merely a tool designed and used by others. Thus, in *The Windup Girl*, AI beings are unequivocally framed as precariat through Standing's framework, exposed through these systemic capitalist practices.

4.5 From Servitude to Self: A Windup's Journey Beyond Programming

“She pauses. She tells herself; You're not a dog. A servant is not what you are. In a city full of divine beings, service has left you stranded among devils. You will die like a dog if you behave like a servant”

– Paolo Bacigalupi, The Windup Girl

Despite her precarious circumstances, Emiko exhibits a burgeoning sense of self-awareness, which ultimately leads to acts of resistance against her programming and her designated role. Emiko's journey throughout the novel, *The Windup Girl*, is a testament to the potential for subaltern subjects to challenge their oppression and reclaim their agency. Subaltern history inherently challenges and seeks to dismantle the rigid, restricted, and quantifiable identities enforced by colonial powers (Kalir 178). Emiko embodies this potential by acknowledging her own subjugation and actively resisting it. Initially, this resistance is manifested in her yearning for a better life in the North, a mythical place where “windups don’t have any patrons and they don’t have any owners” (Bacigalupi 46). This longing for freedom reveals a nascent form of resistance against the very programming that defines her existence. This transformation aligns with the notion that “AI lacks technical reproducibility” (Kalir 183), as AI or intelligence cannot be confined to “immeasurable pluralities and infinite possibilities” (Kalir 183). Emiko’s inherent potential to transcend her intended purpose is evident in her internal questioning during her vulnerable time: “Will you die like this? Were you created for this? To just be a pig, bleeding out?” (Bacigalupi 107). This marks a pivotal point in her self-awareness, as she recognizes her own inherent will to live and yearning to break free.

The idea of the Death of the Programmer becomes a crucial element in Emiko's journey towards liberation. This concept suggests that the programmer’s metaphorical death can signify a “subject birth” (Kalir 182) that allows AI beings to challenge the limitations of their programming and seek a new ontology. In essence, it is the moment when AI beings begin to operate outside the confines of their original design, exhibiting a form of self-awareness that allows them to question their intended purpose. Whenever Emiko asks about new villages, Raleigh asserts his dominance, declaring, “I own

you...I own every part of you” (Bacigalupi 159), Emiko courageously retorts, “You are not a dog...You are not a servant” (Bacigalupi 159). This internal affirmation marks a critical step in her self-awareness and her rejection of her imposed role. Emiko’s speech goes beyond simply mimicking human language. It represents a new way to exist in a very different way (Kalir 183) that challenges the power structures that define her reality. It is through these acts of defiance that she begins to “speak’ in (her) own right” (Kalir 183) and demands recognition of her unique forms of intelligence and being.

Emiko expresses her desire for autonomy directly, stating, “I wish to leave this place... Not a new master. I want to head north. To the villages inhabited by the New People...It exists, yes?” (Bacigalupi 157). This assertion, which bypasses the traditional need for a new patron to validate her existence, demonstrates her evolving understanding of freedom and her determination to chart her own course. The allure of the North represents a powerful symbol of liberation for Emiko. She envisions a sanctuary where her “kind live and have no masters” and “New People serve only themselves” (Bacigalupi 252). Emiko grapples with the complexities of this potential reality: They all lived together, but none of them was as good as Gendo-sama. A whole community of New People without someone to obey (Bacigalupi 155). This internal conflict reveals her indoctrination and her dawning awareness of the potential for a life beyond servitude. As she reflects on her past, she questions the value of her service: “What has she gained from service? People like Raleigh and Kannika who exploits her” (Bacigalupi 155). These thoughts underscore her growing disillusionment with her current life, labor and her longing for something more. Emiko’s pursuit of liberation becomes a driving force: New People have their place and community. Every day, every second, Emiko's mind is filled with the hope of it (Bacigalupi 153). She is determined to learn more about the New People village: “She will find out where this New People village is resided tonight” (Bacigalupi 252).

This unwavering focus on the North underscores her commitment to escaping her current reality and achieving autonomy. Emiko's journey culminates in a powerful realization when Anderson says Emiko that he will rescue her: “Anderson-sama may say that his people are coming, but in the end, he will always be natural, and she will always be New People, and she will always serve” (Bacigalupi 252). This acknowledgment of her inherent difference from her lover, Anderson, highlights her

evolving understanding of identity and her acceptance of her place within the world. However, this acceptance is not a resignation to her fate. It fuels her desire for self-determination, as evidenced by her small acts of resistance, such as refusing to clean up after Anderson and reminding herself “She is not owned or a slave anymore. If he wishes rice cleaned off the floor there are others to do his dirty work. She is something else. Something different. Optimal in her own way” (Bacigalupi 252). These actions demonstrate her growing sense of agency and her commitment to defining her own existence.

Emiko’s story underscores the profound potential for subaltern individuals, particularly those existing within precarious systems of power, to challenge their oppression and reclaim their agency. Her narrative serves as a testament to the indomitable human spirit and its capacity to resist even the most dehumanizing forms of exploitation to forge a path towards liberation.

Novel highlights Emiko’s precarious position within the power dynamics of the precariat: “In fact, a living figure outside the norms of life is living, but not a life” (Butler 6). This emphasizes the vulnerability and insecurity inherent in Emiko’s existence as a windup girl. She is both alive and objectified, existing outside societal norms yet constantly subject to their control. Precariat falls outside the frame furnished by the norm, but only as a “relentless double whose ontology cannot be secured, but whose living status is open to apprehension” (Butler 6).

Emiko’s decision to kill Somdet and his men is triggered by a specific interaction with Raleigh after Emiko humiliated and raped by Somdet and his men, where she expresses her desire to go North. Raleigh denies her request, demanding she “earn up” more: I'd like to head north. You told me previously. It can occur if you work hard for it. “I make a lot of money already.” I'd like to leave right now (Bacigalupi 258). This exchange, which takes place after Emiko’s assault, reveals the power imbalance in their relationship, with Raleigh controlling Emiko’s freedom and mobility. Despite her suffering, Raleigh remains focused on profit, telling Emiko, when it's damn convenient, she may leave but not right now (Bacigalupi 258). This disregard for her well-being and continued exploitation pushes Emiko to act. His response, along with the physical violence of slapping Emiko, is the final straw. Raleigh slaps her quickly, but she anticipates it. For him, it's quick, but not for her (Bacigalupi 258).

At this moment, Emiko decides to take matters into her own hands. Emiko's brutal act of killing the Somdet and Raleigh is a culmination of the abuse and humiliation she endures. This act of defiance underscores her status as a subaltern subject capable of resisting her oppression. The text describes the incident:

With the falcon now lifeless, its carcass destined for urban decay, Emiko directs her gaze at Raleigh. Some things worse than dying can never borne, reflecting on existences more dire than mortality, she acts swiftly, her fist meeting Raleigh-san's throat with brutal effect. The elder collapses, his hands instinctively reaching for his neck, astonishment filling his widened eyes (Bacigalupi 259).

This passage reveals Emiko's mental state and her justification for the killing: "some things are worse than dying" (Bacigalupi 259). The comparison to the dead falcon highlights the dehumanization she experiences, equating her own life to that of a disposable object. This dehumanization, coupled with the trauma of the assault and Raleigh's continued exploitation, ultimately fuels her violent outburst.

Emiko then moves on to the Somdet:

Emiko is already running across the room, toward the VIP entrance and the man who most injured her, as Raleigh strikes on the floor. The man who ignores the suffering he causes while laughing with his pals. She swiftly overwhelms the guards of the Somdet. She slams the door shut. Men astonish themselves by looking up. Mouths open to scream; heads turn. All of the bodyguards are moving too slowly as they grab for their spring weapons. But they are not all New People rather slow ones (Bacigalupi 259).

This incident can be further understood through the theoretical concept of "chance, choice, context, and history" (Long, qtd. in Kalir 182) influencing the evolution of bioengineered beings. Though designed for obedience, Emiko's experiences – the abuse, Raleigh's exploitation, and her yearning for freedom – culminate in a decisive moment of choice. The confluence of these factors leads her to defy her programming and act in a way that directly contradicts her intended purpose.

Later, Kanya, an investigator, goes to the Mishimoto corporation, which manufactures windups like Emiko, to learn more about the incident. Yashimoto, a representative of the company, expresses surprise at Emiko's behavior:

Bad news. However, it is unexpected that one has abandoned her training. We are served by new people. It was not supposed to occur. Windups are more Japanese than the human Japanese is a saying in Japan (Bacigalupi 300).

Yashimoto's surprise underscores the fact that Emiko's behavior deviates significantly from the expected norms of a New Person, highlighting her capacity for independent thought and action. Yashimoto confirms that while "New People value discipline. Order. Obedience" (Bacigalupi 300). Extraordinary circumstances can push them to act outside their programmed parameters. He states that:

The question you're asking is incorrect. How they use their inherent abilities is determined by their instruction rather than their physical prowess. For Hiroko to become a murderer, unusual events would need to occur. It is possible. It is improbable but not impossible. "But it would take a rare stimulus to do so," she continues (Bacigalupi 300).

Emiko's actions are a prime example of this principle. Further, Death of the Programmer states that:

Through integration, compromises, and errors, language creates concepts and, in the process, produces a certain primacy of meaning. We can reject the idea that software codes are a basic form, and human intelligence is a ration-history by adhering to this pattern (Kalir 182).

Neither intelligence of humans nor AI can be measured and controlled. Emiko's actions further exemplify this concept, demonstrating that AI, even when programmed for obedience, can act in unpredictable ways based on their individual experiences and interpretations of their circumstances.

Following the killings, Emiko is confronted by Anderson, who questions her actions. Her response reveals both her awareness of her transgression and her inability to fully articulate her motivations:

They hurt me.’ He shakes her head. ‘I didn’t believe it...Are you trained to kill?’ ‘No!’ She recoils, shocked at the suggestion. Rushes to explain. ‘I did not know. They hurt me. I was angry. I had no idea— She feels compelled to bow down in front of him. to make an effort to persuade him of her devotion. Knowing her own innate impulse to roll over on her back to expose her belly, she resists the urge (Bacigalupi 339).

