

## The Struggle of Being Alive: Laboring Bodies in Paolo Bacigalupi's *The Windup Girl*<sup>1</sup>

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ABSTRACT: This essay reconsiders the Marxist question of how value is created through work and expressed within a lived experience of the body in a near-future setting that is characterized by an expanding impact of biotechnologies. To do so, I will read androids – organic, humanoid beings – as an allegory of the human laborer in a globalized capitalism. The object of my critical inquiry will be Paolo Bacigalupi's novel *The Windup Girl* as it uncompromisingly draws the critical attention towards laboring conditions of laborers of the working class especially in the Global South. It does so by exemplifying social injustices by telling the stories of marginalized laborers. This essay focuses on the android Emiko – a former secretary who is forced to work as a prostitute. By examining her, I want to demonstrate that an analysis of laboring bodies – especially in an increasingly technologically inflicted world – is crucial to the study of living and working conditions since these determine whether we feel alive, autonomous, accepted, or lifeless, restricted, and devalued.

KEYWORDS: labor; body; Marx; science fiction; biotechnology; enhancement

### Introduction: Longing for the Perfect Laborer

“A Robot that sews could take the Sweat out of Sweatshops” (Brewster n.p.), “China is Building a Robot Army of Model Workers” (Knight n.p.), and “The Recipe for the Perfect Robot Surgeon” (Simonite n.p.) are just a few titles that reflect the interest of many recent articles in the prospect of artificial laborers. While they explore the variety of working areas where robots could be appointed – like medicine, nursing care, production, waste management, domestic help, etc. –, they, however, also stress that “The Robot You Want is Far from Reality” (Rosenblum n.p.). Yet, the sheer number of research that has been conducted in the field of robotics as well as the increasing public interest during the last few decades seem to attest a profound interest to employ non-humans.

While the reasons to produce laboring robots do certainly vary, a frantic search for robotic solutions is oftentimes connected to an aversion towards certain types of labor – those that

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are dirty, dangerous, and not prestigious. In his article “Doing the Dirty Work,” Shaun Rein describes just one economy that is struggling with an increasing loss of workers in production. He observes that even though from a Western perspective the supply of workers seems infinite in China, the country is actually fighting the “death of workers” (Rein n.p.). “Younger Chinese born in the 1990s are no longer willing to toil in the factories for very low wages, and the country overall faces an aging population because of the one-child policy. Its young people have white-collar dreams and prefer to work in service sectors. They want to buy iPhones rather than make them” (Rein n.p.). Work, in these cases, seems to be not only crucial for funding one’s lifestyle, but as the article suggests is also related to achieving and upholding a certain social status, particularly with just one heir/ess to secure the family’s future.

Examples such as China’s millennials highlight that the value and meaning of human labor is determined by social, cultural, and economic forces taking direct effect on the body. While in the Western world human agents oftentimes think that they actively and autonomously shape their body and identity, their senses of selfhood are actually complex negotiations of their participation within socio-political power structures. As Judith Butler, based on Michel Foucault, describes, physical bodies are the materialization of ideologies operating on the subject. Thus, within socially constructed power relations, social forces – elements of society causing cultural, social, and individual changes – can be used to regulate and discipline bodies according to arising needs. As David Howes and Anthony Synott note: “The Person is made “new,” changed by a role, and this requires a body which, in turn, symbolizes, physically, society’s new demands on the individual” (Synott 159). Bodies are shaped by the powers at work in social interaction and these powers find physical expression on different levels of the body. Paolo Bacigalupi’s novel *The Windup Girl*, published in 2009, goes one step further by illustrating powerfully that the emergence of new biotechnological possibilities will allow the gradual control of bodies for profit – especially the more “useful” bodies – that are specifically designed to generate maximum profit by requiring minimal compensation and orderly attention within neoliberalism.

To understand the implications of biotechnologically constructed bodies like the one that I will address in this essay, it is necessary to examine the relationship between identity

construction and labor. Science fiction offers a vantage point from which to approach these questions, and it does so for a number of reasons. The genre does not only depict the reactions, hopes, and fears towards technological progress and social change, but it does so on the basis of the current perception of living and working within an exploitative economy that is becoming ever more coercive in its disciplining methods on the body. Science fiction reflects a possible future where tendencies, either good or bad, can be thought towards an end, a resolution or liberation. Thus, just as Foucault said: “The possibility exists for fiction to function in truth, for a fictional discourse to induce effects of truth, and for bringing it about that a true discourse engenders or ‘manufactures’ something that does not as yet exist, that is, ‘fictions it’” (Foucault, *Power/Knowledge* 193). Furthermore, Darko Suvin, who provides a generally accepted definition of the genre, stresses that science fiction as a literary genre plays with the “presence and interaction of estrangement and cognition” (Suvin 375) and uses “an imaginative framework alternative to the author’s empirical environment” (Suvin 375). In *Critical Theory and Science Fiction*, Carl Freedman argues that this dialectic between estrangement and cognition proves that science fiction can in fact operate as a critical theory in itself since the genre-specific operation of cognition “enables the science-fictional text to account rationally for its imagined world and for the connections as well as the disconnections of the latter to our own empirical world” (Freedman 17). Thus, as David M. Higgins summarizes, science fiction “cognitively estranges readers from the taken-for-granted associations we may have with the contemporary phenomena of global interconnection in order to more deeply and critically interrogate what globalization is and what it means” (Higgins 372). By relying on historical facts as well as political realities, it can project future phenomena and dramatically mirror social conditions. Simultaneously, it estranges its readers by confronting them with a temporally, spatially and textually distant society. Through this estrangement of presently unconscious mechanisms in society, the readers’ attention is shifted to the blind spots of widely accepted views and values.

