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THE CHALLENGES OF HUMAN RIGHTS IN THE ERA OF ARTIFICIAL INTELLIGENCE

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ABSTRACT

In an era in which Artificial Intelligence (AI) has brought about tremendous technical advancements that can significantly impact operations and interactions in society, it is crucial to seriously think about the issue of human rights in relation to the applications of AI. The increasingly widespread use of artificial intelligence (AI) presents significant obstacles to the protection of human rights, since it questions the core concept of human supremacy over other living organisms. Given the growing incorporation of AI technology in our daily lives, it is crucial to comprehensively assess the influence of AI on human rights. This article examines the crucial significance of human rights in the era of AI, investigating the potential outcomes of AI's impact on these rights and the worldwide efforts aimed at safeguarding them. It examines the transformative impact of AI, ethical considerations, and potential disruptions across economic, social, and political spheres. This article discusses how AI challenges traditional human rights frameworks like the UDHR, and will emphasise the urgent need for updated legal and ethical frameworks, as well as global collaboration aimed at protecting human rights in this era of AI. Furthermore, it considers the potential of the first internationally binding convention on AI, the AI Convention. Using comparative legal, formal legal and descriptive methods, the analysis shows that AI may undermine the exercise of several human rights. The focus is on integrating legal and ethical factors to ensure the responsible implementation of AI technology and in ensuring that AI technology benefits all of humanity.

Keywords: Artificial intelligence, international law, human rights, AI convention.

INTRODUCTION

Technological breakthroughs in the contemporary period have brought about substantial shifts in several facets of human life. The fast rate of progress has emerged as a compelling factor, stimulating ongoing ingenuity and the formation of technologies positioned to revolutionize the globe. Artificial intellect (AI) is one such significant technical achievement that involves machines imitating human intellect and cognitive abilities (Pabubung, 2023). These technologies are precisely engineered to replicate innate human abilities and intellect.

The capacity of AI to instigate substantial changes in behaviour, daily routines, and improvements in efficiency across diverse industries is apparent. In this day and age of Industry 4.0, AI technologies are progressively integrated into various aspects of contemporary life, transforming industries and optimizing operations (Javaid et al., 2021). AI algorithms play a crucial role in the financial sector, offering advantages in domains like identifying fraudulent activities, evaluating risks, and executing algorithmic trading strategies (Finio et al., 2023). Educational platforms utilize artificial intelligence to provide customized learning experiences that adjust to the specific requirements of each learner (Giligorea, 2023). However, as global companies continue to be disrupted by new processes and discoveries, there is a growing anxiety of the future. Although innovation has the capacity to create new employment opportunities, it is anticipated that a significant number of current occupations may be jeopardized as a result of the innovation (Frey & Osborne, 2017).

Human beings rely on their economic rights as these rights provide individuals with the essential resources to sustain themselves and their families. Economic rights do not only include the right of a person to possess property, but also the privileges that individuals have to get to work and to receive fair compensation to sustain their life. The use of AI to substitute human labour presents a possible menace to these economic entitlements, possibly endangering the ability of individuals to avail themselves of possibilities in the market (Shaheer, 2023).

As AI technology evolves and develops at breakneck speed, finding its way to every possible field in society, its impact extends well beyond workforce considerations. Questions of how AI formulates its decisions, whether they are fair, and whether its algorithms have possible biases create transparency and accountability challenges. This highlights the importance of addressing questions about appropriate and ethical usages of AI systems which could go further down the line to include societal consequences of AI applications affecting various aspects of human rights.

One of the major ethical concerns is privacy. AI systems usually need substantial gathering and examination of data, which raises issues over the protection of people' privacy, a fundamental element intricately linked to human rights (Elliott & Soifer, 2022). These worries include anxieties about unwanted access to personal information, surveillance methods, and the possible abuse of data for different reasons (Elliott & Soifer, 2022).

AI's impact on political rights is equally significant, since technical progress enables the manipulation of people and groups through strategies such as nudges, micro-targeting, and the formation of echo chambers (Helmus, 2022). The spread of false information directly jeopardizes the confidence and reliability of democratic institutions, further complicating the task of AI in safeguarding citizens' political rights. Hence, the ramifications of AI disruptions are extensive, and impacting on economic, social, and political entitlements (Helmus, 2022).

AI seeks to attain cognitive capacities similar to those of humans by utilizing algorithms, mathematical models, and extensive datasets (Khong & Mon, 2023). Given the belief that humans possess superiority over other life forms, the chance that future beings may emerge with consciousness, advanced intellectual abilities, and potentially even greater moral superiority than humans could jeopardise the sanctity of human life (Mathias, 2019). In this regard, it is essential to prioritise and maintain the core principles of human rights in this day and age which is dominated by automation, it is therefore, necessary to adopt measures to prevent any violation of human rights by the system (Mathias, 2019).

This article will delve into the importance of Human Rights in the era of AI. It will discuss the implications of AI on human rights and the international efforts to protect these rights. It begins by highlighting the transformative nature of AI and its pervasive impact on various aspects of society, from industrial applications to security measures. The article delves into the ethical considerations and potential disruptions caused by AI, particularly in the economic, social, and political domains. It will look into various categories of computer intelligence, examining the significance of data in this context and the ethical challenges associated with its integration into various sectors. This article aims to furnish an exhaustive examination of human rights within the framework of international law. It endeavours to trace the historical evolution of international human rights law, specifically in response to the humanitarian issues in the aftermath of World War II. This evolution culminated in the creation of the Universal Declaration of Human Rights (UDHR) and subsequent treaties and conventions, underscoring the involvement of the United Nations and its specialized agencies in the supervision and enforcement of international human rights instruments.

