Report week 1 - Labour & Ownership

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1 Introduction

In examining the impact of AI on workers and society, three particularly relevant issues emerge from the popular press and academic discourse: the exploitation of low-wage workers in AI development in the job market, the impact of generative AI on traditional creative processes and the potential displacement of jobs due to automation.

First off, the development of AI, especially in fields like Reinforcement Learning from Human Feedback (RLHF)[1], frequently depends a sizable labour force from workers performing monotonous, fledging jobs like data labeling, content moderation, and providing feedback. According to reports, these employees—who are crucial to the creation and improvement of AI systems—are usually underpaid and put through difficult working conditions. This labour force, often based in economically deprived places, suffers difficulties such as inadequate compensation, lack of job security, and exposure to dangerous or disturbing content.

Secondly, the creative realm, traditionally associated with human innovation and expression, now experiences the notable touch of AI. The discourse oscillates between accepting AI as an artistic partner in the creative process and dealing with concerns regarding authenticity and the potential overshadowing of human creativity.

Simultaneously, the report navigates the tumultuous terrain of employment in this new era of generative AI. Even with a lot of concerns of inequality and inclusivity, discussions pivot on the potential for AI to augment rather than replace jobs, leading us to a future where human capabilities are enhanced through collaboration with AI technologies.

2 The exploitation of low-wage workers in AI development in the job market

We will try to bridge the knowledge gap between the scientific community and the general public. This investigative voyage aims to provide a gripping narrative by shedding light on the differences between expert ideas and public opinion.

2.1 The popular view

Current Effects The Industrial Revolution is one historical example of how improvements in technology may have beneficial impacts on productivity and overall economic prosperity, but can also have negative effects on some groups. A pioneer of this technology was Charles Babbage, as portrayed by Meredith Whittaker in **Logic(s)**[18]. This is especially true for individuals with lower incomes and levels of education, as they are more susceptible to the negative effects of technological improvements, which could result in job losses and stagnant earnings. These shifts in demographics tend to make socioeconomic inequality worse. This misalignment leads to a form of exploitation where low-wage workers, lacking alternative employment opportunities, may find themselves in increasingly precarious positions.

[1] We define RLHF as the machine learning approach where an AI (such as ChatGPT) learns optimal behaviors based on reward signals derived from human feedback.

Currently, as portrayed in articles from **The Wired**[13] or **vpro.nl**[1], workers from Syria, Kenya, or Pakistan, among others, often earn wages lower than 2 $ per hour, for labeling images or assessing top results. These workers are compelled by limited options, and endure long working hours(sometimes close to 24 hours) and uncertain futures. Their contracts and status as micro workers deprive them of standard employee benefits. The former risk starvation, and have no guarantee for their future, as stated in the two press articles. Yet, these workers, who at first sight are only fragmented puzzle pieces into an infinite jigsaw, play a crucial role in the development of AI, as mentioned best in an article of **The Correspondent**[11]. For regular humans to be able to use *ChatGPT* or *a Tesla* to full capacity daily, their software needs to be well-trained and use cleaned data. To paraphrase Maurits Martijn "Without micro workers, a Tesla would not be able to distinguish between a dog and a traffic light. ChatGPT would be a racist jerk rather than a polite interlocutor".

Furthermore, it is reported that only 40% of the total number of European companies hopping on the "AI trend"[13, 19] ethically use AI, while reports alos suggest these companies to be treating their employees as machines. Disturbingly, reports suggest that platforms like Clickworker [19] asked their micro workers to upload personal data, such as images of their children for AI training against the sum of 2 euros for every 5 photos. This practice is ethically questionable and highlights the strategic exploitation of global wage disparities, where companies often choose low-cost labor for less critical tasks. The latter raises eithical issues, especially in regions such as Kenya, Pakistan, Syria or Venezuela, where underage children have been known to access adult-only jobs using a relative's ID, highlighting a serious issue in the oversight of such platforms.