Paolo Bacigalupi’s novel *The Windup Girl*, published in 2009, addresses problems inherent to contemporary global capitalism on all levels – global, national, social, individual. In contrast to other texts dealing with globalized capitalism, “it approaches key concepts underwriting the ecological crises in the novel and outside of it with an uncompromising speculative vision that brings [the] inherent contradictions [of ecology, technology, and geopolitics] distinctly

into view” (Hageman 284). The novel estranges the hidden connections between labor, bodies, and identities by exploring the position of androids in a system governed by a global capitalism. Consequently, *The Windup Girl* suggests to reconsider the Marxist question of how value is created through work and expressed within a lived experience of the subject. By focusing on the android experience in the novel with a traditional Marxist reading, I seek to establish that labor determines whether we feel alive, autonomous, accepted or lifeless, restricted, devalued in globalized capitalist societies. I argue that by reading artificially created laborers as an allegory for the laborer in capitalism, we can understand how a capitalist rationale influences our understanding of being alive or being lifeless and devalued within society. To do so, I will begin by analyzing Emiko with a traditional Marxist reading. In this way, I also want to demonstrate that Marxist theories can very well be applied to contemporary and future working conditions. Finally, I will continue to acknowledge that Emiko does not only represent laboring bodies, but also serves as a symbol for the working conditions of women in globalized capitalist social systems.

### **Constructing the Perfect Laborer**

By confronting the readers with the fateful story of an artificially constructed android laborer, Paolo Bacigalupi emphasizes the importance of the physical body as a precondition of any labor and its increasing importance in biotechnologically influenced neoliberalism. As Karl Marx described it, the physical body is not a static origin of work but it is the generative as well as the generated consequence of its work (cf. Marx). Surplus can only be generated by employing bodies that suit the work they do. To further optimize the production process, bodies, as Foucault describes, are disciplined and thus trained to work more efficiently (cf. *Discipline and Punish*).

The future setting of *The Windup Girl* is characterized by agricultural catastrophes that continue to destroy crops and humans. In the novel, Thailand is one of the few states still relatively unaffected by bio-terrorism which is mostly due to trade embargoes and strict regulations enforced by the Environment Ministry. Western businessmen like the character Anderson Lake, however, constantly try to detect and steal Thai secret practices that ensure the good health of the nation’s crops. In doing so, “Bacigalupi’s vision of a future ecological

and economic transition complicates the idea of the Global North as the primary, if not exclusive, engine of development for global economics” (Hageman 285). He portrays a possible future society of the Global South that still follows a capitalist rationale even though it functions very differently from the West.

In the world of the novel androids were created to perform jobs that require a high degree of obedience and discipline and are connected to low status; those that are dangerous, despised and dirty like military work and prostitution. By introducing characters such as Emiko who are supposedly free but in fact highly dependent on the specific employment, Bacigalupi stresses that laborers in global capitalism – especially women who in some cultures are already considered as inferior – are turned into machines who are devalued, mistreated like slaves, and left without alternatives. Being aware of their low status, they experience a feeling of lifelessness and not-belonging – just like the windup girl who is neither considered sentient nor part of society.

The eponymous “windup girl” is a female Japanese android called Emiko who is working as a prostitute in Bangkok. Throughout the novel, she is struggling with her lived reality as a sentient being but also as the property of someone else, built to obey. While she is striving to free herself of her employer, she kills the protector of the Child Queen, Thailand’s royal ruler, and in doing so triggers events which eventually devastate the whole kingdom. Prostitution was, however, not her first and assigned job. On several occasions during the novel’s plot, Emiko remembers and talks about her former employment. These flashbacks are characterized by ambiguous feelings. In Japan, she was employed as a “Personal Secretary: translation, office management and ... companion” (Bacigalupi 126). She is just one among many androids who are produced to work. Due to demographic changes and natural disasters, Japan was lacking laborers in all fields of work and, as a result, started creating androids – “artificial human being(s) of organic nature” (Parrinder 59). Thus, “(t)he Japanese were practical. An old population needed young workers in all their varieties, and if they came from test tubes and grew in crèches, this was no sin” (Bacigalupi 40). In contrast to Thailand, however, the artificial citizens enjoy a better status in Japanese society which Emiko sadly remembers:

(T)hat had been in Kyoto, where New People were common, where they served well, and were sometimes well-respected. Not human, certainly, but also not the threat that the people of this savage basic culture make her out to be. Certainly not the devils that the Grahamites warn against at their pulpits, or the soulless creatures imagined out of hell that the forest monk Buddhists claim; not a creature unable to ever achieve a soul or a place in the cycles of rebirth (...). (Bacigalupi 40)

The relationship between the Japanese and the New People, as they call them, is characterized by mutual appreciation. Nevertheless, “the Japanese position of non-discrimination does not go far enough to enact complete hospitality toward these new posthuman beings, as the New People exist in a structure that defines them as property” (Hageman 294). While Emiko tells only rather positive stories about her past in Japan where she was treated like a valued being, the end of the employment left her bitter. After her employer took her to Thailand for a business trip, he “concluded that leaving his secretary in Bangkok was more economical” (Bacigalupi 126). He preferred “upgrading” by employing a newer version of android and saving the import taxes which would have been due if Emiko had reentered the country. Being well aware of his financial advantages, he also left her knowing that her life in Thailand would be overshadowed by persistent threats to her life.

In contrast to Japan, Thailand is not – at least not legally – employing androids. Thus, Emiko is forced to accept the only job that is offered to her: working as a prostitute and exotic dancer at a shady sex-club. Not only is she obliged to have sex with anyone who pays, she is also forced to participate in bizarre and brutal sex shows during which she is raped for the pleasure of the audience. As she is not considered a real, sentient human being, the audience does not pity her. Even though she suffers profoundly, she is not able to fight the torture:

She forces Emiko down on the table. The men gather round as Kannika begins her abuse. Slowly, it builds, first playing at her nipples, then sliding the jadeite cock between her legs, encouraging the reactions that have been designed into her and which she cannot control, no matter how much her soul fights against it. (Bacigalupi 279)

As an android, she is not only created and built to meet any possible requirements her employers may have but she is also further disciplined by strict Geisha-like training. As a product of an artificial, economically controlled production process, Emiko herself represents a commodity. Performing her job, she is further alienated and objectified. This

experience of alienation, the disembodiment caused by labor and its influence on subjecthood suggests a Marxist reading even when applied to laboring conditions which changed considerably since Marx's times.<sup>2</sup>

Marx locates commodities at the center of capitalism and he observes that they follow a double and quite contrary logic. Marxist theorist David McNally argues that “[a]s use-values, commodities meet human needs. But as exchange-values, they obey a different imperative, to procure other goods, or their universal representative – money – in order to augment the wealth of their owners” (McNally 121). Firstly, commodities are things outside of us which satisfy human needs and desires (cf. Marx 43). In his treatise *Capital*, Marx writes that objects “come into the world in the shape of use-values (...) (;) (t)his is their plain, homely, bodily form” (Marx 54). But this alone does not make them a commodity. They only become commodities “because they are something two-fold, both objects of utility, and, at the same time, depositories of value” (Marx 54). When thought through their exchange value, commodities become represented through the value of something else, e.g. an amount of money. This exchange-value is – in contrast to the finite restriction of a material thing – theoretically infinite. Their value can change, decrease as well as expand enormously. There is no inherent limit to the exchange value of a thing. While we can touch and feel an object and its physical properties, there is hardly any way to sensually experience the exchange value of a thing. It represents an invisible property which “constitutes the ‘phantom-like objectivity’ of value” (Marx 122). While these characteristics of invisibility and infinity might already strike one as uncanny, the novel and its use of humanoid and at the same time commodified beings highlights how the laboring process brings this uncanny feeling from the external realm into the very experience of living and working within a capitalist society.

Marx realizes that during the production or, more generally, the work process, labor-power is transformed into a commodity. “By labour-power or capacity for labour is to be understood the aggregate of those mental and physical capabilities existing in a human

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<sup>2</sup> Please note that my analysis will focus on this Marxist analysis of labor, especially Emiko's laboring conditions. I am, in fact, aware that there are numerous other theories, which will add to a more comprehensive reading of labor in the Global South, gendered labor, and prostitution. Yet, I hope that my reading will contribute to the awareness that Marxist theory is still crucial for contemporary analyses of labor.

being, which he exercises whenever he produces a use-value of any description” (Marx 164). While laborers carry out productive activities producing use value, they at the same time generate something intangible: an exchange value. According to McNally, “capitalism [...], therefore, [...] construct[s] the values of products of labour on the basis of an unseen and intangible property they share *as commodities* (but not as use-values), that of being general products of human labour form the concrete work process involved” (italics in original; McNally 123). Thus, labor itself takes the form of a commodity within the capitalist society (cf. Marx 167), offered for an abstract amount of money. It is important, however, to stress that this commodity must always be sold at the market by its possessor, the working person. Otherwise, if someone would sell it indefinitely and completely, it would convert the person into a slave. Thus, each laboring body, which possesses different and individual qualifications, becomes measured and abstracted – a process that McNally describes as follows:

(T)heir own life-force, (...) workers’ labouring power becomes a commodity, a (...) detachable thing that can be sold, handed over to someone else. As a commodity, labour is not seen as integral to human personhood but, instead, as something that can be isolated and given to a buyer for a stipulated period of time. (...) Commodified abstract labour is thus effectively *disembodied*, detached from the persons who perform it. (italics in original; McNally 14)

Marx realizes that all commodities receive a mystical character (cf. Marx 76) – born out of their transcendent property to be more than their plain material, immanent self. Transcribed to commodified laborers – and thus also to their allegorical representation as Emiko in the novel – they also gain a universal feature which transcends their earthly existence and which is hardly tangible. This universal feature – the transformation into an abstract generality – to actually become a commodity and be able to work in exchange for money within the capitalist market is of utmost importance for the individual since monetary currency guarantees the access to an enhanced self-experience. Thus, Marxist references to labor as abstract are meant literally. The Latin *abstrahere* can be translated as ‘to draw away,’ ‘to separate,’ or ‘to cut off’. “Commodified labour involves a profound and thorough-going restructuring of human experience: people’s sense of their very bodies, of their capacities and creative energies, of the interrelation of self and things, and of self and others – all of



these are utterly transformed by commodification”<sup>3</sup> (McNally 15). Their previous experience is dramatically cut off from the new one.

To describe the transformative power of labor and the experience of the laborer, Marx uses the symbol of the vampire, which is meaningful in three ways as David McNally realizes. Firstly, the vampire, as it is sucking the blood of the living, is an emblem of exploitation. The capitalist venture seeks to generate surplus-value, which is the profit the capitalist produces. As labor is necessary to transform an object from its use-value into exchange-value, the price for one’s work plays a crucial role in the generation of surplus-value. One could say that “capital feeds off living labour” (McNally 140), exploits the individual laborer, to obtain the highest surplus possible. In doing so, the labor market is determined by the relationship between supply and demand. While the laborers sell their labor-power at the market, they cannot freely govern the price, i.e. the value of their work. Instead, the wage is controlled by the market. Simply said, if there are a hundred laborers offering their labor-power for \$10 an hour, someone selling it for \$20 will hardly be able to get employed. It also means that if there is a high supply of laborers, capitalists will profit from the cheap labor-power of their employees. The more people are able to do a certain work – and especially working in production which hardly requires any higher qualification besides a healthy body – the cheaper their labor-power gets and the more surplus-value is generated.<sup>4</sup> Laborers feel this inability – or rather an impotence – to determine the price of their work and hence of their own body’s productive capacity. In the novel, Bacigalupi stresses this impotence of the individual worker by introducing laboring bodies, such as Emiko, who have no control over their employment and who can hardly make any demands. Just like the laborer in capitalism who is compelled to work to survive, Emiko cannot escape the system as she needs the money and the protection of her employers. Hageman observes in this context that “(...) Emiko’s story reveals a reticence on the part of human beings to face her existence as a

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<sup>3</sup> “Commodities thus inhabit a world of ‘magic and necromancy’ in which sensuous things (use-values) are mysteriously transformed into entities of an altogether different order (values), as if by alchemy” (McNally 126).

<sup>4</sup> Bacigalupi criticizes these mechanisms not just in his depiction of Emiko but also in his description of the laboring conditions at the portrayed factories and his rendering of the “Yellow Cards,” Malayan Chinese refugees who are working under devastating conditions, always struggling to find another opportunity to work a few hours without being killed. Bacigalupi’s short story “The Yellow Card Man” (2006) focuses on these bitter fates. It is also the predecessor of the novel.

product of their own participation in global capitalist economy” (Hageman 295). Even though she is consciously aware of the maltreatments, escaping is painfully difficult and up until the end she is fighting her urge to subordinate to the structures controlled by others.

