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FROM DEVELOPMENT TO DEPLOYMENT: FOR A COMPREHENSIVE APPROACH TO ETHICS OF AI AND LABOUR

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In recent years, government and policy organizations, private companies, and research agencies have been discussing the potential disruption caused by the deployment of AI systems in working environments. Ethics are fundamental to understanding the implications of technological development and its implementation, and to what extent it can serve workers. While ethics are a cornerstone in the achievement of positive outcomes, their lack of enforcement mechanisms makes their implementation challenging.

Existing principles and ethical frameworks focus exclusively on the deployment or applications of artificial intelligence in the workplace when considering the relationship between these technologies and human labour. However, none of these ethical principles address the forms of labour required to develop and maintain artificial intelligence systems. This paper presents the implications of both instances in which human labour is affected by—and influences—AI, since an understanding of both is necessary for a comprehensive discussion on the implications of AI and work.

Current Concerns with AI and Labour

The contemporary landscape of narrow AI systems suggests that, while these technologies have incredible calculative potential and applications in a wide range of domains, they are nonetheless incapable of judgement (Cantwell Smith 2019). For this reason, the relationship between artificial intelligence and human agency at all levels remains fundamental, and the role of human labour should be considered in all stages of AI development and deployment. By development, this paper refers to the processes of creating, sustaining, and maintaining AI systems. By deployment, it refers to all applications of AI in the many instances of human labour.

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AI Deployment

There are several examples of how AI is actively transforming labour. Recent studies on the impact of AI deployment in traditional workplaces raise several concerns that are, in many cases, discussed in the ethical record of AI systems. One of the most discussed concerns revolves around discrimination provoked by algorithms, since AI creates closed systems that lack external reviewing processes, target specific populations, and replicate the criteria of those accepted when looking for new participants (Ajunwa and Greene 2019). Privacy is another major concern relating to AI deployment. The constant need for automated systems to collect data and quantify human behaviour promotes the commodification of privacy (Moore and Robinson 2016) thereby allowing it to be exchanged for employment opportunities (Ajunwa, Crawford, and Schultz 2017). Moreover, in cases where workers rely heavily on algorithmic guidance, the automated systems themselves become the managers, tracking and influencing the actions of workers without any accountability or transparency (Mateescu and Nguyen 2019).

AI Development

Regarding the implications of labour in the development of AI, Crawford and Joler demonstrate how the development of artificial intelligence relies heavily on different types of human labour and natural resources that span the entire planet. For the authors, the artificial intelligence system “becomes a complex structure of supply chains within supply chains, a zooming fractal of tens of thousands of suppliers, millions of kilometres of shipped materials and hundreds of thousands of workers included within the process even before the product is assembled on the line” (Crawford and Joler 2018). Thus, by focusing so heavily on the deployment of AI systems and the “future of work,” the situation of artificial intelligence and labour *in the present* remains, in many cases, ignored.

Towards Human Rights-Based AI Labour Principles

As the total quantification of human and social experience remains a long-term dream, the labour of those required to develop AI – and those affected by its application – will remain central to the discussion of its ethics, governance, and policy. In this context, and because of the lack of enforcement of ethical principles of AI, many of these principles currently operate under the immense influence of corporate entities in their development (Yeung et al. 2020). Through the International Labour Organization, United Nations has issued several conventions on human rights in working contexts relating to labour issues. These fundamental human rights on labour include the freedom of association and recognition of the right to collective bargaining, the elimination of forced labour, the abolition of child labour, discrimination, and equal remuneration (International Labour Organization 1998). As mentioned, there is still a long way to go in upholding these basic labour principles in the development and deployment of AI. For example, some platforms deliberately hinder collective bargaining by their workers (Woodcock and Graham 2020), and the application of artificial intelligence in worker recruitment reproduces biases towards particular minorities (Ajunwa 2017).

Conclusion

Ethical principles are essential to the relationship between AI and human labour, but they need to become more comprehensive. Principles alone cannot be enforced in social contexts and they should go hand in hand with clear governance procedures involving multiple parties and a clear oversight from international and national policies that aim to respect already established human rights. These actions cannot focus solely on the prospective “future of work” or exclusively on the deployment of artificial intelligence in the workplace. AI is here and it is already impacting the “present of work.” Machines depend on humans to exist, and both entities are already complementing each other. Ethics, governance, and policy will remain essential, as the question will not be *if* machines will be replacing humans, but *who* will own and have a say in the relationship between humans and machines.

References

- Ajunwa, Ifeoma. 2017. “Workplace Wellness Programs Could Be Putting Your Health Data at Risk.” *Harvard Business Review Digital Articles* 2–5.
- Ajunwa, Ifeoma, Kate Crawford, and Jason Schultz. 2017. “Limitless worker surveillance.” *California Law Review* 105(3):735–76.
- Ajunwa, Ifeoma and Daniel Greene. 2019. “Platforms at work: Automated hiring platforms and other new intermediaries in the organization of work.” *Research in the Sociology of Work* 33:61–91.
- Cantwell Smith, Brian. 2019. *The Promise of Artificial Intelligence: Reckoning and Judgment*. Cambridge, MA: MIT Press.
- Crawford, Kate and Vladan Joler. 2018. *Anatomy of an AI system*. New York, NY: AI Now Institute.
- International Labour Organization. 1998. *ILO Declaration on Fundamental Principles and Rights at Work and Its Follow Up*. Geneva: International Labour Organization.
- Mateescu, Alexandra and Aiha Nguyen. 2019. “Algorithmic Management in the Workplace.” (February):1–16.
- Moore, Phoebe and Andrew Robinson. 2016. “The quantified self: What counts in the neoliberal workplace.” *New Media & Society* 18(11):2774–92.
- Woodcock, Jamie and Mark Graham. 2020. *The Gig Economy: A Critical Introduction*. London: Polity Press.
- Yeung, Karen, Andrew Howes, and Ganna Pogrebna. 2020. “AI Governance by Human Rights-Centred Design, Deliberation and Oversight: An End to Ethics Washing.” in *The oxford handbook of ai ethics*. Oxford: Oxford University Press.