Prospects for the future Supporting the popular trend, AI will indeed replace automate part of the jobs. But as we look to the future, there's an increasing expectation that new, equally repetitive, labor-intensive jobs will increase, with more and more companies hopping on this ascending trend, as mentioned in an article from Adrienne Williams, Mialgros Miceli, and Timnit Gebru for **Noema**[19]. Reports from Russel Brandom for **rest of the world**[4] or Billy Perigo for Time[12] hint towards a scenario in which AI companies will rely more and more on these, so called "micro-workers" to perform the above mentioned monotonous jobs.

Benefits & Drawbacks On the positive side, AI is seen as a driver of increased efficiency and productivity. In industries where AI can automate routine tasks, workers may be freed up to focus on more creative and complex tasks, potentially leading to more fulfilling work and increased innovation. Moreover, AI can assist in solving complex societal challenges, like climate change and healthcare, benefiting society as a whole. The challenge as a whole does not rely on assessing the cost versus benefit ratio of these advancements in comparison to the unfairness treatment of these micro workers, In addition, there's a chance that labor standards and wages will 'race to the bottom' in the global economy as businesses relocate operations to areas with laxer labor laws in an effort to save money[19].

Concerns However, these advancements come with concerns. One major concern is the ethical implications of AI development, particularly around privacy, surveillance, and the potential misuse of AI technologies, as per **rest of world**[4]. There's also the concern of algorithmic bias, where AI systems might perpetuate and amplify existing societal biases, leading to unfair outcomes in areas like hiring, lending, and law enforcement.

2.2 Scientific view

The current effects of AI development on the job market, particularly concerning the exploitation of low-wage workers, present a complex scenario where popular press narratives and scientific research intersect, yet at times diverge.

Popular press articles, such as those from **The Wired** and **vpro.nl**, highlight the harsh realities faced by low-wage workers in countries like Syria, Kenya, and Pakistan, who often work in precarious condition earning inferior wages. These workers play a crucial role in AI development, often undervalued, and are exploited in the industry, illustrating the human element of a modern-day Industrial Revolution led by technology giants. In contrast, scientific literature, including studies from the International Journal of Scientific Research in Engineering and Management[16] and Frontiers[9], provides a broader and more analytical perspective. They reveal that the effects of AI on job displacement and opportunities are complex and varied, depending on factors like occupation, sector, and digital skills. This literature acknowledges the challenges posed by AI but also highlights potential positive outcomes, such as increased productivity and new job creation in certain areas.

The scientific community is addressing concerns about AI and jobs, focusing on employment trends, AI-driven skills, and policy solutions. They are considering moral behavior and openness in AI development, considering employment trends and openness in AI-driven futures. Moreover, Stanford University's Foundation Model Transparency Index[3] emphasises the significance of transparency in AI development. It offers perceptions of how open businesses are about their labour practices and data sources. The handling of low-wage workers is one area where this programme emphasises the need for more ethical and open standards in AI development. But there appears to be a difference between the more long-term, systemic focus of scientific research and the more immediate, tangible exploitation that the mainstream media highlights. The latter approach acknowledges societal concerns but focuses on long-term employment patterns, future skill requirements, and legislative measures to mitigate AI's negative effects, potentially overlooking the issue of exploitative labor practices in AI development.

In addressing these concerns, the scientific community is advocating for policies that mitigate negative impacts while maximizing AI's benefits. This includes education and training programs to prepare workers for the changing labor market and research into effective policy measures to protect vulnerable workers. However, these efforts often appear more as recommendations for future action rather than immediate remedies to the exploitation being reported in the popular press.

While the popular press vividly highlights the ongoing exploitation of low-wage workers in AI development, offering immediate and human-centric narratives, the scientific literature provides a broader, more analytical view considering both the challenges and opportunities presented by AI. The discrepancy between these perspectives suggests that more immediate, practical solutions are needed to address the exploitation issues highlighted by the press, in conjunction with the long-term strategies proposed by the scientific community.