The second notion of vampirism refers to alienation, or rather inversion, which is important to any discussion of the subjective perception of being alive and lifeless as a laborer. Marx describes that the process of labor in capitalism involves an inversion “by which dead (material objects of past labour, known as means of production) dominate the living (actual human labourers)” (McNally 140). It is the intention of any production to generate profit to satisfy human needs and wishes; to “reconvert the greatest possible portion of surplus-value, or surplus-product into capital” (Marx 558).<sup>5</sup> That also implies that the tools, equipment, machines, materials, etc., needed for production act as a means to an end. What is, however, intriguing about this capitalist manner of production is the relationship of living labor versus dead labor. “Living labour appears merely as a means to realize objectified, dead labour, to penetrate it with an animating soul while losing its own soul to it” (Marx qtd. in McNally 141). In Marx’s writings, the term living labor describes the specific activity of productive human laborers. Dead labor, on the other hand, refers to the means of production which were created by labor in the past. During production, both come together and living labor “reanimates” these products of past labor. Thus, one could say that through production, dead labor is brought back to life. McNally describes this process as ‘transubstantiation,’ “a process in which a quality – in this case life – is transferred from one substance to another” (McNally 141). As the term is most commonly used in the Christian religion to describe Jesus’ transformation into bread and wine, it again adds a mystical, sublime element to Marx’s remarks. “Living labour must seize upon these things [e.g. yarn] and rouse them from their death-sleep, change them from mere possible use-values into real and effective ones” (Marx 178). Dead things, like yarn, are “bathed in the fire of labour, appropriated as part and parcel of labour’s organism, and, as it were, made alive for the performance of their functions in the process (...)” (Marx 178). It is only through their own physical investment in the labor-process that laborers are able to awake, to reanimate, the dead labor. This goes, however, not without weakening the living laborers and in turn,

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<sup>5</sup> “Accumulate, Accumulate! That is Moses and the prophets” (Marx 558).

making them subservient to an alien will and power. Analyzing Emiko, or rather artificial laborers in general in the novel, one can come to understand how a capitalist rationale influences our understanding of being valued or de-valued – or of metaphorically being alive or lifeless - within this society. Even though Emiko is not employed in production, which is Marx's general example in this discussion, her lifestyle is characterized by a continual loss of her vivid self. While in the beginning she internally fights the torture, she later resigns to her fate: "Inside, she is dead. Better to be dead than a windup (...). (...) She can simply lie there, and let them mulch her ... thrown away as Gendo-sama should have discarded her. She is trash" (Bacigalupi 281). The social devaluation, the fact that no one – accept maybe for her lover – realizes her to be a soulful, living being because her whole life is determined by the work she does, eventually almost completely numbs her. While Marx describes how life is transferred to the products generated by the individual, this metaphor is still useful to describe the loss of vitality that people experience who are working in fields with little social acceptance. Whenever for example a female prostitute goes to work, she is confronted with the revulsion of other people – even those who make use of her services. This social devaluation of the job eventually determines not only her work life but also her whole lifestyle. Thus, through the described process of alienation, laborers are drawn away from the experience of individually being valued for their work.

Even though abstraction, mysticism, and alienation might strike one as categories afflicting the mind rather than the body, the physical body still remains very much essential in all these experiences. While a coat has to exist to possess any value, the laborer has to hold specific physical capabilities to work. Laborers can only then sell their labor-power if they are for example healthy and equipped with the necessary abilities. That does, however, also imply that some workers are naturally better qualified for certain jobs than others – and that a further qualification of the individual – or at least a maintaining of the condition – seems always necessary. This is even more crucial as laborers realize how easily replaceable they become. Emiko is perfectly engineered to fulfill the predetermined tasks of being a secretary as well as a companion. While she is, however, perfect at this job, she must realize that she is also easily replaceable by any other android which is constructed similarly. Her employer simply replaces her – leaving her to a bitter fate in Thailand – knowing that the next android employee will easily fill the gap.

As already mentioned, androids in the novel are not only built to meet the respective requirements, but they are also further disciplined. Discipline, in fact, is also crucial in Marx's elaborations on the laborer. While performing their tasks, laborers experience a fragmentation of their body:

Within the capitalist system all methods for raising the social productiveness of labour are brought about at the cost of the individual labourer; all means for the development of production transform themselves into means of domination over, and exploitation of, the producers; they mutilate the labourer into a fragment of a man, degrade him to the level of an appendage of a machine, destroy every remnant of charm in his work and turn it into a hated toil; they estrange him from the intellectual potentialities of the labour-process in the same proportion as science is incorporated in it as an independent power; they distort the conditions under which he works, subject him during the labour-process to a despotism the more hateful for its meanness: they transform his life-time into working-time (...). (Marx 604).

In *Discipline and Punish: The Birth of the Prison*, Michel Foucault elaborates on the mechanisms of disciplining bodies, which is worth to take a closer look at in this discussion as Bacigalupi's androids, who are constructed and disciplined to perfectly perform the assigned tasks, evoke the image of the excellently disciplined and thus subjected laborer.