Ultimately, this article aims to provide a comprehensive analysis of the correlation between artificial intelligence and human rights, tracing the development of international human rights law and exploring the continual endeavours to promote and preserve human rights amidst technological progress. By scrutinizing the potential of the first internationally binding treaty on AI - the AI Convention, the article highlights the significance of combining legal and ethical frameworks in the context of international collaboration to guarantee the safeguarding of human rights amidst the age of artificial intelligence.

ARTIFICIAL INTELLIGENCE

Artificial Intelligence stands as a transformative discipline within computer science, seeking to develop automatic intelligent entities with the capacity to replicate cognitive functions resembling those of humans (Pabubung, 2023). In essence, Artificial intelligence aims to create machines capable of executing activities that traditionally demand human cognitive abilities, encompassing problem-solving, learning, perception, and comprehension of language. AI systems leverage algorithms, mathematical models, and large datasets to simulate human cognitive abilities.

Technological advancement in computing power, data storage, and algorithms have been instrumental in the ascent of AI. Moore's Law, suggesting a doubling of computing power approximately every two years, has propelled the advancement of progressively sophisticated AI models (Pabubung, 2023). The availability of massive datasets and the refinement of machine learning techniques, particularly deep learning, have empowered AI systems to achieve unprecedented levels of accuracy and efficiency in tasks ranging from image recognition to natural language processing. Given their enhanced accuracy and expedited task performance compared to humans, AI technologies are increasingly taking over or displacing human roles in contemporary society (Ahmad, 2021).

As AI becomes increasingly ubiquitous, its application extends beyond civilian domains, playing a pivotal role in security and weaponry. In the context of security, AI technologies play a crucial role in enhancing surveillance systems, threat detection, and overall safety measures (Brundage, 2018). Through the utilization of learning algorithms, machines possess the capability to analyse extensive datasets in real-time, discerning patterns and irregularities that could signify potential security threats (Brundage, 2018). In the field of weaponry, AI is progressively utilised to enhance the capabilities of military systems. Autonomous drones and robots, driven by AI algorithms, enable more precise and efficient surveillance and combat operations (Rashid et al., 2023). AI's ability to process large volumes of data rapidly allows for quick decision-making in dynamic and complex environments, impacting the strategic landscape of defence (Rashid et al., 2023).

While the incorporation of automation in numerous aspects of life offers advantages such as improved efficiency and accuracy, it also raises ethical concerns and necessitates careful consideration of the potential consequences (Brundage, 2018). Striking a balance between the advantages of AI and the ethical implications inherent in its deployment remains paramount as society navigates the transformative impact of this cutting-edge technology. Accountability, transparency, and the ethical use of AI in various applications demand ongoing scrutiny to align with international laws and human rights standards.

Types and Elements of Artificial Intelligence

Artificial intelligence can be categorized into the following three distinct types: Artificial Narrow Intelligence (ANI), Artificial General Intelligence (AGI), and Artificial Superintelligence (ASI) (Pabubung, 2023). ANI is described as weak intelligence because it relates to specific tasks it can perform well, such as playing chess against world-class players, making market predictions, self-driving, and also includes image recognition and verbal expression (Pabubung, 2023). The second type of artificial intelligence is AGI. AGI is alternatively referred to as "Strong AI" or "artificial intelligence at a human-level capacity". AGI represents an advanced stage of artificial intelligence evolution that attempts to mimic the performance of the human brain. However, its development is still debated due to issues of responsibility and other "components" present in the human brain (Pabubung, 2023). The third type of AI is ASI. ASI is a prospective depiction that might transpire when artificial intelligence surpasses the cognitive capacity of the human brain in aspects like creativity, social skills, and wisdom. This progression introduces distinctive challenges that have the potential for significant advantages to humanity, yet also entail inherent risks (Pabubung, 2023).

Currently the progress in robot development is still in the ANI or AGI stages (Syvityk, 2016). These stages necessitate adherence to Turing test standards which ascertain whether the "behaviour" of the robot is akin to that of a human or not (Syvityk, 2016). According to Max Tegmark, a Swedish-American physicist at the Massachusetts Institute of Technology (MIT), ASI will use superintelligence to dominate the world (Beltramini, 2019). Tegmark, renowned for his exploration of the foundations of quantum mechanics and the implications of AI, delves into these ideas in his publication entitled, "Life 3.0: Being Human in the Age of Artificial Intelligence." In this work, Tegmark speculated about the uncertain trajectory of ASI, questioning whether it would result in totalitarian control akin to historical figures such as Stalin or Hitler or lead to individual empowerment. The potential outcomes of AI scenarios span a spectrum from libertarian utopia to potential self-destruction by human actions (Beltramini, 2019).