3 The impact of generative AI on traditional creative processes

3.1 The popular view

Current Effects The question that we seek to answer is how AI is influencing traditional creative processes and whether it is viewed as a complement or a threat to human creativity. One answer to this question comes from Golnar Khosrowshahi, founder and CEO of Reservoir Media. In the **Columbia Business School**'s event covered in the article by Jonathan Sperling [15], Khosrowshahi emphasises the importance of reframing the conversation around AI as "AI and" rather than "AI or." She suggests that human-AI collaboration can enhance creativity

by exploiting the knowledge provided by AI. On the other hand, concerns are raised about the potential loss of authenticity and the risk of AI-generated content overshadowing human creativity.

Prospects for the future In their publication in the **Harvard Business Review**, De Cremer, Bianzino and Falk [5] discuss the disruptive potential of generative AI in the creative work landscape. They present three possible scenarios: AI-assisted innovation leading to faster and more efficient creative processes, machines monopolising creativity and overshadowing human creators, and a potential shift away from algorithmically generated content, with a preference for higher quality human-made products. It seems that the first scenario or the "AI and" paradigm is the most likely and embraced by most people.

Benefits & Drawbacks Moreover, in another article from **The Guardian** [14], David Smith considers the potential benefits of AI in various aspects of filmmaking, such as scriptwriting, pre-production, special effects and audience analysis. He mentions the role of AI in de-aging actors, generating voices for posthumous recreations, preservation, and restoration. Furthermore, the Writers Guild of America suggests the use of chatbots to assist writers without sharing credit or residuals.

Concerns Pranshu Verma discusses in a **Washington Post** article [17] the legal and ethical challenges surrounding the use of AI in filmmaking, including issues related to intellectual property, consent, and contract negotiations. Actors, such as Keanu Reeves, express concerns about the rise of generative AI, calling it "scary" and a potential way to undermine fair compensation for artists.

3.2 Scientific view

Now, let's address this issue from a scientific perspective. The article "Artificial Intelligence & Creativity: A Manifesto for Collaboration" from the **The Journal of Creative Behavior** [8], presents four scenarios of human-AI collaboration in creative tasks. These include "Co-Cre-AI-tion," where humans and AI collaboratively contribute to creative processes; "Organic," emphasizing pure human creativity without AI assistance; "Plagiarism 3.0," highlighting potential ethical issues of heavy reliance on AI-generated content without proper attribution; and "Shutdown," suggesting a scenario where individuals may lose motivation to engage in creative activities due to perceived inferiority to AI. The manifesto emphasizes the need for human involvement at critical stages of the creative process, such as problem finding and idea evaluation. The positive future envisioned involves a harmonious collaboration between humans and AI, termed "augmented creativity," recognizing the unique contributions of each. This scientific standpoint mostly aligns with the positive view in the popular press that emphasizes collaborative creativity. The press suggests that AI can be a valuable companion, enhancing the creative process by offering new ideas and suggestions. The collaboration is seen as a harmonious interaction, with humans holding central roles at the beginning and end of the creative process.

Another paper "AI in Art and Creativity: Exploring the Boundaries of Human-Machine Collaboration" [6] provides an insightful exploration of the intersection between AI and art, discussing historical contexts, categorizing AI applications, and highlighting real-world examples. The research paper acknowledges challenges such as copyright issues, biases, and authenticity preservation, reflecting the scientific community's awareness of the ethical considerations associated with AI in art. Nevertheless, the paper and the popular views align in recognizing AI's transformative impact on creative processes. Both acknowledge the opportunities AI presents in

challenging traditional notions and inspiring new forms of artistic expression. The paper states that AI is no longer a mere tool but a creative partner in the artistic process.

4 Job displacement due to AI and the future of work

Another significant issue that appears with the rise and adoption of AI is its influence on employment and the future of work. This brings us to the question: How will the increasing use of generative AI impact the future job market, and what measures are being suggested to address potential challenges?

