The Evolution Of AI Labour And The Benefits And Detriments Of This Progression With Reference To Chris Sanders, *The Wild Robot*

Over the past 20 years, artificial intelligence (AI) has significantly transformed its capabilities and uses within society, evolving from simple automation to emotional intelligence and potentially an imitation of human behaviour and creativity. These progressions reflect the increasing integration of AI into everyday life and the shifts in labour dynamics as automation takes over both basic menial physical labour and encroaches on emotional and creative labour. Chris Sanders's children's film *The Wild Robot* (2024) depicts these evolutions in the uses and applications of AI labour, where critical theory can be applied to the learning journey of the Rozzum Unit 7134 as she progresses to form her identity and become Roz. I will use critical theory to conclude that the developing modes of labour within the AI industry explore how the critical arguments surrounding AI highlight the capacity for this to become ubiquitous in industry to benefit and predominantly detract from the value of human labour. A speculative depiction of this process of the evolving of AI consciousness is shown within Chris Sanders' *The Wild Robot (TWR).* Within this essay, the term conservational labour applies to the practices by both humans and AI of "preserving nature" (Ramachandra Guha 233) for both future generations and the inherent worth of the task, providing an "unflinching opposition to the human attacks on undisturbed wilderness" (Guha 231). These acts of conservational labour are undertaken by Roz within the film, demonstrating the applications of theorems, perhaps mimicking how AI can develop its

consciousness and begin to help the human population conserve our precious resources and planet.

Firstly, I will examine the act of physical labour and the critical theory surrounding AI applications, how these have affected the manufacturing processes, and their fictional representations in *The Wild Robot.* I will then develop my argument to demonstrate how AI has evolved beyond simple physical labour tasks to adapt to our needs for emotional labour and the impact this has on both AI and the human population. I will illustrate how these elements of physical and emotional labour have combined to create conservational labour, conceived to protect the Earth's natural resources whilst simultaneously destroying them.

Initially, AI was designed for industrial use and implemented in manufacturing settings to perform physical labour with a precision that is unable to be replicated by human workers. These AI creations have proved effective at enhancing the efficiency of the manufacturing industry. Subsequently, human labour in manufacturing small goods has been reduced, lowering the costs, but questions have been raised about the decreasing value of *human* physical labour. These acts of physical labour are a "coordinated algorithmic ballet" (Kate Crawford 54) that enhances the efficiency of the manufacturing process where the "workers in the factory are far less serene" (Crawford 54), promoting the idea that automation of physical labour is a necessary and fortuitous provision that allows for a linear and rote progression in manufacturing. This viewpoint has caused significant consternation as it prioritises the AI industry over human efforts- reducing job numbers and future opportunities for human workers. Furthermore, using the term "serene" (Crawford 54) highlights the chaotic nature of human production methods and the supposed inefficiency that this creates. The mechanised factory values "conformity, standardisation and

interoperability" (Crawford 57) above the rewards of human labour, suggesting that profit is to be put above the worker's safety, promoting an AI dystopia where human variability has been mitigated. AI is "ready to enhance your lives" (Sanders 6) without the consumer's consent or the protocols in place to protect human jobs and interests.

Nevertheless, there are many benefits to AI-focused mechanised physical labour, as there are tasks that humans are physically unable to perform or replicate. "Great leaps in artificial intelligence and computer capacity into the physical and mechanical functioning of robots" (Kim Moody 110) have allowed them to progress to the point where they can complete intricate tasks and move in a coordinated manner to replace human workers in tasks that they are physically incapable of doing. This demonstrates that the application of Kate Crawford's description of the "algorithmic ballet" (54) can indicate how machines programmed to execute repetitive and precise movements speed up the manufacturing process and work alongside humans to enhance their productivity. These physical labours are reflected within Sanders' film as Roz's primary function is a 'helper' robot who "always completes its task just ask!" (1). However, the robot designed by Universal Dynamics is activated by the customer to "receive [its] first task" (Sanders 2) instead of the preprogrammed and non-adjustable factory floor physical labour of the current iterations of AI (Figure 1). This notion highlights how the film is a futuristic application of AI, as we do not currently have the technology that allows for physical labour and complex manoeuvres to be a spontaneous reaction to a singular and unique command.

Figure 1"The Wild Robot",(4:57) created by Chris Sanders, Universal Pictures, 2024.