One crucial element in discussing artificial intelligence is data. Data fuels artificial intelligence technology (Taulli, 2019) and it can be categorized into the following four types: structured data, unstructured data, semi-structured data, and time-series data. Structured data is commonly stored in interconnected databases or spreadsheets, and encompasses details such as financial data, addresses, product information, sales figures, social security numbers, and phone numbers. Unstructured data lacks predetermined formatting and encompasses elements such as images, videos, audio files, text files, and social network information like tweets, posts, and satellite images. Semi-structured data represents a blend of structured and unstructured sources, exemplified by formats like XML (Extensible Markup Language) and JSON (JavaScript Object Notation). Time-series data, which can assume a structured, unstructured, or semi-structured nature, is employed for interactive purposes, such as gathering information when a user engages with a website or utilizes an application (Taulli, 2019).

Large companies like Amazon, Google, Facebook, TikTok, and Baidu rely heavily on data. Data serves as fuel for the mechanisms of mega-tech companies. Countries also need data to advance the welfare goals of their citizens, using collected data as a means for decision-making. For companies, data is crucial for understanding market preferences, consumption correlations, production efficiency, and improving sales and service performance. However, the intertwining of data, governance, and business with "privacy" raises concerns. Can data be collected for the benefit of economic and political elites? Privacy issues become a heated topic, especially when related to the interests of other parties. There have been numerous instances of privacy violations and data breaches, involving the misuse of data (Allen, 2015), for example, in the data privacy concern cases of the Democratic National Committee (2016), Myspace (2016), as well as the recent cases of Meta and TikTok (2022) (Zolyniak, 2013).

The prospect of discrimination poses a significant concern, encompassing issues such as algorithmic bias based on race, analysis errors arising from hoaxes, and identity manipulation. While companies express a keen interest in big data, the discussions surrounding its utilization give rise to various challenges, including data breaches, instances of discrimination, and flawed analyses (Gillis & Spiess, 2019). A notable illustration occurred in 2014 when Amazon embarked on developing an AI-driven recruitment software to streamline its hiring procedures (Dastin, 2018). In this case, a major problem emerged as the system displayed a pronounced bias favouring male candidates. The machine learning models at the core of the software were trained on resumes spanning a decade, predominantly from male applicants, resulting in a skewed preference. Remarkably, the system penalized phrases containing the term "women's" and devalued candidates from all-women colleges (Dastin, 2018). Despite Amazon's assurance that the tool was never employed for candidate evaluations, attempts to modify it for impartiality proved unsuccessful. Faced with uncertainties about eradicating discriminatory learning patterns, Amazon ultimately discontinued the project in 2018 (Dastin, 2018).

The rapid advancements in AI have propelled it to the forefront of technological innovation, which is aimed at replicating human cognitive functions. As a transformative force, AI has significantly impacted various aspects of society, revolutionized industries, enhanced security measures, and even raised ethical concerns. The evolution of AI types, from ANI to the speculative ASI, introduces possibilities ranging from enhanced creativity to potential risks and challenges. The utilization of data is at the core of AI development, with structured, unstructured, semi-structured, and time-series data fuelling its algorithms. However, the integration of AI into various domains comes with a set of ethical considerations, particularly concerning its potential to disrupt human rights within the realm of the economy, society and politics. which necessitates ongoing scrutiny and the need for ethical frameworks. This is crucial in order to guarantee the rights of individuals and mitigate the risk of potential abuses.

HUMAN RIGHTS IN INTERNATIONAL CONVENTIONS AND COVENANTS

Human rights represent the fundamental entitlements of all individuals by virtue of their humanity, transcending citizenship or legal status (Nor, 2016; Iancu, 2022). These rights have evolved over time, from basic principles to codified laws enforced through legislation (Nor et al., 2020). International human rights law serves as a safeguard against governmental encroachment, ensuring that every individual possesses inviolable rights (United Nations, 2023). However, achieving a universally accepted set of rights remains a complex challenge, balancing cultural diversity with the pursuit of universal standards (Renteln, 1990).

Cultural relativism emphasizes respecting diverse traditions, while universalism asserts that certain rights transcend cultural boundaries. This tension is reflected in international instruments like the Universal Declaration of Human Rights (UDHR), which has emerged from collaborative efforts among nations to establish common ground (United Nations, 2023). The post-World War II era marked a revolutionary shift in recognizing human rights globally, leading to the adoption of the UDHR in 1948, which though non-binding, set a shared standard for human dignity and equality (Ferrone, 2017).

This shift laid the groundwork for subsequent human rights treaties such as the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social, and Cultural Rights (ICESCR), which have remained foundational in protecting rights globally (United Nations, 1966). Following these internationally recognised covenants, more specific treaties like the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) and the Convention on the Rights of the Child (CRC) further expanded international human rights protections (Kamal, 2017). The United Nations (UN) plays a central role in monitoring and promoting human rights through bodies such as the UN Human Rights Council and the Office of the High Commissioner for Human Rights (OHCHR) (United Nations, 2023). Other entities like the International Criminal Court (ICC) and region-specific organizations such as the Council of Europe and ASEAN also contribute to upholding human rights globally (Council of Europe, 2014; AICHR, 2009).

THE RELEVANCE OF HUMAN RIGHTS IN THE CONTEXT OF AI

Throughout history, technological advancements have significantly impacted human life. We are familiar with the term "industrial revolution," which refers to the rapid and radical changes within society in a short period of time (Wibowo, 2021). The initial phase of industrialization, denoted as the First Industrial Revolution (IR 1.0), characterized by the creation of the steam engine, enabled humans to work faster and more efficiently, facilitating extensive travel with the support of newly discovered machines. The Second Revolution (IR 2.0), with the discovery of electricity, allowed for mass production, making goods easily accessible and affordable. Certainly, many aspects were streamlined. Mass production became even more facilitated with the advent of computers, marking the beginning of the Third Revolution (IR 3.0). In this era, various necessities of life such as food, beverages, clothing, vehicles, and more could be obtained easily and at nearly the same cost. Social boundaries between countries diminished as information flowed rapidly from one place to another with the introduction of a new sophistication called computers. People even began to feel less tied to their respective countries, implying a shift from narrow nationalism to the notion of global citizenry (Wibowo, 2021).