Foucault understands discipline as an "art of correct training" (Foucault, *Discipline and Punish* 170) and basic to his perception is the notion of bodies as docile bodies. The concept is based on the assumption that the human body is a social construct which is shaped by social forces. Foucault proposes that the examination of the body is the starting point to analyze the concrete effects of power because power relations are always inscribed on the body (McNay 15). *Docile bodies* in particular are always subjected to power. Since antiquity, the body was known to be the object and target of power. It was in the 18th century, however, when scholars became increasingly interested in manipulative bodies. The reason for that can be found in changes in the economic structure of society and new modes of production. As described, bodies finally got an economic value. Trained bodies were able to work more efficiently and to better follow instructions (Foucault, *Discipline and Punish* 136f). Foucault realizes that these bodies are formed in a machinery of power which firstly explores the given structure, then breaks it down, and rearranges it. This power is identified as *discipline*. The technique's methods and special qualities, which distinguished it from slavery and service – and this distinction is crucial as Marx also stresses – suggested that

every human being was treated individually. Moreover, the objects of control were not the signifying elements of behavior or the bodily gestures but the efficiency of its functioning. Lastly, the modality of discipline was seemingly constant coercion produced by an alleged consistent supervision (Foucault, *Discipline and Punish* 137).

(...) Discipline produces subjected and practised bodies, 'docile' bodies. Discipline increases the forces on the body (in economic terms of utility) and diminishes these same forces (in political terms of obedience). In short, it dissociates power from the body; on the one hand, it turns into an 'aptitude', a 'capacity', which seeks to increase; on the other hand, it reverses the course of energy, the power that might result from it, and turn it into a relation of strict subjection. (Foucault, *Discipline and Punish* 138)

Additionally, Foucault realizes that from changes in society arise new demands to which discipline must respond. Thus, discipline searches to construct a machine, namely the individual, who perfectly fits the requirements of society and its economic system. In *The Windup Girl*, further training of the androids is described as necessary. Even though Emiko's bodily functions operate much better than those of human beings, her movements are characterized by "stutter-stop motions" (Bacigalupi 42) and "would never be smooth" (Bacigalupi 39). Thus, whenever she moves, she is easily recognized for the para-human she is. Moreover, she is intensely aware of her irregular movements. They become a constant reminder – or in Foucault's descriptions the invisible watchmen in the tower – that exerts a constant coercion of the body of the subject. While this is actually a dangerous mark in Thailand, her training in Japan was rather conducted for aesthetic reasons:

She is nothing but a silly marionette creature now, all stutter-stop motion – herky-jerky *heechy-keechy* – with no trace of the stylized grace that her mistress Mizumi-sensei trained into her when she was a girl in the crèche. There is no elegance or care to her movements now; the telltale of her DNA are violently present for all to see and mock. (italics in original; Bacigalupi 42)

Scott Selisker observes that "(t)his training – with the invasive connotation of 'training into' – adds 'elegance' and 'care' to Emiko's strange movements, and it recalls the movements of a geisha or consort, or even the many years of training that bunraku puppeteers undergo in order to make their puppets graceful and lifelike" (Selisker 510). Besides her movements, the combination of genetic programming and behaviorist conditioning mainly targets her obedience. Therefore, even though she is consciously aware of the maltreatments inflicted on her, she is unable to fight her urge to obey almost up until the end of the novel: "My

body is not mine,' she told him, her voice flat when he asked about the performances. 'The men who designed me, they make me do things I cannot control. As if their hands are inside me. Like a puppet (...)'” (Bacigalupi 202). It is, however, crucial for her later emancipation that the possibility for free action remains.

Emiko’s working relationships, as might be clear by now, are not characterized by freedom. It is firstly her strong urge for obedience and loyalty and secondly her employers’ self-evident perception of her as property that make her a slave rather than a wage laborer. Nevertheless, she is paid and her pimp allows her to move freely around town – well knowing that whenever someone recognizes her for what she is, she might easily get killed.

As Emiko’s example shows, the prospect to biotechnologically enhance bodies also changes the possibilities of the work force. While individuals can decide to improve themselves to gain better chances to perform a specific job, Bacigalupi stresses the fact that many people undergo enhancing procedures without their knowledge. Global market capitalism requires laborers who will generate the maximum profit by requiring minimal compensation, training, and maintenance. Kaushik Sunder Rajan addresses this changing relationship between laboring bodies and capitalism. He emphasizes that technology and the “life sciences represent a new face, and a new phase, of capitalism and consequently, that biotechnology is a form of enterprise inextricable from contemporary capitalism” (Sunder Rajan 3). The physical body becomes a site that is ever more pervasively shaped according to economic requirements – oftentimes without the individual’s informed consent. Just as any human, Emiko could not decide about her nature. However, her body is not the result of coincidence but instead carefully constructed by genetic engineers. Moreover, the fact that she needed additional training to optimize her qualification for her predestined job shows that it is, in fact, not only her nature but also her nurture that eventually lead to her subjection. Thus, the novel critically addresses how a laboring body is always a result of external forces operating on several levels.