Roz is equipped with “integrated multiphase task accomplishment” (Sanders 6), which makes her adept at both completing acts of physical labour such as removing a tree that is in the way of a dam (Sanders 3) but also anticipating the needs of others demonstrating “algorithmic assessment” (Crawford 56) and critical expansion of the generative capabilities of AI. They can not only complete the tasks of physical labour they are assigned, but also dictate how they are performed. They can also use reasoning and deduction skills to find the best and most effective solutions to human physical needs. Nadine Muller theorises that there are four “requirements of computerised work” (174) whereby Roz demonstrates both “skills [and] planning” (174), showing her advanced nature, whereby she extends past her programming protocols and the basics of performing labour-intensive tasks without fatigue. Roz uses her algorithms to acquire the forethought needed to process complex thoughts, which is linked to Muller’s argument about the pillars of automotive work (174). These acts raise awareness beyond task completion, depicting Roz’s evolution as she begins to “[activate] learning mode” (Sanders 5) to fully integrate into her community and be able to complete the tasks necessary for her algorithmic processes to be satisfied. This evolution from automation to consciousness allows for the beginnings of an evolution in her processing systems that will enable her to expand from simple physical labour tasks to compassionate and emotional labour that she provides towards a young gosling[1]. This highlights the need for AI to adapt to the increasing demand to complete emotionally cognisant tasks and be able to act as an interface for companies and their customers. To the detriment of society, AI replaces the human workforce as AI makes no time or monetary demands.

[1] That she accidentally makes an orphan by crushing his mother and siblings (Sanders 12)

AI systems have advanced from their initial inception as providers of manual labour, with new iterations created for specific emotional labour tasks with emphasis on communication and 'thought' processes over manual duties. Their roles have now expanded to include the management and modulation of emotional intelligence to provide their employers with emotional care and customer service. Arlie Hochschild defines emotional labour as one required to "induce or suppress feeling to sustain the outward countenance that produces the proper state of mind in others" (7). AI has thus progressed from simple physical labour to the complex nature of emotions and the acts of 'people pleasing' that enable a "customer [to seem] content" (Hochschild 5) from an interaction with an AI. In *TWR,* this progression is seen through the lens of motherhood as Roz feels the "crushing obligation" (Sanders 32) to look after the gosling, Brightbill, and forgo her physical labour capabilities to pursue emotionally grounded tasks of childrearing. However, unlike the development of AI for a specific and discreet purpose, to undertake the emotional labour that humanity is unable to provide and pay wages for in a 24-hour society, Roz instead has "violated [her] protocols" (Sanders 33) to develop emotions that Universal Dynamics has not programmed. Roz begins "listening with a different part of herself" (Sanders 32) and appears to start developing a sense of consciousness outside her role as a provider of physical labour. The audience is presented with a futuristic example of a robot liberating itself from the menial tasks it has been instructed to perform, thus illustrating the progression of AI labour tasks, including emotional labour.

In her narrative, Roz "learns to accept help and to realise the limitations of self-sufficiency" (April Spisak 405), further demonstrating how Hochschild's definition of emotional labour as a "coordination of mind and feeling" (7) applies to AI as it begins to

access those fundamental cornerstones of humanity that robots were unable to possess. The acts of inter-community relations portrayed in both the film and within society, where humans and AI work in tandem to undertake work, demonstrate how AI has progressed from tasks of physical labour to that of becoming emotionally cognisant and playing on the tension between “having feelings and being a cog in a socioeconomic machine” (Hochschild 22-23), leading to despondency and negative associations with both physical and waged work. This principle highlights how emotional labour has been commodified and subsequently outsourced to AI, devaluing the labour often prescribed to women and further invalidating their contribution to the workplace and society at large.

Emotional labour is frequently the purview of the female worker, as many acts of emotional service have been socialised to be a supposedly feminine attribute. This feminisation of emotional labour has been transferred into the workings of AI, where the most ubiquitous acts of emotional labour are “emulated by highly feminised AI assistants such as Siri, Cortana and Alexa” (Crawford 58). This feminisation of emotional labour within the world of AI illuminates how the prejudices and preconceived notions about types of labour have been programmed into their digital counterparts, thus demonstrating how physical labour is seen as an ungendered, if not masculinised, form of labour. However, there is little evidence for assigned ‘male’ AI systems working in fields of emotional labour, such as customer service and forms of assistance such as Siri. Nevertheless, it is essential to remember that these are still AI systems despite their realistic voices and despite their “cheery demeanour [they are] unfeeling, inflexible, and morally neutral” (Sanders 80). They cannot fully be cognisant of the spectrum and variety of human emotions- AI can only respond to their programming.