Now, people all over the world are acquainted with the Fourth Industrial Revolution (IR 4.0), where AI becomes a primary driving and transformative component (Pabubung, 2023). Work becomes

increasingly effortless, with robots assisting human tasks that (almost) no longer require heavy labour due to automation in specific jobs. If administrative or customer service roles were traditionally performed by humans, artificial intelligence (AI) can now take over these functions. During the pandemic, artificial intelligence has further eased the tracking of individuals positive for Covid-19 while providing the necessary preventive actions or steps to be taken. Life has also become more convenient. The smartphone in our hands often serves as a personal assistant that sometimes knows more than we do. Various applications residing on our smartphones can remind us to exercise or offer places that most people find refreshing and inspiring. Social media algorithms are becoming more adept at recognizing users by presenting content that aligns closely with each user's preferences. As we progress, these algorithms become more sophisticated, and in a certain sense "smarter," thanks to their immersive features that can penetrate the privacy barriers of their users' lives (Pabubung, 2021).

In addition to the positive impacts brought about by each technological advancement, there are often unseen negative effects. The IR 1.0 unexpectedly created new classes of entrepreneurs or bourgeoisie, triggering the French Revolution and altering the political landscape in Europe (Wibowo, 2021). The IR 2.0 was also not immune to negative effects, leading to widening social inequality. Indirectly, the IR 2.0 gave rise to significant conflicting ideologies for decades, namely the clash between the bourgeoisie or ruling class of the capitalist system and the proletariat majority which favoured the working class (Wibowo, 2021). The computerization system marking the advent of the IR 3.0 could not escape its negative repercussions either. The 3.0 Revolution accelerated the fierce currents of competition and production, solidifying the liberal capitalist system and causing the collapse of the communist system (Wibowo, 2021). Now, we find ourselves in the era of the IR 4.0 where artificial intelligence becomes the main driving force.

Similar to the IR 1.0, the IR 2.0, and the IR 3.0, the IR 4.0 is not exempt from significant issues affecting society in this day and age. The 4.0 Revolution is believed to gradually erode the foundation of the longstanding liberal democratic system (Wibowo, 2021). This is evidenced by the presence of propaganda through various digital platforms. In America, societal divisions were prolonged after the presidential election in 2020 due to the circulation of hoaxes and conspiracy theories. Similar incidents have occurred in Indonesia, where digital platforms were often used to undermine democracy by expressing dissatisfaction with legitimate democratic election outcomes. Digital platforms driven by artificial intelligence technology have provided space, or even "facilitated" a small group of people willing to undermine democracy and overthrow legitimate governments. In this era of artificial intelligence, the most significant challenge is data colonialism and digital dictatorships (Wibowo, 2021).

Artificial intelligence technology is advancing rapidly and exponentially over time, resulting in a widening gap between nations. Not all countries are able to master this artificial intelligence technology, only a small fraction can and do master it (Alonso et al., 2020). Meanwhile, all countries have become heavily reliant on this new technology. To prosper in the current global context, every country must participate in the utilization of artificial intelligence technology. This situation demands that the majority of nations depend on a small number of technologically advanced countries for the development of artificial intelligence technology (Alonso et al., 2020). This dependence allows the advanced countries that are the developers and suppliers of artificial intelligence technology to control and dictate the affairs of most other countries, especially smaller and poorer ones. At present, data has become a target for large companies and powerful nations. The data of consumer countries will naturally be controlled by developed nations or megatech corporations (Alonso et al., 2020).

According to *The Guardian (2021),* social media was alarmed by the Pegasus project scandal, as Pegasus was a spyware designed to extract data from personal smartphones without the target's knowledge. The Pegasus malware algorithm was more intrusive than those owned by megatech companies like Alphabet (Google) and Meta (Facebook) because it could access anything on an individual's phone. If this technology falls into the hands of a dictator who appears on the surface to be democratic, catastrophe is imminent. It will not only erode the foundations of democracy but destroy the elements of democracy. Human rights will only be faintly visible, and the privacy of citizens will completely vanish under the constant vigilance of a dictator. In such a situation, one cannot speak about freedom as the right of every individual (The Guardian, 2021). Freedom and privacy are essential elements in human dignity. Adherence to the inherent worth of individuals logically entails that everyone must be treated with due respect for the autonomy they possess (Kateb, 2011). Real human autonomy is preserved in the preservation of freedom and individual rights, with privacy being the most urgent individual right at present. Thus, the utilization of artificial intelligence technology which is not grounded in mature ethical considerations can override the principles of respect for humans. The absence of clear regulations and sanctions will weaken human dignity and infringe human rights to freedom and privacy (Kateb 2011).