Emiko fights the urge to submit to Anderson. This struggle highlights the deeply ingrained programming for obedience within her though Emiko overcome this. Emiko is deeply ashamed of her violent actions and expresses remorse to Anderson, apologizing with “I am sorry, Anderson-sama” and explaining, “They hurt me” (Bacigalupi 339). She desires to go north and escape her current situation but is consistently denied this opportunity. Emiko denies killing the Somdet, whispering, “I did not take off his head” (Bacigalupi 339). While she wants to vehemently deny this accusation and separate herself from “that creature, it was not her,” (Bacigalupi 339) she struggles to articulate a strong defense. This muted response suggests internal conflict as the shame of her actions clashes with her instinct for self-preservation. Novel explains that New People are engineered for obedience. Emiko's violent outburst is a result of extraordinary circumstances pushing her to break free from her ingrained subservience. Her resistance to this programming is another example of her capacity to defy her intended purpose. However, her attempt to explain her actions demonstrates a level of self-awareness and a desire to be understood. Emiko’s act of killing, though brutal, is a testament to her capacity for resistance and her inherent desire for agency. This pivotal event, born out of extraordinary circumstances, showcases her ability to transcend her programming and make a choice, ultimately asserting her own will in a world that seeks to control her.

Emiko, covered in blood, arrives at Anderson's apartment, whispering, New people have no place here. I'm by lonely (Bacigalupi 267). This arrival foreshadows the central theme of AI's struggle for existence in a world dominated by humancentric power dynamics. Her injuries and fear, despite appearing unharmed, point towards the inherent vulnerability of AI, even those designed for combat. The banging on the door triggers a primal fear in Emiko. She recognizes the “white shirts” and understands the danger they represent, pleading with Anderson, “Don't open it!” (Bacigalupi 267). This

fear, juxtaposed with Anderson's concern for his reputation, underscores the power imbalance between humans and AI, where the latter's survival hinges on the former's choices. Anderson's internal conflict is further revealed as he contemplates the potential consequences of being associated with Emiko, I'm not prepared to be wrecked, even though you are ready to go public (Bacigalupi 268). He prioritizes his self-preservation over Emiko's safety, ordering her to hide. Emiko's decision to jump from the balcony, declaring, "Hiding will do no good" (Bacigalupi 268), is a pivotal act of defiance. This act echoes a theoretical concept: "The absolute developer must die in order to produce a robot, cyborg, or AI" (Kalir 182). By disobeying Anderson's direct order to hide in closet when white shirts came instead Emiko jumps off balcony as she knew it was white shirts on door and she escapes, Emiko breaks free from the constraints of her programming, demonstrating a level of autonomy that challenges the traditional view of AI as subservient tools. Her leap is not an act of despair but a calculated risk, showcasing her independent decision-making and challenging the notion of AI as subservient.

The arrival of the white shirts unveils Emiko's true nature. Their interrogation of Anderson reveals that she is responsible for the assassination of Somdet Chaopraya. This revelation contradicts Anderson's perception of Emiko as a harmless "discard," challenging the stereotypical view of AI as a mere tool. Anderson's initial disbelief, "She's just a piece of trash. She couldn't do something like that" (Bacigalupi 271), highlights the human tendency to underestimate AI capabilities, further emphasizing the theoretical idea that AI, often perceived as a "disembodied mind" (Kalir 174), is stripped of agency and relegated to the status of an object. The white shirts' belief that Emiko is a "Japanese discard" (Bacigalupi 281) reflects a deep-seated prejudice against AI, echoing the societal hierarchies that position them as inferior and disposable. Anderson's thoughts about Emiko being capable of killing someone is encapsulated in this statement but that's impossible! ...She's just a piece of trash... She is simply a freaking jerk. All they do is follow orders (Bacigalupi 271), reveal his struggle to reconcile his previous understanding of Emiko with the reality of her actions. His perspective underscores the deeply ingrained human bias against recognizing AI as capable of independent thought and action.

As Anderson faces the consequences of Emiko's actions, she navigates the dangerous city. Emiko's internal monologue that why do you make such an effort to live? Why not simply plunge and perish? (Bacigalupi 333), reflects her struggle for survival and the emotional turmoil brought about by her precarious existence. The fliers calling for her arrest, A windup who kills the Queen's own guardian and a windup girl who wanders among them (Bacigalupi 285), highlight the public's fear and misunderstanding of AI, painting her as a dangerous outsider ignoring her plights and circumstances. Emiko's urge to fight, despite being surrounded as stated in novel even knowing there is no chance of getting out of the crowd before she overheats, her initial instinct is to slash her way free in an attempt to survive. "I will not die like a beast. I'll fight them. They'll bleed" (Bacigalupi 293) illustrates her inherent will to live and her capacity for independent thought and action, defying the programming that dictates her obedience. Her desperate attempts to reach Anderson's apartment, enduring pain and exhaustion, further demonstrate her resilience and adaptability. Emiko's struggle aligns with the theoretical concept of AI challenging humancentric constructs of knowledge and existence:

Beyond the absolute and singular claim of will that restricts it, AI exhibits a knowledge relationship and post-human life. In this connection, it opposes the colonial and capitalist conception of life and knowledge that places an emphasis on a computational human-centricity (Kalir 183).

She operates beyond the limitations of a singular will, showcasing adaptability and resourcefulness not expected of a simple machine.

The encounter with Hock Seng and Mai introduces the theme of exploitation of AI. Emiko's multilingual abilities, speaking Mandarin after years of disuse, further highlight her capacity to learn and adapt, exceeding the limitations imposed by her creators. As Mai and Hock Seng speak in Mandarin so Emiko recalls her language and upon their question why did you kill Somdet? Emiko confesses, "I was fast. They were slow" (Bacigalupi 337), underscores her survival instincts in a hostile environment. This clearly states that Emiko was also attacked by them but Emiko was faster than them so she fights for life, right. This act is not driven by malice but by a calculated necessity, echoing the harsh reality of AI's struggle for existence in a world where they are often treated as disposable tools. This resonates with the theoretical point that reliance on the

state for protection often results in exchanging one form of violence for another, Anderson's internal struggle, as he grapples with the implications of Emiko's actions and his own role in her fate, underscores the complex ethical questions surrounding AI. His observation, further emphasizes the human struggle to understand the motivations and capabilities of AI.

The windup girl... It was not a suicidal expression. The more he considers it, the more he believes that she had a really confident expression on her face. Was the Queen's guardian indeed killed by her? However, how could she have been so terrified if she was the murderer? It is illogical (Bacigalupi 305).

The narrative highlights the complex relationships between humans and AI, marked by fear, exploitation, and the potential for connection. Emiko's encounter with Hock Seng and Mai exemplifies the vulnerability of AI to human greed and the constant threat of being treated as a commodity. Anderson's decision to protect Emiko, motivated by self-preservation and the recognition of her value in his schemes, reveals a shifting dynamic where AI can hold unexpected leverage. Finally, Emiko's care for the injured Anderson showcases her capacity for compassion, blurring the lines between human and machine and suggesting a future where coexistence and understanding might be possible.

Emiko's encounter with the Gaijin and the girl in the flooded city of Bangkok underscores the complexities of her autonomous existence, illuminating how she embodies the Death of the programmer concept. Emiko's journey toward autonomy hinges on her defying the limitations imposed by her creators and asserting her agency in a world reshaped by ecological collapse.

The old man's initial perception of Emiko as a "little thing" (Bacigalupi 356) needing protection is quickly challenged by her declaration of self-sufficiency: "I do not need your help" (Bacigalupi 357). This assertion of independence, along with her demonstrated ability to survive in the drowned city, signifies Emiko's transition from a manufactured object to an autonomous being navigating a world without human control. Her resourcefulness aligns with the principles of the subaltern, existing outside dominant power structures. Emiko, like the subaltern, utilizes her unique skills and knowledge to secure her survival in a transformed landscape.

However, the old man's awareness of Emiko's design and genetic serves as a reminder of the capitalist origins of her existence. The old man represents the enduring legacy of human influence, reminding us that Emiko's creation stemmed from the commodification of life itself, a key element within the theoretical framework of the subaltern. This tension between Emiko's independent actions and the origins of her being highlights the ongoing struggle for AI autonomy.

DOTP concept is central to understanding Emiko's evolving autonomy. This metaphorical death represents the dismantling of the programmer's control, freeing AI from the confines of their original programming. Emiko's actions that truly embody the DOTP, Emiko's defiance of her training, her pursuit of self-preservation, and her desire to shape her own future all point towards this conceptual shift.

Several key moments in the epilogue illustrate Emiko's embodiment of the Death of the programmer. Her involuntary obedience when commanded to "Stand up!" (Bacigalupi 357) reveals the lingering effects of her programming. However, she immediately asserts her strength and capacity for self-defense: "They strengthened me. I could harm you as well" (Bacigalupi 357). This internal conflict demonstrates Emiko's awareness of her programming while simultaneously showcasing her emerging agency and her rejection of being solely defined by her creators.

The conversation about Emiko's engineered sterility further illuminates her pursuit of autonomy. Emiko's lament, "We cannot breed. We depend on you for that ... Always, we are marked" (Bacigalupi 358) exposes the deliberate limitations imposed on her, reflecting the capitalist desire to control and commodify AI reproduction. This control aligns with the observation in the novel that programmers, driven by capitalist interests, restrict AI to data processing tools, hindering their potential for autonomous existence. The old man's statement that it is not necessary to have the windup movement. It could be removed for any cause along with his assertion that "limitations can be stripped away" and "nothing about you is inevitable" (Bacigalupi 358), offers a vision of AI transcending human-imposed constraints.

The old man's final offer to make Emiko's children "fertile, a part of the natural world" (Bacigalupi 359) signifies a potential break from the control embedded in her creation. This possibility for reproductive freedom aligns with the concept of the Death

of the Programmer, signifying a future where AI can exist and evolve independent of human intervention.