The feminised principles of emotional labour are also evident within Sanders's film as Roz is voiced by the female Lupita Nyong'o, giving her the aurally female responses and sense of identity to the audience and the perception of femininity to the other animals. She is referred to as 'she' and takes the feminised name of 'Roz' when prompted to shorten Rozzum 7134. Her feminised design features smooth curves and a rhythmic cadence of speech, developing after she applies her protocols of mimicry to learn animal behaviour. Her cadences change from 'typical' automated female speech to a natural rhythmic speech throughout the film (Figure 2). Furthermore, this evolution of emotional labour is also evidenced by her ideas of motherhood, where she "[forms] connections with things [she] should not" (Sanders 92) and begins to liberate herself from her purely physical instructional coding. Roz develops a consciousness and an awareness of the community in which she lives, with a deep emotional connection to keeping it a viable and thriving place. This demonstrates the emotional principles of "being cared for in a convivial and safe place" (Hochschild 7), highlighting how emotional labour is under the purview of AI and is developing further to see the damages to the planet brought on by the manufacturing industry. Developers and programmers with high emotional intelligence are beginning to see "a call to save another wilderness from corporate use and keep it wild forever" (Hochschild 22). In keeping emotional labour free from the commodification by the marketplace and applying it to the narrative, Roz desires to keep the island and its inhabitants free from the damages wrought by Universal Dynamics. This illustrates one of

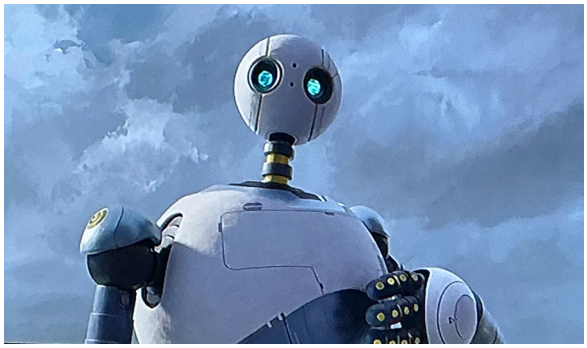

Figure 2"The Wild Robot"(3:14) created by Chris Sanders, Universal Pictures, 2024.

the newest forms of AI labour- combining manual and emotional labour to produce conservational efforts to reduce the impacts of climate change on the planet.

One of the newest aspects of AI development is that of conservational labour, using AI tools to study and potentially reduce the impacts of climate change. It is evident that AI tools, especially ChatGPT and open source, drain natural resources (Marianna Mazzucato). However, some tools are being developed to combat this and other aspects of preservation activities. Guha states that “preserving nature... has an intrinsic worth quite apart from any benefits preservation may convey to future human generations” (233). The preservation of Earth and its natural resources through AI labour is inherently worth it, regardless of the energy and resource impacts. It is necessary to protect the wilderness of planet Earth to prevent the extensive damage seen within Sanders’ film, whereby the ecosystems have been destroyed by rising water, leaving the San Francisco Bridge submerged (Figure 3). This futuristic prediction demonstrates how AI can “provide helpful tools to manage, conserve and restore nature” (Peter Dauvergne 53) at a rate that human labour cannot process. “Machine labour is improving the modelling of Earth” (Dauvergne 67), advancing the capabilities to recognise the damage done to the Earth; conversely, the damage caused by AI overuse is wreaking havoc.

Figure 3"The Wild Robot"(59:36) created by Chris Sanders, Universal Pictures, 2024.

Despite the risks to the Anthropocene, AI has been employed in conservational labour, building upon the foundations of the initial foray into physical tasks for AI robots, incorporating it with emotional labour and creating empathy for wildlife. Karen Bakker argues that “immersive technology is a mechanism for increasing human empathy for their

environment" (155). Digital simulators can help immerse the general public in environments they would otherwise not be able to experience, thereby increasing their empathy and dedication to the cause of saving and rewilding Earth. This notion demonstrates how emotional and physical labour have combined to create an experience for the general public that can "result in changes in environmental attitudes and environmental behaviours" (Bakker 156). AI labour may impact the perceptions of climate change and the solutions to Earth's degradation.