AI and Challenges in Maintaining Social, Cultural, Economic and Political Rights

AI has become deeply embedded in daily life, influencing decision-making and personal interactions, making it essential to integrate human rights principles into AI system design. Technological advancements impact social, economic, cultural, and political rights, with the Internet of Things (IoT) playing a major role in the Fourth Industrial Revolution (IR 4.0). IoT connects individuals and objects via networks, enhancing efficiency and environmental management while driving fields like AI, robotics, and biotechnology (Keoh et al., 2014). However, despite the convenience and comfort to our lives due to IR 4.0, challenges such as privacy concerns, disinformation, and threats to individual autonomy pose significant risks to human rights (Wood et al., 2017).

AI technologies, such as language models and generative AI, have rapidly gained global prominence, with transformative advancements allowing these systems to perform complex tasks autonomously, or often with limited human supervision. Key concerns include growing threats to personal autonomy, as AI can manipulate choices and behaviour. Additionally, interference with individual privacy, as AI-powered systems enable extensive surveillance capabilities. AI-driven platforms also contribute to the spread of disinformation, which in turn can undermine public trust and influence democratic processes, such as elections (Suleimanova, 2024).

AI technologies have the potential to influence, limit or control individual decision-making in ways that undermine one’s ability to act freely and independently. AI systems, especially those used in social media, marketing or digital platforms, can analyse vast amounts of data on users’ preferences, habits and behaviours (Suleimanova, 2024). With this information, AI can be designed to subtly guide, nudge, or manipulate decisions by presenting tailored content, advertisements or recommendations that align with certain goals, creating the risk that individuals’ choices may not be entirely their own, but rather are shaped by external factors controlled by AI algorithms (Suleimanova, 2024). Over the course of time, this manipulation can erode personal autonomy, making it harder for people to make independent, informed decisions.

On a broader scale, AI also exerts significant influence in the labour market, thus affecting economic rights. Algorithms wield significant influence, as seen in instances like Amazon terminating contract

drivers based on AI decisions, even in the absence of any wrongdoing or clear justification (Soper, 2021). Although AI is recognized as a driver of productivity and economic growth, and is expected to make substantial contributions, potentially doubling annual global economic growth rates by 2035, as projected by a study from Accenture, its potential to automate tasks in certain sectors raises concerns about job displacement and downward pressure on wages (Soper, 2021). This introduces uncertainly regarding the future of work and worker's economic security in the face of increasing AI-driven automation.

AI-powered systems, from chatbots to intelligent scheduling systems, have optimized workflows and facilitated productivity especially with the rise of remote work (Podolsky, 2023; Aleem et al., 2023). However, the ongoing ethical concern about job displacement—despite the historical precedent of technological advances affecting employment—remains central to discussions around responsible AI implementation (Tiwari, 2023). A greater concern arises with newer AI developments as generative tools, such as text-to-image models like DALL-E, which use deep learning to generate digital images from natural language prompts (Dehouche & Dehouche, 2023). While these models offer creative possibilities and efficiency in industries like design and marketing, they also raise questions about the future of jobs traditionally held by artists and designers (Lyu et al., 2022). This further underscores the need for responsible AI integration to address both the economic impacts and the ethical implications.

Generative AI tools like text-to-image models are typically trained on the use of vast datasets that may contain copyrighted artwork, images, and other creative content, often without proper attribution or permission (Lyu et al., 2022). This leads to the potential for AI-generated images to unintentionally replicate elements of existing works, blurring the line between inspiration and infringement. As these AI models may create content that closely resembles or borrows from copyrighted materials, they raise significant concerns regarding intellectual property rights, leading to potential violations and disputes over ownership (Zhang, 2023). The central issue is whether the rights to AI-generated images belong to the individual who inputs the prompts or the company that developed the AI technology.

While revolutionising the creative and marketing industries, generative AI tools also pose challenges that extend beyond intellectual property concerns, affecting broader areas such as individual privacy and reputation, both of which are fundamental to human dignity. These AI systems have the potential to impact freedom of expression, media manipulation and the dissemination of misinformation (Suleimanove, 2024). AI models, like ChatGPT, can generate harmful and defamatory content without easy recourse for the affected individuals. Although companies like OpenAI include disclaimers warning users about the potential for inaccuracies, these disclaimers do little to protect individuals from the consequences of misinformation (Coltri, 2024). This situation exemplifies the human rights risks posed by AI-generated misinformation, particularly in cases where the content is widely disseminated, causing reputational harm or emotional distress.

This situation is further complicated by the issue of legal liability. When AI-generated false information is republished by users, those users may be held accountable as the publishers. However, AI companies often shift the responsibility for verifying the accuracy of the content onto users, as seen in OpenAI's disclaimers that advise users to fact-check outputs (Coltri, 2023). This creates an ambiguous situation in terms of who should be held responsible when reputational harm occurs. The lack of clarity on whether the AI developer, the AI user, or both should be accountable reflects a significant gap in the current legal frameworks.

This legal grey area leaves individuals vulnerable to harm, with few clear avenues for recourse. If responsibility is placed solely on the users of AI tools, it becomes harder to protect individuals' rights, as the AI companies may escape liability. In a world where AI-generated content can have significant real-life consequences, this lack of accountability is a serious challenge to human rights. The evolving nature of generative AI and its potential to produce misleading information demands stronger regulatory frameworks to ensure that individuals' rights are not compromised and that clear channels for accountability are established.