4.1 The popular view

Current Effects The popular press has extensively covered the issue and there is a consensus that AI has the potential to automate various tasks across different sectors. According to Kweilin Ellingrud and Saurabh Sanghvi for the **McKinsey Global Institute** [7], to navigate the evolving job landscape, the emphasis is on reskilling and upskilling the workforce. Their podcast stresses the importance of adapting to the changing nature of work, with a focus on acquiring skills that complement AI technologies. Companies and governments are urged to invest in training programs to equip workers with the skills required in the AI-driven future.

Prospects for the future The article by Mark Rayner for the **World Economic Forum** highlights three ways in which artificial intelligence (AI) is changing the future of work:

AI driving job creation: A WEF survey shows that, almost half (49%) of companies anticipate AI adoption to create jobs, with automotive and aerospace industries seeing the most significant growth. However, some sectors, like oil and gas, are expecting job losses.

Prioritization of AI skills: Companies with over 50,000 employees prioritize AI and big data skills, investing in skills training from 2023 to 2027, highlighting the growing importance of AI for business performance.

Tasks augmentation, not automatisation: Despite technological advancements, businesses are becoming more skeptical about the full automation of tasks by AI. It is anticipated that only an additional 9% of operational tasks will be automated in the next five years. There is a growing consensus that AI will augment human performance rather than replace it entirely.

Benefits & Drawbacks AI enhances efficiency and productivity by automating tasks like analyzing large datasets and making predictions. While it may cause job displacement for doctors, it allows them to focus on other tasks. However, specialized AI lacks robustness and adaptability to novel situations. Challenges include trust issues, lack of transparency in decision-making, and biases in human-generated data, which may slow its widespread use.

Concerns One key concern that was highlighted in the **Forbes** article by Bernard Marr [10] is the growing social inequality. Jobs that are highly likely to be transformed by generative AI, such as those in the fields of medicine, law, and software engineering, often come with higher salaries. This could lead to a widening income gap, as previously mentioned in Section 11, creating a divide between those who can harness the benefits of AI and those who can not.

4.2 Scientific view

The scientific community is aware of and is researching the viewpoints and worries expressed in the media about how AI will affect employment and the nature of labour in the future. The revolutionary effect of digitalization and technology advancements on the workforce is extensively acknowledged in the literature. Important insights on how many digital technologies,

including cloud computing, AI/ML, online collaboration tools, and 3D printing, are changing the nature of work may be found in the study by Jetha et al. [2]. The scientific community agrees that new technologies have the potential to enhance productivity, but they also bring up issues with pay depression, job displacement, and access obstacles for those who are more susceptible. The emphasis on future skill needs aligns with current conversations in the media. The research makes a contribution to the widely accepted need of upskilling and reskilling by highlighting the possible obstacles disadvantaged workers may experience in obtaining the required technical and soft skills. The scientific community also understands that customised training programmes are necessary to close the skills gap and advance diversity in the workforce.

5 Conclusion

To conclude, the analysis of how AI affects labourers and society reveals a variety of intricate dynamics. Three main concerns are emphasised in particular: the use of low-wage labourers in the development of AI, the effect that generative AI will have on conventional creative processes, and the possibility of job displacement from automation. As the public press and scholarly journals have made clear, there is grave concern over the exploitation of low-wage workers in the AI development industry. Low-skilled workers, frequently situated in economically impoverished locations, confront demanding working circumstances with inadequate pay and quick efforts are needed to address this continuous exploitation. Both popular media and academic publications present generative AI's effects on conventional creative processes in a good light. It is believed that working together, humans and AI may improve creativity. Both viewpoints, however, address issues with authenticity and ethical dilemmas, emphasising the necessity for cautious thought and moral standards when integrating AI in creative fields. AI's potential to eliminate jobs and the nature of employment in the future are hot topics of conversation. The scientific literature and the general public both see the need for reskilling, the possibility of job creation in particular fields, and the necessity of specialised training programmes and legislative measures to handle the issues raised by AI in the workplace.

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