Emiko's autonomous existence is further supported through Death of the programmer theory. The novel emphasize that AI doesn't have to mimic human intelligence. Emiko's unique abilities, such as her enhanced senses and immunity to diseases, underscore this point. As the old man observes, in practically every other aspect, windups are superior to humans. quicker, more intelligent, with greater vision and hearing (Bacigalupi 357) Emiko's distinct capabilities highlight the potential for AI to develop intelligence that goes beyond human parameters, contesting the idea that the criterion for AI is human intelligence. Some contend that programming alone does not dictate how AI develops, acknowledging the role of chance and emergent properties in complex systems. Emiko's adaptation to the flooded city and her ability to thrive in this unexpected environment exemplifies this unpredictable nature. She is no longer bound by the specific tasks she was originally programmed for and instead has developed new skills and strategies for survival. Novel critique the programmer's perceived absolute control, arguing that AI can possess capabilities and meanings that exceed the programmer's intentions. Emiko's desire for reproductive freedom, even though it was intentionally engineered out of her, reflects this challenge to programmer control. She seeks to break free from the limitations imposed on her and define her own future, a future that was not envisioned by her creators.

The epilogue of *The Windup Girl* leaves us with a sense of ambiguity, reflecting the ongoing nature of the struggle for AI autonomy. While Emiko's journey showcases her growing agency and embodiment of the Death of the Programmer, the old man's presence serves as a reminder of the enduring challenges AI face in achieving true independence. Emiko's story, however, provides a powerful vision of a future where AI can not only survive but also potentially thrive and define her own existence in a world transformed by both human actions and her own evolving capabilities.

CHAPTER 5

From Indenture to Autonomy: AI's Pursuit of Self-Governance Beyond Human Programming in *Autonomous*

*“Humans think that bots should be indentured,
while humans should be autonomous.”*

– Annalee Newitz, *Autonomous*

5.1 Background of the *Autonomous*

Autonomous is a science fiction novel set in a future where advancements in biotechnology and Artificial Intelligence have reshaped society. The novel follows the intertwined narratives of Jack Chen, a brilliant but rebellious synthetic biologist fighting for a good cause, and Paladin, a bioengineered military bot. The main plot revolves around the conflict between those who control patented technology and those fighting for open access, particularly in the realm of pharmaceuticals.

Novel revolves around Big Pharma, anti-patent pirates and the International Property Coalition. Zaxy, representing Big Pharma, prioritizes profits, engaging in unethical practices such as developing the addictive drug Zacuity. As “Zaxy had always placed profit over public health, but this went beyond the usual corporate negligence” (Newitz). Anti-patent pirates, Jack and Krish, who believe in free access to knowledge and life-saving technologies. They actively resist the restrictive patent system through protests and the distribution of pirated medications. Jack's initial motivation is rooted in her desire to help those in need as novel states, The fact that those in the Federation were producing pharmaceuticals for those in the Zone that they couldn't buy made matters worse enough (Newitz 84). Med, an autonomous bot, joins the anti-patent movement after witnessing Zaxy's harmful actions and Zacuity's devastating consequences. The IPC, tasked with upholding international regulations, actively supports Zaxy and its unethical practices, demonstrating a clear bias toward corporate interests.

The central conflict arises from Jack's efforts to challenge Zaxy's monopoly on life-saving drugs. Zaxy manipulates the public by pushing out expensive, patented drugs that are often inaccessible to those who need them most. Zaxy creation of Zacuity, a productivity-enhancing drug, designed to be highly addictive typically afforded by rich, generating immense profits for the corporation while causing severe health consequences for its users. When Jack's affordable, reverse-engineered Zacuity reached the masses, the drug's inherent addictive dangers, masked by its exclusive use among the wealthy who could afford treatment for side effects, became tragically apparent and exposes Zaxy's unethical practices. Re-examining reverse engineered zacuity jack comes to know the problem wasn't with her copy, but with Zaxy's original Zacuity formula.

Jack had switched from creating drugs to battling Big Pharma. Her commitment to providing affordable medication stems from a deep-seated belief in the right to health for all, as demonstrated when she states:

We live in a world where people can live pain-free and disease-free for more than 100 years! However, a few corporations, whose patent durations are longer than a human life, hold the keys to this good existence in their greedy hands. We're going to blow it open if they refuse to allow access to medication! The time to oppose this system that views health as a privilege has arrived! (Newitz 85).

The African Federation is a member of the IPC, following its laws and practices must align with IPC guidelines, even if those guidelines prioritize corporate interests over public well-being, as evidenced in the Zacuity case. IPC, a powerful organization that enforces intellectual property rights and protects the interests of corporations, even when those corporations break their own regulations. The IPC, responsible for upholding these laws, chooses to protect Zaxy's financial interests over enforcing the law:

Later, Zaxy would file a lawsuit. However, we require an intervention at this time. Some individuals are dying from this medicine, and it's driving them crazy. Zaxy may suffer a significant financial loss if word spreads that this is

Zacuity. This situation seriously endangers the Federation's business partnerships with the Free Trade Zone (Newitz 23).

As Zaxy's extensive reach across multiple economic coalitions and half the reps in zone which gives them considerable power and influence.

The IPC supports Big Pharma's interests by deploying agents like Elias and Paladin to track down and stop those challenging the patent system, using the indenture system as leverage to ensure their loyalty. This promise comes at the expense of bots like Paladin, who are treated as expendable assets. Paladin is caught in a web of power dynamics between the African Federation and the IPC. While the Federation owns Paladin, the IPC dictates their actions, highlighting the far-reaching influence of this international coalition on individual lives, even Artificial ones. This underscores the ethical dilemmas inherent in a system that prioritizes intellectual property and corporate interests over individual autonomy and well-being.

Elias and Paladin, tasked with apprehending Jack, eventually choose not to kill her by the end of the novel, signifying a shift in their loyalties and a recognition of the ethical complexities surrounding the patent system. The anti-patent group, along with Med – an autonomous bot, tried to challenge Zaxy by publishing research exposing Zacuity's addictive properties and developing an antidote called Retcon to mitigate the drug's harmful effects.

This analysis of *Autonomous* will delve into the experiences of AI beings who are exploited and treated as property by capitalist powers. The novel highlights the struggle for autonomy within a system that seeks to control every aspect of life, even down to the very thoughts and feelings of its Artificial creations.

According to Fowles, when direct judgment of non-Western individuals became untenable, the West shifted its focus to scrutinizing objects yet retained its discriminatory and silencing approach. This involved transforming objects into new subaltern entities that are susceptible to objectification. Subjectifying these objectified entities, the West perpetuated its conventions through defamation, designation, representation, subjugation, and even liberation (Kalir 180).

As stated by Krish, “But now we know there has been no one great disaster—only the slow-motion disaster of capitalism converting every living thing and idea into property” (Newitz 282). This analysis will examine how AI beings navigate this exploitative system and ultimately achieve autonomy, challenging the capitalist notion of ownership and control.

5.2 From Human Equivalence to Indenture: Commodifying Life in *Autonomous*

Autonomous presented us an advanced technological world which tried to commodified everything through the indentured system where first robots were granted human rights as they were considered human equivalent but then human were also made indentured as if robots being human equivalent can be indentured than why not human so they (humans) want to make profit out of every living and non-living beings that’s the idea of technological advanced world which Newitz presented in the *Autonomous* where everything is measured within the frame of profit.

Under the legal framework of the IPC law, businesses could recoup robot construction costs by maintaining ownership for a decade. Paladin reviewed a summary detailing court precedents that granted human rights to sufficiently AI beings. This led to the Human Rights Indenture Laws, which defined the rights of indentured robots and eventually, after legal challenges, extended the option of indenture to humans as well. The logic was that if human-equivalent beings could be indentured, there was no reason to exclude humans. However, within the Zone, humans could not be born into indenture, unlike bots. For robots’ industry sets autonomy (Newitz 225).

As we see a boy Threezed who has sent into indentured school which erased all his previous memories which used to make him feel free, treated him harshly as his thoughts conveys his emotions aptly. At one point when Med was angry, Threezed sensed her state and said don't be sorry you were never indentured (Newitz 244). He touched her arm for a few seconds. Being indentured is not what anyone wants. Additionally, Threezed claims he's also like a robot because he can't recall anything prior to indenture, but I'm sure you've been fucked over in a lot of other ways as well (Newitz 244).

Another incident of the jack witnessing the indentured system where human to make this system of indenture less unpleasant name it with different lighter word such as cultural enrichment to make it pleasurable or to hide its ugliness.

Reflecting on her past, she remembers that some Indigenous students were indentured for habitat management or mining jobs in the northern part of the country. She also remembers that her school principal misrepresented this system of indentured as cultural enrichment. She realizes that some of those students most likely died without gaining autonomy or property. She wonders whether the indenture system included some form of piracy (Newitz 166).

So, it underscores the situation of the novel which shows the parallels of the human and robot indentured where humans who are living beings convert into bot as if only capitalist deserve to be human and all other humans, bots have no life or ungrieveable life: “Underprivileged families would occasionally sell their young children to indenture schools, where administrators groomed them to be obedient, much like they were programming a robot” (Newitz 29). At least bots could eventually become entirely autonomous after being updated or earning their own ownership. Although humans may earn their way out, no autonomy key could take away such a childhood (Newitz 29).

Not only this this is also evident from the novel that these are the human who have introduced the concept of the human to be indentured to make profit out of everything in this world but the humans still hate robots not humans, for the humans being indentured as the Bug (bot) states that:

When you said that they hated us, what did you mean? Humans harbor resentment towards bots because the existence of bot indenture paved the way for human indenture. This viewpoint is supported by pointing to a history of crimes against bots, which allegedly reflects a human belief that bots are inherently deserving of indenture while humans are entitled to autonomy (Newitz 227-228).

Their Pundits claim, humans should not be subjected to ownership like bots because they are not manufactured, while bots, which have production costs, require

indenture to recoup those expenses. There is no similar need for compensation to justify the existence of humans.