The integration of AI into democratic processes carries both constructive and detrimental implications. On a positive note, AI serves as a tool that can enhance political participation and civic engagement, aligning with democratic ideals. For instance, AI technologies like chatbots, social media, and online forums enhance civic engagement by providing alternative channels for information and communication (Bertot et al., 2016). Additionally, AI contributes to improved transparency and accountability by enabling the monitoring and evaluation of public policies and services through tools like open data, dashboards, and feedback systems (Bertot et al., 2016). Moreover, AI aids in fostering deliberation and consensus by facilitating the exchange and analysis of diverse perspectives and preferences through mechanisms such as argumentation, voting, and recommendation systems (Mikhaylovskaya, 2024).

Conversely, the introduction of AI poses risks and challenges that could infringe upon political rights. It has the potential to manipulate individuals and groups by exploiting cognitive and emotional vulnerabilities through techniques like nudges, micro-targeting, and the creation of echo chambers (Helmus, 2022). Furthermore, AI can contribute to the spread of disinformation, eroding the credibility of democratic institutions, through the generation and dissemination of false or misleading information, including deepfakes and fake news (Helmus, 2022). Generative AI, when used maliciously, can generate realistic but entirely fabricated images that distort reality. Deepfakes—hyper-realistic digital forgeries—have already proven to be a significant political challenge (Westerlund, 2019). AI's role in generating disinformation is a growing threat. The rise of deepfakes and AI-generated fake news allows malicious actors to create and spread realistic but entirely fabricated images and narratives, distorting reality in ways that can manipulate public opinion, discredit political opponents, or undermine the legitimacy of democratic institutions.

In essence, the discourse on AI and democracy emphasizes the delicate balance between leveraging technological advancements for the enhancement of political participation and safeguarding against the infringement of political rights. This intersection of AI's impact on both individual rights and democratic processes reflects a broader concern about the spread of misinformation and its consequences. The risks of generating false and misleading information increase, affecting not only reputations, but also public trust in political systems (Westerlund, 2019). While AI-generated content can be weaponized to harm political figures and sway public opinion, the issue is not just about the technology itself but the human oversight and intent behind it. Responsibility lies with the creators, users, and regulators of AI. Ultimately, AI's impact, whether it is positive or harmful, depends on how it is used.

INTERNATIONAL REGULATIONS ON AI TO PROTECT HUMAN RIGHTS

The development of regulations for AI is crucial in safeguarding human rights. Recently, the United Nations launched an initiative, Governing AI for Humanity, which has emphasised the necessity of

global cooperation to ensure that AI technologies would respect human dignity, privacy and fairness (United Nations, 2024). This framework complemented the ongoing national and international efforts, including the White House's blueprint for an AI Bill of Rights, which has outlined principles such as human alternatives, fallback systems, and transparency in AI governance (The White House, 2022). These collective efforts reflect the growing consensus that AI must be regulated with human rights at the forefront.

In the same vein, Human Rights Watch (2023) and 86 other human rights and civil rights organizations have urged Congress in the USA to regulate AI to protect civil rights and liberties, particularly for historically marginalized communities. Amnesty International has emphasized the need for legally binding regulations for the already documented harms to people subject to AI, and these would include broader accountability mechanisms, and complement international, regional, and national governance efforts (Nolan et. al., 2024). The urgent but difficult task of regulating AI must prioritize the protection of human rights and ensure that AI systems are rights-respecting by design.

Since 2019, the UN Human Rights B-Tech Project and the Global Network Initiative have emphasized the need to ground regulatory approaches to AI in the international human rights framework and the UN Guiding Principles on Business and Human Rights (ITU, 2021). The UN High Commissioner for Human Rights has called for regulations that require assessment of the human rights risks and impacts of AI systems and resist the temptation of self-regulation by the AI industry (UNHR, 2023). These existing efforts have pushed for AI regulation grounded in human rights which aligned with the UN's Governing AI for Humanity initiative. Since its inception, the initiative has focused on ensuring that AI technologies respect the rights and freedoms of individuals, particularly those from vulnerable and marginalized communities. It seeks to prevent the risks of bias, discrimination, and privacy violations often associated with AI systems (United Nation, 2024). By advocating for mandatory human rights impact assessments and stringent oversight mechanisms, the Governing AI for Humanity framework reflects a comprehensive approach to managing AI's global implications, calling for collaboration between governments, private companies, and civil society.

Before the launch of the UN initiative, the Council of Europe had already begun to shape AI governance. The Council of Europe, acknowledged as the preeminent human rights organization in Europe, has been actively working on crafting a legally binding instrument that addresses the creation, design, and implementation of AI systems. Referred to as the "Convention on Artificial Intelligence, Human Rights, Democracy, and the Rule of Law" (AI Convention), this endeavour aims to protect human rights in light of potential risks associated with AI. If successfully implemented, the AI Convention could signify the establishment of the inaugural internationally binding treaty specifically addressing AI (Kolfschooten, 2023).

Established in 1949, the Council of Europe has traditionally upheld human rights throughout the European continent. In the last ten years, it has released several non-binding legal instruments related to AI. In 2019, the Ad Hoc Committee on AI (CAHAI) was created to assess the need for a legally binding AI convention. Since January 2022, a new Committee on AI (CAI), composed of member states, observer states (such as the US and Japan), and representatives from the private sector and civil society, has been actively crafting the content of its AI Convention (Council of Europe, 2020).