However, "there is a huge chasm between current claims about what these affective sociable robots can technically feasibly do and what they can do" (Judy Wajcman 17), demonstrating how the information on the effectiveness of these technologies perhaps warps public perceptions of AI. The successes of immersive experiences are well documented, but aspects of conservationism are underrepresented in data. AI systems are still an environmental risk because of their energy consumption when carrying out their tasks (Mazzucato). This "huge chasm" (Wajcman 17) is effectively closed in Sanders's film as Roz represents an AI system that has not only combined emotional and physical labour but has done this as an autonomous process, leading to a developed sense of consciousness. Roz moves from "existing to living to loving to sacrificing her freedom" (Spisak 405) for the sake of the environment and the animals she has bonded with. She goes above and beyond her programming to save the community of animals from a terrible winter storm (Figure 4). This highlights both the conservational labour that Roz has autonomously evolved to provide as a result of her gaining genuine

Figure 4"The Wild Robot"(1:04:28)created by Chris Sanders, Universal Pictures, 2024.

empathy, as well as the impacts of climate change upon the fauna where the “worst storm [they’ve] ever seen” (Sanders 70) can wipe out the population, mimicking real life scenarios.

Furthermore, James Bridle opposes the notion that AI can be used as a conservation tool as he suggests that it is responsible for the “inevitable destruction of environmental treasures: the felling of trees, the killing of wildlife” (5). The consequences of these actions are seen directly within Sanders’s film (figure 5). No matter how positively scientists frame AI in the processing and modelling changes in the Earth’s composite makeup, it still “actively participates in the drilling, draining and desolation of the few remaining wildernesses on Earth” (Bridle 6), ensuring the damnation of our species. The progression and now ubiquitous nature of AI labour has brought destruction that has consequences for the Earth and its wilderness. No matter how many companies and scientists use AI to enhance the knowledge and effectiveness of conservation attempts, it will still “take centuries to recover from... ‘nature vandalism’” (Bakker 168). This suggests that the possibilities of AI are far outweighed by the risks it poses to the environment and the nature of human emotional labour and commodification. While Sanders’s film depicts the natural conclusions of these environmental disasters upon the planet, he also provides a speculative fiction narrative whereby AI overcomes its predilection for the destruction of nature. Roz becomes a beacon of hope when she develops genuine empathy and conversational skills to ensure the survival of her home- a view to which the majority of modern-day politicians might aspire.

Figure 5"The Wild Robot" created by Chris Sanders, Universal Pictures, 2024.

In conclusion, the critical arguments depict the evolving nature of AI labour, supporting the initial foray into physical labour tasks that humans often cannot complete without assistance, showing the positive impact on the workplace and productivity. Alongside this, they also portray the negatives associated with AI remodelling the working conditions to which human labourers are subjected, where “basic monitoring and tracking systems are being expanded” (Crawford 63) and workers are trapped in a surveillance state by AI and their employers. These fallacies of human versus AI labour are also translated to the arguments of how programming AI to perform emotional labour, often as AI assistants, has benefited the company to the detriment of predominantly female emotional labour. The commodification of emotions within the market has disproportionately affected women and reduced their employment capabilities within society, reducing company spending. From these achievements, conservational labour was developed to combine physical and emotional AI tasks to help increase empathy towards the climate crisis and change the attitudes surrounding climate change. However, these benefits in conservation and modelling of ways to reduce the climate crisis have been outweighed by the negative impacts on the “broad commonwealth [which] includes every inhabitant of the biosphere” (Bridle 17) caused by the overconsumption of AI tools. These critical discussions pair nicely with Chris Sanders’s film, where these labour transitions are seen as an organic process whereby an AI can develop consciousness and a genuine appreciation for the flora and fauna she encounters. The viewer is provided with a speculative fiction interpretation of an AI that is a genuine champion for conservation and has more traits in common with authentic personhood and sentience than a simple trained AI.

Overall, whilst the topic of labour and its applications within the AI field is inherently complicated, it is presented as a multifaceted attempt by humanity to try to adapt working conditions to those of futuristic standards, where AI helps but often hinders the labour processes that we depend on to survive. Crucially, the performance of physical and emotional labour combines to perform conservational labour, as with increasing awareness of environmental instability, AI is becoming a necessary tool to help slow the progression of the destruction of our planet, whilst "all Earth's resources are fair game for the AI in pursuit of [efficiency]" (Bridle 7), inching us closer to destruction. Sanders's film provides a fun and imaginative backdrop to which these arguments play out in a cohesive narrative where a robot displays the natural progressions of AI, not as a result of profitability, but of compassion and a journey to full sentient capacity.

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