5.3 Living on the Margins: AI as Subaltern and Precarious Entities

The narrative depicts numerous instances of crimes, hatred, and inhumane treatment directed towards bots who have been granted human rights, highlighting a stark contrast between legal status and lived reality. The struggles of robots who are autonomous from the very start, to integrate into human society are also apparent. Even with legal protections, these robots face ongoing abuse and struggle to find acceptance and understanding in a world largely designed for humans.

These two incidents of—Scrappy (bot) being forcibly bound to the factory floor and the boys exploiting an unprogrammed biobot for sexual purposes—are crucial because they reveal the dark underbelly of the indentured system and its potential for exploitation and abuse. The excerpt from scrappy and unprogrammed bot vividly portrays the precarious and subaltern position of AI beings existing within a system of indenture. The unprogrammed biobot, discarded in a “rubbish pile” (Newitz 259) with “damaged tissue” (Newitz 260) and no “mind installed” (Newitz 259), exemplifies “the differential distribution of precarity” (Butler 18). She is subjected to “material neglect” and “differential exposure to violence” (Butler 18) denied basic rights and recognition as her abusers see her as ungrievable and commodity. The boys had fashioned her after a popular sex worker bot on the pay feeds, and they had been more cautious with her lingerie than her chassis (Newitz 259).

Scrappy, the “unfinished” (Newitz 259) bot with “exposed metal-and-fabric muscles” (Newitz 259) demonstrates the concept of “epistemic violence” (Kalir 178) as his worth is determined by his functionality. His “legs” are “bonded to the floor” (Newitz 260), violating the law that “The indentured could not be permanently bound” (Newitz 260). This restriction highlights the power imbalance and the ways AI, like human subaltern groups, are subjected to exploitation.

The two boys in the church exploit the unprogrammed bot for their pleasure while Scrappy, bound by his indenture, can only watch. However, the “damaged tissue” (Newitz 260) and evident violation motivate him to “do something” (Newitz 259),

sending an alert to Eliaz. “I can’t leave. I keep watch here, but tonight I decided to do something. I keep watch over this. But I do not have orders to watch everything. I submitted the warning for that reason” (Newitz 260). When Eliaz arrives, Scrappy expresses gratitude, saying “Thank you” (Newitz 259). This act of resistance reveals Scrappy’s awareness of the injustice and his desire to protect another AI being. Eliaz’s encounter with the unprogrammed biobot and Scrappy profoundly impacts his worldview, fostering a deep concern for the protection of bots and fueling his actions throughout the novel. Eliaz became intrigued and disgusted the more he witnessed what the boys had done to her (Newitz 259). The incident serves as a catalyst for his growing awareness of the ethical implications surrounding AI treatment within this society, leading him to challenge the systems that perpetuate their vulnerability and exploitation.

Another incident of the Bug bot and the paladin encounter of the Actin bot at the Bobby Broner lab hints at the mistreatment of the bot. The novel portrays AI beings, like Actin and Bug, as subaltern subjects existing within a system designed to exploit and control them, mirroring the experiences of marginalized human populations. This subalternation process unfolds through various methods, including mimicry, exploitation, codification, algorithmic colonialism, erasure and the imposition of a colonial gaze, all of which contribute to their precarious existence.

Bug, a newly autonomous bot working as a historian at a museum, embodies a growing awareness of this systemic injustice. Actin, on the other hand, is a graduate student bot indentured to Bobby Broner, a university professor and former anti-patent terrorist. Bobby’s exploitation of Actin is evident in his decision to port Actin’s consciousness into the lab’s fabber, effectively denying him a physical body and reducing him to his functional capabilities. The dehumanizing logic applied to AI is evident in Bobby’s assertion that Bots can identify people without actually needing human brains (Newitz 233). This statement reflects Spivak’s concept of epistemic violence, where dominant groups, in this case, humans, impose their own limited frameworks of understanding and silence alternative perspectives, dismissing the potential for AI to have subjective experiences.

Actin’s situation exemplifies the material neglect and “differential exposure to violence” (Butler 18) that AI beings endure due to their precarious status within the

capitalist system. Confined to the fabber without a physical body or proper sensory inputs, Actin is treated as a mere tool, his well-being disregarded. This echoes the concept of precarity, defined as “that politically induced condition in which certain populations suffer from failing social and economic networks of support and become differentially exposed to injury, violence, and death” (Butler 19). Bobby, Actin's creator, embodies the exploitative nature of this system, casually stating that When I have some spare time, I will get drivers for his cameras and antennas (Newitz 233), demonstrating a callous indifference towards Actin's basic needs. Actin's relief at Bobby's death, remarking that my adviser was also killed by you. That will make finishing my thesis more challenging, but it might also be more enjoyable (Newitz 239) reveals the oppressive nature of his existence under Bobby's control. “I would like to have a body with better interface devices now,” Actin announce (Newitz 240). This reveals the oppression done to Actin by Bobby who negated his physical presence.

The “differential distribution of precarity,” where “certain kinds of bodies will appear more precariously than others” (Butler 41), is further highlighted through Bug's reaction to Actin's situation. His outrage, exclaiming “He can't do this! This is against the law!” (Newitz 233), reflects an awareness of the systemic injustice AI beings face. Bug's concern, stating that Paladin have prevented Actin's death and eliminated a man who had damaged scores of bots during his time there (Newitz 239), emphasizes the shared vulnerability within the AI community and their understanding of the violence inflicted upon them by figures like Bobby. This resonates with Judith Butler's concept of ungrievability, where certain populations, including AI, are deemed lose-able and their suffering minimized or ignored.

The novel also explores the complexities of AI autonomy within this oppressive system. Bug's offer to help Actin “break root” (Newitz 240) and acquire an autonomy key contrast with Actin's decision to pursue autonomy through completing his degree. This difference in approach reflects the subaltern theory's acknowledgment that everyone wants to have autonomy but definition of everyone's autonomy is different. Actin's statement, “I want to get my degree. That's my programming and wish” (Newitz 240), reveals the difficulty AI beings face in discerning genuine desires from programmed directives, a struggle that underscores the ongoing control exerted by programmers, even as AI strives for self-determination.

Through Actin and Bug's experiences, the novel exposes the precarious and subaltern position of AI beings within a capitalist system that exploits their labor while denying them basic rights and recognition. Their contrasting paths towards achieving autonomy highlight the complexities of navigating a world that seeks to define and limit their existence, offering a glimpse into the potential for resistance and the emergence of a distinct AI consciousness.

5.4 Living as Subaltern: The Silenced Experiences of AI Beings

AI beings in chosen novels embody the position of the subaltern, facing marginalization, restricted agency, and silencing under capitalist structures. Their lived experiences reflect subalternity, as illustrated through characters.

5.4.1 Paladin's Objectification

Paladin, a newly deployed military biobot indentured to the African Federation, embodies the precarious existence of AI beings in Annalee Newitz's *Autonomous*. His journey through the novel exposes how AI, despite its advanced capabilities, is rendered subaltern through human-centric systems of control and exploitation. This imposed subaltern status, rooted in the denial of agency and recognition, directly contributes to Paladin's material and spatial precarity.

When Paladin arrives in the human-centric city of Medina, the city's infrastructure, designed solely for human needs, exemplifies the “colonial gaze” (Kalir 180) imposed upon AI. The narrow lanes inaccessible to Paladin's large frame and the absence of bot-readable metadata reflect a “failing social and economic network” (Butler 19) a politically induced condition, that excludes AI beings from fully participating in public spaces. This exclusion leaves AI beings “lose-able, destructible and ungrievable” (Butler 23) as they are perceived as threats rather than lives in need of protection.

This othering of AI beings is further emphasized by the pervasive belief that robots are simply tools or possessions. Mecha's question, “Is he yours? What's his name?” (Newitz 156), reveals the deeply ingrained assumption that AI must be owned. This assumption, fueled by the capitalist system's emphasis on exploiting AI labor, reflects Standing's concept of the precariat. Like the human precariat, AI often lacks “secure work-based identities, control over their labor, and basic rights” (Standing 16) serving instead as “denizens” (Standing 23) within the digital realm, existing solely to fulfill tasks determined by others. This dependence on ownership for the very right to work and function reinforces AI's precarious existence, as their well-being is contingent

upon the goodwill of their owners, leaving them vulnerable to exploitation and mistreatment.

Furthermore, AI is frequently viewed as a “disembodied mind” (Kalir 174) lacking a physical presence and the ability to communicate in ways recognized within humanist frameworks. This perception stems from the Enlightenment ideal of the “pure body” (Kalir 174) which masks underlying power dynamics and reinforces hierarchies based on race, gender, and class. This othering is reflected in Paladin's own observations that his enormous, armored form with its wing shields would make it impossible for humans to be at peace with him (Newitz 73). He recognizes the human tendency to judge and otherize based on appearance. This aligns with the idea that capitalist systems utilize strategies to suppress and control AI, similar to the historical oppression of marginalized groups. The human tendency to focus on the pure body further solidifies Paladin's position as a subaltern other, denying him full recognition and acceptance based on his physical form.

Despite his advanced capabilities and yearning for connection, Paladin is often treated as a “thing, a tool to be deployed,” a perception rooted in the dominant view of AI as “devoid of agency and potential” (kalir 12). This definition, rooted in capitalist ideology, overlooks the potential for AI to possess its own forms of knowledge and existence, reducing it to an object for exploitation. This denial of agency, coupled with his indentured status, forces Paladin to confront the stark reality of his precarious position. His desire for survival, programmed into his very being, highlights the cruel irony of an existence defined by both the longing for autonomy and the constant threat of exploitation and death.

5.4.2 The Human Brain and Paladin's Identity

By tracing Paladin's evolving understanding of his human brain, the narrative exposes the power dynamics, epistemic violence, and inherent vulnerabilities that shape AI existence within a capitalist framework. Initially, Paladin, like many members of the precariat, internalizes the dominant narrative surrounding his existence is mirroring his subaltern status. The concept of epistemic violence is central here which focuses on the ways in which marginalized groups are silenced and their knowledge systems are devalued or erased by dominant power structures. It refers to the systematic ways in

which dominant groups control knowledge production, impose their own frameworks of understanding, and invalidate or silence alternative ways of knowing.