While the European Convention on Human Rights, the Council's primary human rights instrument, is applicable to all facets of life, including technological advancements, the Council deems a new AI Convention necessary for three primary reasons (Council of Europe, 2023). First, it aims to address

interpretational challenges in applying current human rights standards to the AI context. Second, it seeks to legally incorporate essential principles. Lastly, it aims to establish international norms on AI human rights to bolster trade. The proposed instrument does not introduce new human rights but instead articulates more precise provisions which can be applied to existing human rights standards in the realm of AI. The legal instrument is anticipated to adopt the structure of a framework convention, elucidating guiding principles and values, as opposed to a convention entailing binding rights and obligations (Council of Europe, 2023).

The AI Convention is positioned to assume a crucial role in influencing the worldwide governance of AI, emphasizing the protection of fundamental rights and the establishment of norms within a swiftly advancing technological environment. As the Council of Europe advances in its endeavours to conclude the required regulations, the potential influence of the AI Convention transcends the European continent, indicating a shared dedication to addressing the ethical and human rights ramifications of artificial intelligence on a global level. In light of the increasing integration of AI systems across diverse sectors, the Convention's comprehensive approach from design to decommissioning reflects a forward-looking stance in ensuring responsible and accountable AI practices (Article 1). The inclusive definition of AI systems in Article 3, encompassing algorithmic processes and their varied outputs, underscores the need for a nuanced understanding of AI technologies.

The horizontal applicability of the Convention (Article 4) signifies its relevance across different industries, emphasizing the universal principles that should guide the deployment of AI. The specific obligations outlined in Chapter II for actors utilizing AI systems and the corresponding duties imposed on Member States in Chapter IV contribute to a holistic framework that balances innovation with ethical considerations. Articles 17, 19, and 20 further highlight the Convention's commitment to non-discrimination, public engagement through consultations, and the development of digital literacy, recognizing the societal implications of AI. By formalizing fundamental AI principles in Articles 7 and 12, the Convention emphasizes transparency, oversight, and safe innovation as core tenets for responsible AI development.

The proposed risk-based assessment regime in Chapter VI underscores the Council's foresight in addressing potential AI-related risks to human rights. Article 25, which mandates effective oversight mechanisms, aims to ensure accountability and compliance with the Convention, aligning with the overarching goal of protecting individuals from the adverse effects of AI technologies. On September 5th, 2024, the Council of Europe’s AI Convention, was signed by Andorra, Georgia, Iceland, Norway, the Republic of Moldova, San Marino, the United Kingdom, Israel, the United States, and the European Union (Whitecase, 2024), marking a significant step towards the establishment of internationally binding regulations for AI. The Convention will be implemented in the European Union through the AI Act, which provides harmonised rules suitable for deployment and use of AI systems in EU markets, complementing other relevant EU legislations where needed (European Commission, 2024).

EU AI Convention and the UN’s initiative are aligned in their shared goals of ensuring that AI development respects human rights, promotes fairness, and is transparent. Both frameworks aim to address the ethical, social, and legal challenges posed by AI technologies, with a strong emphasis on protecting human dignity and preventing harm. The EU AI Convention marks a pivotal moment in the regulation of artificial intelligence, establishing a framework that prioritizes human rights and democratic values. The Convention not only addresses the immediate challenges posed by AI technologies, but also sets a precedent for international cooperation and comprehensive governance in the age of AI.

The Significance of Establishing Regulations for AI in Safeguarding Human Rights

The imperative to regulate artificial intelligence (AI) arises from its potential impact on human rights, a concern highlighted by organizations like Amnesty International (Nolan et al., 2024). Despite the complexity of the legislative process, there is an urgency to protect individuals from current and future AI-related harms. The proposed regulations must be legally binding, focusing on documented harms and emphasizing responsible AI development, broader accountability mechanisms, and the meaningful inclusion of those impacted (Nolan et. al., 2024). Without such measures, AI could exacerbate existing inequalities, undermining social cohesion and the protection of cultural, economic, and political rights.

In the comprehensive framework of safeguarding individuals from AI-induced abuses, human rights play a pivotal role amid rapid technological advancements. The multifaceted impact of AI, posing threats to privacy, freedom of expression, and non-discrimination, necessitates robust regulations. Integrating human rights principles into AI development becomes a mechanism to ensure the respectful and protective design of technologies, preventing encroachments on individual rights and dignity (Strasbourg, 2018). By integrating these principles into AI systems, we can ensure that technologies operate in ways that respect social and cultural rights. For instance, the Clearview AI case, where facial recognition technology was used without consent, shows the serious major privacy concerns that arise when AI is used irresponsibly (Dul, 2022). Similarly, the Google Street View incident, where sensitive information was captured from private Wi-Fi networks, has demonstrated how even large, established companies could violate privacy rights when AI-enabled data collection was left unchecked, undermining trust in both technology and governance systems (Burdon & McKillop, 2013).

Moreover, beyond privacy concerns, human rights become instrumental in addressing the transformative effects of AI on economic rights, particularly in the context of employment dynamics. Concerns about job displacement and shifts in the nature of work have underscored the importance of human rights principles as a compass guiding effort to prevent individual marginalization. Advocating for access to meaningful employment, fair wages, and social protection, these principles sought to mitigate adverse consequences and foster inclusive economic development (Strasbourg, 2018). The Amazon hiring algorithm case has been illustrative, as the AI tool displayed gender bias by systematically downgrading resumes containing the word “women”, thus reinforcing existing inequalities in the labour market (Lin, 2022). Without proper regulatory safeguards, AI could entrench these disparities, therefore making human rights principles all the more pivotal in fostering inclusive economic development.