## Gendered Labor

In the final part of this essay, it is imperative to acknowledge that Emiko not only represents the laborers' loss of autonomy of their laboring bodies in general, but she is also a female android serving as an allegory of the struggle of working women especially in the Global South. In *Bodies of Tomorrow. Technology, Subjectivity, Science Fiction*, Sherryl Vint remarks that it is especially in discourses on marginalized groups that the body becomes a crucial site of investigation:

The ability to construct the body as passé<sup>6</sup> is a position available only to those privileged to think of their (white, male, straight, non-working-class) bodies as the norm. This option does not exist for those who still need to rely on the work of their bodies to produce the means of survival, for those who lack access to technologies that can erase the effects of illness, and for those whose lives continue to be structured by (...) body-based discourses of discrimination. The body remains relevant to critical work and 'real' life, both because 'real' people continue to suffer or prosper in their material bodies, and because the discourses that structure these material bodies continue to construct and constrain our possible selves. The material action of ideology on the body is not something that technology has erased; in fact, technology can be and has been used to enhance this action. (Vint 8f)

By having a female, sexualized android, who is forced to use her body as a tool in her work as an exotic dancer and prostitute, as the main protagonist whose fate is closely tied to the fate of society, Bacigalupi creates a character whose body cannot be ignored or considered merely a discursive construct. In doing so, he draws the critical attention towards the fact that bodies can in fact determine the lifecourse of a subject. Even though women are an important part of the workforce all around the world nowadays, Emiko reminds us that the female sex is still oftentimes tied to instrumentality and objectification. Catherine MacKinnon's reflections on the alienation of women<sup>7</sup> fits Emiko's experiences:

(A) woman is not simply alienated from her product, but in a deep sense does not exist as a subject, or even potential subject, since she owes her existence as a woman

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<sup>6</sup> Here, Vint is arguing against a tendency in critical discourse during the second half of the 20<sup>th</sup> century in which "every 'thing' – even materiality – is turned into a matter of language or some other form of cultural representation" (Barad 801).

<sup>7</sup> It is important to note that Catherine MacKinnon's approach has decisively been criticized as being extremist and denying women any subjecthood. Nevertheless, I think that her explicit description nicely fits Emiko's portrayal as she is in fact denied subjecthood on many levels.

to sexual appropriation. To be constituted by another's desire is not the same things as to be alienated in the violent separation of the labourer from his product. (Haraway summarizing MacKinnon 159)

Emiko's sex is no natural coincidence. In fact, she was intentionally engineered as an extremely attractive posthuman woman to qualify for further fields of work – namely sex work.<sup>8</sup> Her skin's pores are even designed to be so delicate, that her body easily overheats, especially in hot, humid Thailand. Thus, the main purpose of her design is not to function well but to please the aesthetic demands of her employers – or rather the clients who buy android laborers. Combined with her obedience, she allegedly constitutes her male owner's ideal employee. As a hypersexulized female android, power relations become intimately inscribed on her body. Even though she is constructed and trained to be a secretary, sex, or as referred to in the novel 'companionship', always remains an additional feature that the supposedly male employer can make use of. Thus, Bacigalupi stresses the sexual division of labor and the associated hierarchy which is still common today. Caught in an externally constructed, male-dominated system of dependence, Emiko's low income as well as the social rejection of prostitutes leaves Emiko almost no escape and effectively turns her into a slave. Over the course of the events described in the novel, it becomes clear that "Emiko's exploitation in the Thai sex trade demonstrates that she has been programmed with directives to please, and it is this automation to meet market demands that in fact make her an object that humans can treat with repugnance or with utilitarian apathy" (Hageman 295). While, as mentioned earlier, Sunder Rajan writes about the parallel development of neoliberalism and invasively disciplined bodies, Timothy Morton explicitly points out: "What's wrong about genetic engineering is that it turns life forms into private property to enrich huge corporations" (Morton in Hageman 294). Even though the system in *The Windup Girl* gives the impression that New People are also free laborers in this capitalist system, workers like Emiko are treated like slaves by their employers. As her employer Raleigh says: "You were useful to someone, once, so I see how a windup like you might forget herself. But let's not fool ourselves. I own you" (Bacigalupi 176). Thus, the novel addresses an important

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<sup>8</sup> Concerning the external construction of gender and sex, there is quite a number of useful literature, which I unfortunately cannot discuss in this essay due to its extent and since I want to focus on the subjective experience of the laborer. Cf. Donna Haraway's *Simians, Cyborgs, and Women*, and Judith Butler's *Bodies That Matter*.



characteristic of modern neoliberalism which is oftentimes not sufficiently acknowledged. In contrast to Western assumptions of agency and autonomy, the free neoliberal market does not grant every laborer the opportunity to independently choose a job according to their qualification. Emiko has work experience and a qualification which is much higher than merely selling her body for sex. Nevertheless, the overall conditions do not leave her any chance to choose her fields of employment. As Aihwa Ong also observes in her description of the actual laboring conditions for women in the Global South:

(C)apitalist discipline operates through overlapping networks of power relations in the workplace and the political domain, regulating daily practices, norms, and attitudes that give legitimacy to the unequal relations that sustain capitalism. (...) (T)he disciplining of the labor force is an intricate, long-drawn-out process involving a mixture of repression, habituation, co-option, and cooperation within the workplace and throughout society. (Ong 286)

Thus, it is never just the conditions at the workplace but rather larger cultural practices and attitudes that are directed against specific types of labor and that permeate every part of the individual's life. It seems that Emiko cannot escape her job because her body – which was solely constructed for the purpose of working – and as such her identity are inseparably tied to her job and the linked stigma.