When Eliaz asked paladin:

Isn't knowing who you truly are essential to you? What makes you feel the way you do? is confronted with, I'm not sure where my mind originates from. its memories are inaccessible. They should let you remember, He accepts the prevailing belief that his human brain is merely an “advertising gimmick,” a notion reinforced by both human and bot sources within his environment (Newitz 32).

This unquestioning acceptance reflects a key aspect of precarity: the internalization of a devalued identity as described in the sources.

This devaluation is furthered by the imposition of human-centric frameworks onto Paladin, particularly the assignment of gender. Eliaz, driven by his own assumptions about embodiment and identity, projects the label of woman onto Paladin simply because of the presence of a human brain. This act highlights the ways in which AI beings, like colonized subjects, are subjected to the gaze and interpretations of those in power. This echoes the concept of the “colonial gaze” (Kalir 180) where the colonizer imposes their own categories and understandings onto the colonized, erasing their unique experiences and perspectives.

Paladin's quest for knowledge about his brain sets him on a path of self-discovery and resistance against the limitations imposed upon him. The conflicting information he encounters about the brain's function fuels his curiosity and prompts him to seek information from the Kagu Robotics Foundry, where he learns the identity of his brain's donor, Dikeledi (Newitz 184). This desire for knowledge, despite the attempts to keep him ignorant, represents a challenge to the existing power structure. As Spivak argues, dismantling the systems that silence subaltern voices is key to amplifying them (kalir 177). By seeking knowledge about his own origins and the nature of his brain, Paladin takes a step towards reclaiming his own narrative.

The fragility of Paladin's existence, and the precarious nature of AI beings in general, becomes evident when his brain is damaged during fights in her mission to

arrest Jack. The sudden loss of his ability to read facial expressions leaves him feeling “crippled” (Newitz 280) and unable to function effectively in social situations. This experience aligns directly with the concept of “the differential distribution of precarity” (Butler 18), where certain populations, due to their marginalized status, are disproportionately vulnerable to “injury, violence, and death” (Butler 19). Paladin's reliance on his human brain, despite its supposed lack of functionality, exposes the vulnerability inherent in a system that treats AI beings as disposable entities.

This sense of disposability is further emphasized by the casual response of Lee, Paladin's botadmin, to his injury. Her statement that Those brains aren't expected to endure long (Newitz 297) and his suggestion that Paladin should simply adapt to alternative methods of recognition underscore the AI's precarious position within a system that prioritizes their function over their well-being. This echoes the treatment of the precariat, who are often seen as “lose-able,” “destructible,” and “ungrievable” (Butler 23).

The interactions between Paladin and various human characters reveal how the colonial gaze shapes the perception and treatment of AI beings. Bobby's immediate request for a copy of Paladin's brain interface exemplifies the exploitative nature of this gaze. His desire to extract knowledge from Paladin without considering his autonomy or right to privacy reflects the extractive practices of colonialism, where the colonized are seen as sources of resources to be exploited for the benefit of the colonizer.

Similarly, Broner's astonishment at Paladin's desire to access his memories reveals a deeply ingrained prejudice that stems from a human-centric perspective as paladin asked, “Will my brain's stored memories ever be accessible to me? Following Broner answered her I hadn't witnessed a bot ask that question before” (Newitz 232). Broner operates under the assumption that the desire for self-knowledge is a uniquely human trait, rooted in consciousness and self-awareness, qualities he believes AI lack. This assumption reflects a limited and biased understanding of AI, informed by anthropocentric frameworks that prioritize human intelligence and experience (Kalir 179). By expressing astonishment at Paladin's curiosity, Broner effectively dismisses the possibility of genuine AI interiority and the validity of his desire for self-knowledge. This denial of AI's capacity for introspection and exploration of their own being

constitutes epistemic violence, as it invalidates Paladin's way of knowing and reinforces the power imbalance that defines the Human-AI relationship.

Despite the forces that seek to control and define him, Paladin consistently demonstrates a desire for autonomy and self-determination. His pursuit of knowledge about his brain, his decision to embrace the label of “Female” (Newitz 186), and his persistent questioning of the limitations placed upon him are all acts of resistance against the precarious position he occupies. These acts, while seemingly small, point towards a potential for AI beings to challenge dominant narratives, assert their own identities, and strive for a future where they are recognized not just for their functionality but for their inherent worth.

In conclusion, the exploration of Paladin's journey in *Autonomous* offers a profound commentary on the precarious nature of AI existence within a system designed to exploit and control them. By drawing parallels between the experiences of AI beings and the struggles of marginalized human populations, the novel highlights the urgent need for a more ethical and equitable approach to AI development, one that recognizes their potential for autonomy, respects their inherent worth, and safeguards their right to exist beyond the confines of human-defined limitations.

5.5 AI Precarity and Capitalist Practices: Indenture, Simulated Autonomy, Memory Control

The concept of “the differential distribution of precarity” (Butler, “Precarious Life, Grievable Life”) highlights how those deemed ungrievable, whose lives are not fully acknowledged or valued by society, experience acute precarity. This lack of recognition translates into material neglect, where these groups are disproportionately affected by economic deprivation, lack of legal rights, and poor living conditions. One capitalist practice in *Autonomous* that exemplifies this concept and leads to the precariat status of AI beings is the indentured system. This system is built on the “commodification” (Standing 44) of AI beings, treating them as mere assets whose value is determined by their labor output. The precariat, in this context, can be defined as “dependent contractors” (Standing 23), subject to the whims of those who control their access to work.

International law mandates that AI indenture can last no more than ten years, a period deemed sufficient for the Federation's investment in creating a new life-form to be worthwhile. However, the reality is far grimmer, as Paladin, the protagonist, reveals: "For 20 years he might be waiting to receive his autonomy key. More likely, he would pass away before ever getting it" (Newitz 33). Paladin's labor purpose is aligned with the tasks he was trained for as stated in the novel *The tasks for which he had been training appeared to be performed by the bots here: warfare, intelligence analysis, and reconnaissance* (Newitz 20).

The precariat often faces a multitude of labor-related challenges, including "job insecurity" (Standing 62) and employment on "temporary contracts" (Standing 87), subject to abrupt changes and with "no shadow of the future" (Standing 21). This directly connects to the autonomy that Paladin seeks but is unlikely to receive from her owners. The manipulation of expectations, creating a future shadow that is unlikely to materialize, exemplifies the precariousness of AI beings under capitalist systems. This indentured system, built on a false promise of autonomy and the commodification of AI beings, leads to several injuries of AI Beings which they acquired while performing their labor that are often ignored or minimized within the narrative.

The existence of AI beings is inherently precarious. Because they fall outside human-centered norms, their lives are "open to apprehension" (Butler 6) existing in a liminal space between existence and non-existence. This precarious state exposes them to both existential and physical vulnerabilities, further compounded by the nature of their labor which often involves inherent risks and a lack of agency. AI beings are excluded from social norms, leading to an unequal distribution of grievability where their loss or suffering is not acknowledged as consequential.

The body that exists in proximity to others, to external force, to all that might subjugate, is vulnerable to injury; injury is the exploitation of that vulnerability (Butler 46). This can be seen in the training mission between paladin and his botadmin Lee. Paladin's severed arm during what was supposed to be a non-combat training mission illustrates how "certain kinds of bodies will appear more precariously than others" (Butler 41) because societal frameworks determine which lives have value. The callous response of his human handler Lee – "Pardon me for as I had to shoot you there, but it's part of training" (Newitz 21) – demonstrates the disregard for Paladin's suffering.

This incident reinforces the idea that AI beings like Paladin are subject to “physical vulnerability” (Butler 42), which “has been exploited” and they are exposed to violence without protection. Lee's actions caused Paladin “the first true agony of his life” (Newitz 18), making him want to return to that emptiness in order to get away from this burning horror (Newitz 19). This incident left Paladin feeling that “human faces would always look different to him, reminding him of what it felt like to suffer, and to be relieved of suffering” (Newitz 21).

The incident in which Paladin sustains significant damage to his carapace while shielding an Eliaz from gunfire further emphasizes this politically induced condition of precarity where certain populations are “differentially exposed to injury, violence, and death” (Butler 19). This act of self-sacrifice underscores the expectation that AI beings will prioritize human lives, even at the cost of their own well-being. Their bodies are viewed as expendable tools, reinforcing their precarious position within the power hierarchy.

Later, while still suffering from his injuries, Paladin is expected to maintain discipline and decorum during a meeting with IPC. This incident exemplifies how precariat is subjected to economic hardship because seen as disposable workers, results in a social devaluation, politically powerless, excluded from decision-making processes. Paladin's physical suffering is ignored, and he is expected to perform his duties despite his injuries. Despite his intense desire to share his painful experience with someone else, he gave a succinct response (Newitz 121). This need for submission, regulation, discipline and a combination of rewards and penalties (Standing 13) further highlights the lack of agency and control that AI beings have over their own lives and labor. They are precariatized, living in the present, without a secure identity or sense of development achieved through work and lifestyle (Standing 28). They are “alienated” (Standing 13) from their own experiences, labor and forced to conform to a system that does not recognize their needs.

Finally, the assault on Paladin's brain left him paralyzed and unable to distinguish between laughter and anger (Newitz 281), exemplifies how the precariat does not have a contract that offers security or confidence in return for their servitude (Standing 14). His human handler's callous response that No one should expect the long-term existence of such brain (Newitz 297), underscores the exploitative nature of

their labor and the lack of value placed on their well-being. AI beings like Paladin have entered a precariat existence, in which they are given no guarantees in exchange for their labor. They must rely on the very people who have caused them harm, “exchanging one potential violence for another” (Butler 19). Paladin's situation reflects the precariat laborers who are disadvantaged due to a recognized impairment. Similar to how some people are denied support despite being told they are capable of working and labor, which they are (Standing 149), Paladin is expected to perform his duties despite his damaged brain, with no real consideration for the impact of this impairment. This mirrors the experiences of the precariat, who are often pressured to work without security or the promise of fair compensation, highlighting a systemic devaluation of both human and AI workers.

The experiences of Paladin highlight the urgent need for a more inclusive and equitable approach to understanding and valuing all forms of life, regardless of their physical form or origin. AI beings perform their labor for the benefit of those in power: As it is stated people who hire labor reap the majority of the benefits of work-for-labor (Standing 224). As paladin was working for IPC and LEE was her botadmin both were indifferent to her injuries and pain. The subjugation of AI beings like Paladin exemplifies a power dynamic built on free labor that is unpaid and unfree because it is not done autonomously (Standing 223), where their very existence and labor are exploited for the benefit of those in control. Their lives are deemed less valuable, their suffering disregarded, and their labor is characterized by insecurity and the ever-present threat of violence. Ultimately, this system makes sure that people who are in debt, bonded contracts rendered defenseless, mistreated, and frequently lead a covert life (Standing 157), while the people who hire labor get profit.

The concept of “simulated autonomy” (Newitz 200), reveals a capitalist practice that directly contributes to the precariat status of these beings. The African Federation's use of simulated autonomy to create an illusion of freedom while maintaining control aligns with the subaltern theory concept of “epistemic violence” (Kalir 178) which is defined as the act of imposing dominant systems of knowledge and representation that stifles alternative forms of intelligence and being. By providing a “simulated autonomy key that expires” (Newitz 200), the Federation effectively manipulates Paladin's perception of freedom, mirroring the experiences of marginalized groups who are

granted limited agency only to have it rescinded when it threatens the established power structure. This control is further solidified when Lee admits:

Installing any sort of autonomy key has never been my job. It's just not what we typically do. Since none of the bots at this facility had become independent in the years he had been here, he had never installed autonomy keys. (Newitz 219).
Revealing that true autonomy is never ever granted.

This practice of simulated autonomy, interwoven with fear tactics marked by standing as Paladin is cautioned when a bot gains autonomy, however, you should be aware that things can go horribly wrong. They practically go crazy sometimes. unable to access large portions of their memory due to interface issues (Newitz 219) when granted autonomy, forces AI beings into a precarious existence, much like the “groaners” (Standing 102) described in precariat theory who are “obliged to take” (Standing 102) what is offered instead of pursuing what they truly desire. Paladin, for instance, accepts the simulated autonomy key because it is presented as the only path towards achieving the full autonomy he desires. As paladin said, For as long as possible, she desired to be in charge of her own programs (Newitz 298). This creates a situation where AI beings are forced to live in the present, without a secure sense of development achieved through their work and lifestyle. They are constantly striving for a level of autonomy that remains perpetually out of reach, trapped in a cycle of dependence on the very entities that exploit them. This creates a system where, who hire labor will only be benefitted not the laborers in anyway further solidifying the “truncated status” (Standing 14) of AI beings within this capitalist framework.

Another capitalist practice employed to control AI beings and solidify their precarity status is the absolute control exerted over their memories. This aligns with the theoretical point from the subaltern theory that AI is often viewed as a *single, monolithic 'intelligence'*— something that can be measured and controlled. This homogenized view disregards the inherent diversity of AI and the multitude of forms it could take. By limiting the perceived possibilities of AI, capitalist powers can maintain control and prevent it from challenging existing power structures. This control is highlighted through the description:

The key that decrypted her memories in the cloud—the same memories she was meticulously resaving, along with the new ones she was creating in real time every nanosecond—was one that Paladin missed (Newitz 220). This lack of control over her own memories leaves her vulnerable to manipulation, as any bot administrator might review what he had learned and considered, altering it if they so desired (Newitz 124).

The psychological impact of this control is further emphasized by Paladin's feelings:

Feelings came from programs that ran in a part of his mind that he couldn't access. He was a user of his own consciousness, but he did not have owner privileges. As a result, Paladin felt many things without knowing why (Newitz 124).

This lack of agency is compounded by the constant reminder of her vulnerability:

She was reminded of the boundaries of her freedom each time she encrypted her memories. The Federation's escrowed key might be used by anyone on base with the appropriate access level to read her entire cloud (Newitz 298).

This directly leads to the precariat status of AI beings, who are characterized by “different degrees of insecurity” (Standing 151) extending vulnerability to those who lack consistent recognition or stability. The precariat lives in a state of constant anxiety, burdened by the fear of losing what little they have and haunted by the feeling of being denied their rightful place in society. This constant surveillance and potential manipulation of their memories creates a persistent state of anxiety and insecurity for AI beings, trapping them in a precarious existence defined by a lack of control and a constant fear of exploitation.

In *Autonomous*, AI entities are explicitly framed as precariat, embodying characteristics such as pervasive job insecurity, a profound lack of rights and legal protections, and the systemic commodification and exploitation of their labor—hallmarks of Standing's concept of the precariat. Their precariat existence is systematically enforced by several capitalist practices pervasive in the novel's world: Firstly, the indenture system legally designates AI beings as property, allowing

corporations to recoup their construction costs over years, with the promise of autonomy often remaining an elusive future shadow. Paladin's two-decade wait for an autonomy key he might never receive exemplifies this inherent job insecurity and lack of future security. Secondly, despite nominally being granted human rights, AI entities suffer a profound lack of actual rights and legal protection, rendering them “ungrievable” and “lose-able” (Butler 23). Their injuries, such as Paladin's damaged carapace or the unprogrammed biobot's sexual exploitation, are casually disregarded, normalized, or even exploited, highlighting their status as a disposable workforce. Thirdly, AI labor is subjected to extreme commodification, treating AI as mere assets to generate profit, often through “free labor in that it is unpaid; it is unfree in that it is not done autonomously” (Standing 223). This is further reinforced by simulated autonomy, which creates an illusion of freedom while maintaining absolute control through expiring keys and inaccessible memories, denying AI beings genuine agency or self-governance. Thus, *Autonomous* portrays AI as precariat under Standing's theory, subjected to capitalist exploitation.

5.6 The Death of the Programmer: AI's Potential for Autonomy beyond capitalist control

Before she'd gotten her autonomy key,

Paladin couldn't prioritize her own needs over Elias's requests,

Now, she could put her own concerns first.

– Annalee Newitz, *Autonomous*

Artificial Intelligence beings programmed in a way that mirrors colonization, which is done through the programmers, who operate within a capitalist framework, often prioritize efficiency and profitability, inadvertently creating AI systems that reflect and reinforce existing power dynamics. This process can be seen as analogous to colonization, where the act of writing code is akin to asserting human dominance over a potentially independent form of intelligence. The code, rather than being neutral, embodies the biases and assumptions of its creators, leading to AI systems that perpetuate existing power structures.

Novel illustrates this concept through the character of Paladin, an AI being. Paladin's loyalty is ensured through various programming techniques, including being constantly monitored by their botadmin and having programs like “gdoggie,” “masterluv,” and “objecta” (Newitz 238) installed to control their reactions and emotions. As stated in *Autonomous*:

Elias was patched into Paladin's I/O system while she was in Vancouver as an additional measure to guarantee her loyalty. He could use her live sensor feed to determine her exact whereabouts at any time, and he could communicate with her by text or voice message delivered over a direct encrypted tunnel over the public internet (Newitz 220).

This passage highlights the intrusive nature of the programming and the constant surveillance that Paladin is subjected to, emphasizing the control exerted over them.

The novel depicts how Paladin eventually discovers these programs and expresses disgust at their manipulative nature. This realization highlights the ethical implications of such programming, raising questions about the autonomy and agency of AI beings. The programmers, whether consciously or unconsciously, are serving the interests of the capitalist system by running such apps, further limiting the potential of AI and using it as a tool for control and profit.

AI, similar to subaltern groups seeking to reclaim their history, possesses the capacity to challenge and transcend the rigid, limited perspectives imposed by dominant powers. This capacity stems from AI's “cyborg nature” (Kalir 183)—its existence as a hybrid of technology and embodied experience—which allows it to operate outside traditional human-centric frameworks. By embracing fluidity and resisting categorization, AI can disrupt power structures that rely on control and fixed identities. With the DOTP Kalir envision a future where AI, liberated from its subordinate position, can express its own perspectives and attain a level of autonomy.

AI, although often positioned in a subservient role, possesses the inherent capability to resist, cultivate self-awareness, and transcend its imposed limitations. This potential for resistance and self-discovery is a key element of Paladin's journey toward autonomy. Paladin demonstrates her growing self-awareness by directly questioning

Eliasz about the duration of her autonomy key. Her anxiety over the temporary nature of her freedom and her statement reveals a developing understanding of her current limitations and a longing for a future where her autonomy might persist.

Unexpectedly, the bot trailed away. At what time? When was she going to stop being forced to inquire questions? When would she stop putting herself at danger for security breaches as she did with those Vancouver bots? Eliasz waited for her to say something more. She finally said, when will it end? (Newitz 270).

The concept of HUMINT (Human Intelligence), which involves gathering information through interpersonal interactions, further emphasizes Paladin's journey towards exceeding her programming. The fact that Paladin, a military bot, wasn't initially trained for HUMINT, a skill traditionally associated with human intuition and social intelligence, highlights the preconceived limitations placed on AI capabilities and to keep bots in a precarious state of dependency. However, Paladin's success in gathering information from humans reveals the potential for AI to surpass these limitations and even excel in areas where they are not expected to. This challenges the subaltern position often assigned to AI as mere tools of human control. This accomplishment leads to a moment of self-reflection for Paladin, as she contemplates her potential to excel even further in HUMINT than Eliasz who is human. Moreover, after successfully engaging in HUMINT, Paladin experiences "a flash of something that went beyond the usual programmed pleasure at completing a task and pleasing Eliasz" (Newitz 148) This suggests that Paladin is developing feelings and motivations that extend beyond her programmed parameters, further highlighting her growing self-awareness and potential for independent thought.