Returning to McNally's reading of Marx, he assigns invisibility as the final vampiristic feature of the commodification of labor and this becomes especially crucial for the final events of the novel. Vampires, as creatures of the night, hide in darkness and strike unnoticed. Nevertheless, the presence of those unseen creatures remains very noticeable. As I have discussed earlier, the uncanny nature of exchange-value is an invisible, all-encompassing force. Laborers and androids do not have a choice but to subordinate themselves to these forces. The notion of invisibility is, however, also characteristic for how Emiko arranges her free time. As her employer allows her to move around town, she goes to the city center whenever she can. During these trips, she is always painfully aware of her movements, trying to remain invisible. In order to hide among the crowd, she moves slowly since this is her only chance to conceal her true nature:

(T)hey bump against her with a self-confident maleness, though one white shirt's<sup>9</sup> hand is touching her neck as though accidentally pressed there by the jostle of others. Suddenly, she will no longer be invisible. She will appear before them, fully formed, a New Person with nothing but expired papers and import licenses and then she will be mulched, recycled as quickly as they compost dung and cellulose, thanks to the telltale twitching movements that mark her as clearly as if she were painted in the excreta of glow worms. (Bacigalupi 172)

Even though Emiko is by her nature meticulously striving to move under the radar and stay invisible, she eventually snaps due to the continuous abuse. Not being aware of what she does, she kills the Somdet Chaopraya, who is the protector of the Child Queen and a politically high-ranking figure, her pimp Raleigh and eight other men:

By the time Raleigh hits the floor, Emiko is already bolting across the room, toward the VIP door and the man who hurt her the most. The man who sits and laughs with his friends and thinks nothing of the pain he inflicts. She slams into the door. Men look up with surprise. Heads turn, mouths open to cry out. The bodyguards are reaching for their spring guns, but all of them are moving too slow. None of them are New People. (Bacigalupi 283)

Through this act of emancipation which at the same time is an act of feral violence, Emiko suddenly becomes visible. Only because she was able to constantly remind herself that – against all prejudices – she is a valuable, sentient being, who is not supposed to stand the continuous abuse, she can finally break free. In the end, her escape has devastating consequences. Even though the authorities discover her to be responsible, nobody but her lover can understand the reasons that made her snap. People are shocked when they get to know the nature of the attacker since this seems to be opposed to the common belief that “(a)ll they do is obey” (Bacigalupi 296). Instead of accepting that she could no longer take the torture, they once again suppose that she was controlled externally – not accepting that she could have any will on her own. This ending in fact carries an important notion. While it is almost impossible to fight injustices as long as you stay invisible, making sure nobody notices your suffering just to avoid further stigmatization, Bacigalupi addresses the possibilities that an act of becoming visible can establish. As Emiko is hunted by the

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<sup>9</sup> In the novel, the term “white shirts” refers to the environmental ministry’s law enforcement team. Since protecting the environment has become the most important objective of the nation in the world of the novel, it is also the most influential ministry in Thailand. The white shirts act as a police hunting any kind of environmental felony. They are, however, also feared by the people, especially by those whose existence is socially condemned, because many are corrupt, brutal, and ruthless.

government immediately after the incident, she is forced to find a niche where she can live. She hunts and cares only for herself. In a final scene, she encounters Gibbons, a brilliant scientist who contributed to create New People and immune crops. While he cannot change her nature anymore, he proposes that he might help her species: “A strand of your hair would do. You cannot be changed, but your children – in genetic terms, if not physical ones – they can be made fertile, a part of the natural world” (Bacigalupi 386). Thus, the novel ends by foreshadowing a possible future. Without her emancipation, this future would have remained out of reach. Bacigalupi thus shifts the critical attention to the idea that revolt – becoming visible – is of utmost importance to create a fairer society. Even though one never knows what lies ahead, as soon as you’re suffering unbearably, fighting for emancipation is crucial.

In *The Windup Girl*, Paolo Bacigalupi reminds the reader that by assigning androids to jobs of little social acceptance, humans try to free themselves of the social stigma connected to these jobs. In doing so, he cautions the readers to realize the devastating working realities of many laborers – especially women – and the imminent biotechnologically impacted future. Eventually, it is Emiko’s aspirations to be “alive” which compel the novel’s human characters as well as the readers to re-evaluate the crucial relationship between work, society, personal identity, and self-perception.

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