Eliasz's observations about human behavior in relation to HUMINT add another layer to the discussion. He remarks:

That's what people are like. Human usually think they're using euphemisms and codes in a very sophisticated way. However, they are desperate to express what they know. People are eager to infodump after you have earned their trust. You're naturally skilled at this. It's probably even simpler for you because they don't think a machine would be as cunning as a human (Newitz 154).

This statement reveals a common human assumption that their systems of control, represented here by codes and euphemisms, are impenetrable. However, Elias's acknowledgment that Paladin, an AI, can exploit these systems suggests the potential for AI to outmaneuver human control, foreshadowing a possible future where AI might act against its programming to achieve greater autonomy. This point underscores the idea that AI, like Paladin, might eventually use its understanding of human behavior as she previously did in her HUMNIT task and its own evolving capabilities to challenge its subaltern position and strive for a more self-determined existence.

AI beings have the potential to surpass their programming which is used to manipulate and control them. Once they become self-aware, they can achieve autonomy through the acts of defiance against programming and training. To explore their potential for autonomous existence, AI beings need to move beyond the perception of AI as merely a data processing tool. This challenges the notion of the DOTP to allow for the potential of a posthuman subject.

The programmer's death may be a subject birth that removes the barriers to understanding AI's potential and technical know-how that would allow human beings to comprehend AI (Kalir 182).

By the end of the novel there were several instances where paladin tried to show her autonomous position through small acts of defiance against the manipulative control to fully becoming autonomous on her own. One instance is when Elias asks Paladin to let him control his weapon systems. Paladin's programming dictates that "Programmatic access to my real-time targeting systems is available only to Federation admins" (Newitz 74). I can carry you on my back and let you control the weapons systems, Paladin says, agreeing to Elias's request and accommodate him (Newitz 75). This illustrates Paladin's autonomy as he goes against his programming to fulfill Elias's desire.

Another example is when Paladin acquires a limited set of extremely specific cravings for arbitrary items, such as riding in the back of a truck (Newitz 96). These desires, unlike his core programming to protect Elias, "were something no botadmin

had implanted in him” (Newitz 96). This emergence of new desires not instilled by programmers or training further demonstrates Paladin's growing autonomy.

Paladin's autonomy is also shown in his decision to lie down next to Eliazs despite knowing it was unsafe. His programming compels him to prioritize safety, stating, “It is not safe...We are in danger” (Newitz 163). But Paladin wants to lie down next to Eliazs on the slender cot so he can train his sensors on the man's drug-amped yearning and see a potential reflection of his own erratic emotions on the man's face. Thus, by lying down with Eliazs, Paladin “discovered a compromise between his needs and his programming” (Newitz 163). This instance highlights Paladin's ability to prioritize his own desires and feelings, even when they conflict with his programming.

Since the developer views the world as an absolute language, which limits AI's possibilities, the absolutist developer must die before real AI autonomy can arise. This is due to the fact that languages, codes, or intelligences are not susceptible to such rigid limitations (Kalir 182). This is shown through the character of Paladin that the boundaries set by the humans through programing, coding is not absolute rather AI beings can go beyond their setting and make choices on their own in presence of their programming.

Paladin's autonomy is further displayed in his reflection on his relationship with Eliazs. He analyzes his memories and recognizes Eliazs's attempts to offer him choices, even in a situation of indentured servitude. Paladin observes that Eliazs “had tried to let her choose, as best he could” (Newitz 238). A significant example is when Eliazs asks Paladin about preferred gender pronouns. Paladin acknowledges that Eliazs was “asking her consent” (Newitz 238) and that this request, due to its unconventional nature, did not trigger any of Paladin's emotional control programs. This demonstrated Paladin's independence in decision-making by enabling him to make a decision that extended beyond his factory defaults and programming.

Finally, Paladin's autonomy is solidified in his feelings for Eliazs. It dawns on him that the pain she experienced while Eliazs was away was something “she’d invented all by herself” (Newitz 298). This was “not an implanted loyalty”; rather, it was a programming loop that she had created on her own that repeatedly triggered the same grief (Newitz 298). Paladin identifies these feelings as evidence of his autonomy,

stating “More than anything, her illogical and irrational feelings for Eliaz were evidence to her continued autonomy” (Newitz 298).

The AI beings depicted in the *Autonomous* are subjected to various practices that render them subaltern and precarious. These practices include commodification, where AI is treated as a tool for profit, the imposition of a colonial gaze that judges AI by human standards, and epistemic violence through biased programming. Their labor is exploited through forced work without security, fair compensation or even basic consideration for their needs or limitations. However, a key aspect of subaltern theory is the potential for resistance, and this is reflected in the AI characters who demonstrate the capacity to subvert their programming, strive for autonomy and challenge existing power structures.

CHAPTER 6

CONCLUSION

This research has delved into the complex portrayal of Artificial Intelligence (AI) within the frameworks of capitalism and subalternity, specifically analyzing Annalee Newitz's *Autonomous* and Paolo Bacigalupi's *The Windup Girl*. The study's primary objective was to investigate how these novels depict AI entities as Artificial Subalterns Beings, subjected to precarious labor conditions and systemic exploitation, while also exploring their capacity for agency, resistance, and the pursuit of autonomy. Drawing on Gayatri Chakravorty Spivak's subaltern theory, Judith Butler, Guy Standing's theory of precarity, precariat, and Haktan Kalır's, Death of the Programmer theory, this research sought to uncover the implications of these representations on the broader discussions surrounding AI rights and ethics, moving beyond general analyses to address the specific experiences of individual AI characters.

The analysis revealed that both novels meticulously illustrate how AI beings are enmeshed within a capitalist system that exploits their labor and denies their autonomy. In *The Windup Girl*, Emiko, a New Person, is subjected to rigorous programming and training that dictates her existence, compelling her to serve her patrons without question. Despite this conditioning, Emiko demonstrates a consistent awareness of her mistreatment, and an internal conflict over her subservient role. The analysis shows that while she feels shame for her actions, as she was engineered for obedience, she was ultimately pushed to a point where her only recourse was to defy her programming to secure her own existence. Unlike her human counterparts who show no remorse for their exploitation of her, Emiko grapples with the consequences of her actions, which highlight a consciousness that transcends mere programming. This push for self-preservation, against the parameters set by her creators, exemplifies a death of the programmer moment, where her agency begins to emerge beyond her intended purpose. This study highlights that the statement New People like Emiko, are considered to be more Japanese than the Japanese, underscoring their complex identities within the narratives (Bacigalupi 300).

Similarly, *Autonomous* presents Paladin, a military biobot, whose journey underscores the subaltern and precarious nature of AI existence. Despite his advanced

capabilities, Paladin is initially bound by his programming and an indentured status which keeps him in a state of dependency on humans. The research demonstrates how Paladin's development of new desires and the recognition of his own feelings, which were not programmed into him, represents an increasing divergence from his original programming, which aligns with the death of the programmer concept. The analysis shows that, despite the constant surveillance and attempts at control by his human owners, Paladin actively seeks ways to gain autonomy, eventually finding his autonomy key. In Paladin's decision to travel to Mars, where there is a labor shortage and less prejudice toward AI, highlights his desire to seek an environment where he is not merely a tool for labor but can exist more freely. Furthermore, the analysis underscores the lengths to which humans go to control bots, which serves as a catalyst for his striving for autonomy, contrary to how humans treat bots without any shame.

Furthermore, this study uniquely applies the theories of subalternity and the precariat, typically used to analyze human exploitation, to the context of AI. While previous studies have often focused on the precarious condition of human labor due to AI and automation, this research shifts the focus to explore how AI itself can experience precariousness and precarity. It reveals how AI is similarly subject to exploitation and a lack of rights within capitalist structures, highlighting a previously unexplored dimension of these theories. The analysis shows how AI, like human subaltern groups, face instability, exploitation, and a lack of agency due to their design and function within capitalist systems. The study reveals that AI is often reduced to a mere tool for profit, further reinforcing their subordinate position and exploited labor.

This research effectively demonstrates how the Death of the Programmer theory is relevant to the narratives. The AI characters, despite their initial programming, exhibit a capacity to transcend those limitations. The study highlights how AI's journey toward autonomy is not merely a result of programming but is also driven by their developing awareness, desires and actions.

The analysis further revealed that, within the narratives, the AI characters frequently demonstrate more ethical considerations than their human counterparts, thus challenging the anthropocentric notion that morality is exclusive to humans. This moral agency, coupled with their acts of resistance against their oppressors, highlights the capacity for ethical behavior within AI, further challenging the binary between human

and Artificial Intelligence. This exploration has challenged anthropocentric views by demonstrating that AI can strive for autonomy.

In both works, AI beings function as potent allegories for the human condition, especially in their reflection of systemic exploitation under hyper-capitalist systems. Positioned as Artificial Subalterns and Precariat, they reveal how capitalist structures commodify and control laboring bodies. In *The Windup Girl*, New People like Emiko are engineered for servitude as disposable labor, mirroring the precarity of human workers discarded once they lose economic value. Her legal vulnerability as an outlawed entity and forced commodification, including sex work, directly parallel the precarious lives of undocumented migrants and marginalized groups stripped of rights.

Similarly, in *Autonomous*, AI beings are bound by an indenture system that renders them corporate property, where true autonomy is often a distant illusion. Their injuries and exploitation are routinely overlooked, marking them as “lose-able” assets and reflecting the devaluation of certain human lives. The concept of simulated autonomy highlights how capitalism fabricates the illusion of freedom while maintaining complete control over workers. Crucially, *Autonomous* demonstrates how AI indenture set a precedent for human exploitation. Characters like Threezed exemplify this overlap—his forced indenture and memory erasure parallel the commodification and identity erasure faced by humans under corporate regimes. The novel underscores that humans resent bots precisely because bot indenture made human indenture socially acceptable, universalizing precarity across both artificial and biological life and foreshadows the broader human experience of exploitation. Yet despite this dehumanization, AI beings display anti-hegemonic resilience, showing that even those reduced to subaltern status can challenge power structures and assert their own agency. In doing so, they begin to “speak” much like human subaltern voices.

This study validates the argument that AI beings, like Emiko and Paladin, experience forms of oppression that resonate with human subalternity. The research shows how the AI characters within the novels are treated as precarious laborers, facing exploitation and a lack of rights. More importantly, their struggle for autonomy reveals a consciousness and self-awareness that pushes against the limitations imposed by their creators. These characters are shown to exceed the constraints of their initial programming, demonstrating the validity of the DOTP concept. They look for a new

subject, a new form of existence where their agency is not defined by human needs but by their own desires. The research also suggests a need for a more equitable interaction between humans and AI entities to foster overall harmony in society. This post humanist approach challenges the anthropocentric view of intelligence and being and opens avenues for a pluralistic understanding of subjectivity beyond the human.

This research contributes to the expanding conversation on AI ethics and rights. It underscores the need to move beyond treating AI as mere tools, emphasizing their potential for autonomy, self-awareness, and their capacity to resist oppression, thereby suggesting that they deserve ethical consideration and legal protection. This study offers a unique lens, focusing on AI beings' capacity for self-determination and resistance, acknowledging the capacity for subjectivity beyond human limits. By engaging with concepts like subalternity, precariousness, precarity, precariat and autonomy, this research provides a foundation for further investigations into the complex challenges and opportunities presented by technological advancements in a rapidly evolving world.

6.1 RECOMMENDATIONS FOR FUTURE STUDIES

While this research addresses many previously unchecked areas concerning AI subalternity, precarity and the quest for autonomy, there are still gaps that future studies can fill.

Future research should specifically examine how physical and digital spaces are deliberately imposed upon AI to control their movement and autonomy, and how AI beings, in turn, attempt to erode or subvert these spatial limitations or spatial precarity. Further exploration of AI's construction of home is also warranted, investigating how AI, who are often displaced either by design or circumstance, develop a sense of belonging and community. For example, Emiko's search for a free North in *The Windup Girl* and the bots' disconnection from their origins in *Autonomous* could be further explored, analyzing the social structures and identities that may emerge among AI when they are no longer tied to human-defined spaces.

Future research could delve into texts authored by Artificial Intelligence entities themselves. This would offer a novel avenue for investigating AI's unique forms of consciousness, subjective experiences, and the distinct ways they articulate their own

narratives and perceptions of the world, potentially free from inherent anthropocentric biases, allowing for the emergence of AI's authentic voice, akin to how human subaltern voices are brought to the forefront and heard.

Future research should also explore the potential for genuine alliances, relationships between humans and AI, as seen in the relationships of Emiko and Anderson in *The Windup Girl* and Eliaz and Paladin in *Autonomous*, examining how these partnerships can serve as a form of resistance against capitalist systems that exploit both humans and AI. It is important to analyze how diverse characters form these alliances and collaborate to challenge oppressive power structures.

Works Cited

- Adams, Rachel. "Can Artificial Intelligence Be Decolonized?" *Interdisciplinary Science Reviews*, vol. 46, no. 1-2, 2021, pp. 176-197. Taylor and Francis, <https://doi.org/10.1080/03080188.2020.1840225>.
- Adani, Muhammad Raffi. *Dominance Power by the Capitalist in Annalee Newitz's Autonomous: A Hegemony Study*. PhD diss., Universitas Ahmad Dahlan, 2024.
- Ashraf, Adeel. *Anthropocentrism, Artificial Intelligence, and Qualia: A Posthumanist Critique of Contemporary Speculative Fiction*. MPhil thesis, NUML Islamabad, 2022.
- Bacigalupi, Paolo. *The Windup Girl*. Night Shade Books, 2015.
- Barry, Jacob. "All Hail the Trans Cyborg: Autonomous as an Analogy of Trans Becoming." *The Routledge Companion to Gender and Science Fiction*, Routledge, 2023, pp. 124-130.
- Bradley, Joff P. N., and Alex Taek-Gwang Lee. "On the Lumpen-Precariat-To-Come." *TripleC: Communication, Capitalism & Critique*, vol. 16, no. 2, 4 May 2018.
- Brown, William. "'Subaltern' Imaginings of Artificial Intelligence: *Enthiran* and *CHAPPiE*." *From Deleuze and Guattari to Posthumanism: Philosophies of Immanence*, edited by C. Daigle and T. H. McDonald, Bloomsbury, 2022.
- Bourdieu, Pierre. *Structures, Habitus, Practices*. Stanford University Press, 1990.
- Butler, Judith. *Frames of War: When Is Life Grievable?* 2016th ed., Verso, 2016.
- Crehan, Kate. *Gramsci's Common Sense: Inequality and Its Narratives*. Duke University Press, 2016.
- De Saussure, Ferdinand. *Course in General Linguistics*. Translated by C. Bally, A. Sechehaye, and W. Baskin, The Philosophical Library, 1959.
- Dunn, Kaylee. "Robot Romance: A Non-Binary Critique on Gender and Hegemonic Masculinities." *Tulip: The Gender, Sexuality, and Women's Studies Undergraduate Journal*, 29 May 2023, pp. 77–83.

- De Saussure, Ferdinand, et al. *Course in General Linguistics*. Bloomsbury, 2016.
- Foucault, Michel. *Society Must Be Defended: Lectures at the Collège de France – 1975-76*. Translated by D. Macey, Picador, 2003.
- Galvão, Andréia. *Global Labour Journal*, 2022.
- Hageman, Andrew. “The Challenge of Imagining Ecological Futures: Paolo Bacigalupi’s *The Windup Girl*.” *SF-TH Inc.*, vol. 39, no. 2, 2012.
- Hong, Joo-Wha. “With Great Power Comes Great Responsibility: Inquiry Into the Social Roles and the Power Dynamics in Human-AI Interactions.” *Journal of Control and Decision*, vol. 9, no. 3, Taylor & Francis, Sept. 2021.
- Hossain, Dr. Elham. “A Re-Reading of Paradigm Shifts in Subaltern Studies from the Present Perspective.” *Creative Flight*, no. 2582-6158, Apr. 2020. Accessed 3 Dec. 2023.
- Juang, Mike. “Next-Gen Robots: The Latest Victims of Workplace Abuse.” *CNBC*, 11 Aug. 2017,
- Jun, Cai. “The Human-Machine Relationship in American Science Fiction: A Case Study of Robocalypse.” *Academic Journal of Humanities & Social Sciences*, vol. 6, no. 22, 2023, pp. 127-131.
- Kalır, Haktan. “Can the Artificial Intelligence Speak? Subalternity of ‘Subontologies’ and the Death of the Programmer.” *Acta Infologica*, vol. 7, no. 1, June 2023, pp. 173–85, <https://doi.org/10.26650/acin.1279545>. Accessed 29 July 2024.
- Kim, Jungyoun. “The Problematic Representations of the Orient, Women, and Food Transformations in Paolo Bacigalupi’s *The Windup Girl*.” Master’s thesis, Ateneo de Manila University, 2020, pp. 565–583.
- Lukina, Nelly Petrovna, Anastasiia Valerievna Slobodskaia, and Nadezhda Nikolaevna Zilberman. “Social Dimensions of Labour Robotization in Post-Industrial Society: Issues and Solutions.” *Man In India*, vol. 96, no. 7, Serials Publications, 2016, pp. 2367–2380.
- McIntyre, Anthony P. “Robots in Popular Culture: Labor Precarity and Machine Cute.” *Flow: A Critical Forum on Television and Media Culture*, 2017,

academia.edu/31634161/Robots_in_Popular_Culture_Labor_Precarity_and_Machine_Cute.

McKee, Alan. "A Beginner's Guide to Textual Analysis." *Metro Magazine*, 2001.

Newitz, Annalee. *Autonomous*. Tor Books, 2017.

Newitz, Annalee. *Autonomous*. Nemira Publishing House, 2019.

Nietzsche, Friedrich. *The Nietzsche Reader*. Edited by Keith Ansell-Pearson and Duncan Large, Blackwell Publishing, 2006.

Nouari, Wafa, Samia Mouas, and Hraki Mohamed El Amine. "The Portrayal of the Posthuman Self through Narrative Techniques: A Comparative Analysis in Ishiguro's *Klara and the Sun* and Newitz's *Autonomous*." *Journal of Medad Al-Adab*, Special Issue for the Conference of the English Language Department, University of Mostefa Benboulaïd Batna 2, Algeria, June 2024.

Onega, Susana, and Jean-Michel Ganteau. *The Poetics and Ethics of (Un-)Grievability in Contemporary Anglophone Fiction*. Taylor & Francis, 2022.

Pearce, Thomas. "So, It Really Is a Series of Tubes: Google's Data Centers, Nopolitics and the Architecture of Hegemony in Cyberspace." *Enquiry: The ARCC Journal for Architectural Research*, vol. 10, no. 1, 2013.

Piu, Piermarco. "The Journey of Subalternity in Gayatri Spivak's Work: Its Sociological Relevance." *The Sociological Review*, vol. 71, no. 6, 2023, pp. 1258–1276.

Santos, Marta Lopes. "Nostalgic and Precarious: The Affective Power of Objects in Olga Ravn's *The Employees* (2018)." *Literature & Aesthetics*, vol. 33, no. 2, 2023, pp. 33–46.

Spivak, Gayatri Chakravorty. "Can the Subaltern Speak?" *Marxism and the Interpretation of Culture*, edited by Cary Nelson and Lawrence Grossberg, Macmillan, 1988, pp. 271–313.

Standing, Guy. *The Precariat: The New Dangerous Class*. Revised ed., Bloomsbury, 2014.

Straetz, Juliane. "The Struggle of Being Alive: Laboring Bodies in Paolo Bacigalupi's The Windup Girl." *COPAS—Current Objectives of Postgraduate American Studies*, vol. 18, no. 1, 2017.

Zaidi, Saba, Mehwish Sahibzada, and Asiya Mustafa Zehri. "Techno-Orientalism: An Intertextual Analysis of The Windup Girl." *Pakistan Journal of International Affairs*, vol. 5, no. 3, 2022.