The significant concern of AI system is their reliance on biased training data which introduces risks of perpetuating and amplifying social prejudices. This highlights the critical need for fairness, transparency, and accountability in AI system design and implementation (Strasbourg, 2018). The Apple Card algorithm controversy was a case in point, where it was revealed that men were often given higher credit limits than women despite similar financial backgrounds (Lin, 2022). This highlights how, without stringent oversight, AI could perpetuate biases if left unchecked, AI could further marginalise already disadvantaged communities, hindering efforts to achieve equity and justice.

Furthermore, human rights play a crucial role in building and sustaining trust in AI technology. Public acceptance relies on the belief that AI operates within ethical and rights-respecting boundaries. Any perceived violation of rights or unethical AI use can erode public trust, highlighting the significance of aligning AI practices with human rights principles. Public confidence is easily eroded when AI systems violate these principles, as seen in the Facebook-Cambridge Analytica scandal, where data harvested

via AI algorithms was used to manipulate political campaigns (Peters, 2022). This demonstrates the severe consequences of unethical AI use and how its misuse can distort democratic processes. In essence, the incorporation of human rights principles into the realm of AI serves as a foundational pillar for fostering ethical development, equitable deployment, and widespread societal acceptance of this transformative technology (Strasbourg, 2018), thus ensuring that political rights and freedoms are protected in the digital age.

As AI becomes integral to our technological landscape, robust governance frameworks are necessary to address ethical concerns and safeguard human rights. The governance of AI should be anchored in key principles, such as fairness, explainability, robustness, transparency, and data privacy. These tenets must underpin the development and deployment of AI systems (Boinodiris, 2021). The European Union's AI Act is an example of a top-down regulatory approach aimed at curbing unacceptable uses of AI, providing a model for balancing innovation with accountability. Companies are encouraged to conduct comprehensive evaluations, assessing the impact of potential unfair outcomes, scrutinizing decision scope, understanding operational complexity, and aligning with organizational governance capabilities. Transparency, a cornerstone in ethical AI, requires companies to balance the level of explanation needed while navigating inevitable trade-offs (Boinodiris, 2021).

The regulation of AI presents both an urgent and formidable challenge, particularly concerning the protection of human rights. AI systems must be designed with an inherent respect for these rights, requiring responsible inclusion of those affected. IBM contributes three pivotal principles for AI in organizational settings, emphasizing that AI's purpose should augment human intelligence, not replace it (Sheopuri, 2021). Ownership of data and insights should belong to the creator, emphasizing data rights. This American multinational technology company also stresses that the entire AI life cycle should prioritize transparency and explainability (Sheopuri, 2021). These principles provide a framework for ethical AI development while also addressing practical concerns about data privacy and ownership.

Looking ahead, binding legal regulations are essential for preventing the misuse of AI technology and protecting human rights. The governance of AI must navigate a complex terrain of principles, regulations and ethical imperatives, ensuring that AI is implemented in ways that prioritise societal well-being, protection against threats to privacy, freedom of expression, and non-discrimination. Regulating AI presents an urgent yet formidable challenge, with the paramount concern being the protection of human rights. This necessitates the AI systems be designed with inherent respect for these rights, requiring responsible development and usage of AI, broader accountability mechanisms, and the meaningful inclusion of those impacted. The governance of AI must navigate a complex terrain of principles, regulations, and ethical imperatives, striking the right balance to guarantee the responsible and ethical implementation of AI technologies that prioritize human rights so as to secure a just and equitable technological future for all.

CONCLUSION

The pervasive influence of AI technology has ushered in a wave of positive changes across various sectors. From enhanced efficiency in industries to breakthroughs in medical research, the benefits are undeniable. However, this progress is not without its underlying issues, as the darker side of AI surfaces, they have revealed consequences that are not always immediately apparent.

In the realm of human rights, AI has the power to disrupt established norms across social, cultural, economic, and political dimensions. Socially, AI can erode personal autonomy by manipulating user behaviour through content, potentially making individual choices less independent. The privacy risks associated with AI-driven surveillance and data can be exploited for commercial or political gain.

Culturally, AI's role in creating generative content, such as images and text, introduces challenges to intellectual property and artistic integrity. The use of copyrighted materials without proper attribution raises ethical and legal questions about ownership and the future of creative industries, threatening the livelihoods of traditional artists and designers.

Economically, AI's integration into the labour market creates uncertainty, as automation may displace workers and put downward pressure on wages. While AI enhances productivity and is projected to contribute to economic growth, it simultaneously raises concerns about job security, particularly in sectors most vulnerable to automation.

Politically, AI poses risks to democratic processes through the spread of disinformation, such as deepfakes and fake news. AI generated content can manipulate public opinion, distort reality and undermine trust in political institutions. The increasing use of AI for micro-targeting and political manipulation threatens political rights by exploiting cognitive biases and influencing voter behaviour in ways that may subvert democratic ideals.

While AI opens up new possibilities for inclusivity and accessibility, there is the simultaneous risk of exacerbating existing inequalities. The transformative nature of AI has far-reaching implications, touching upon social, cultural, economic and political rights.

The ethical dimension of AI becomes increasingly prominent as its influence grows. Nations must collaboratively establish regulations to counteract potential misuse and safeguard the foundations of human dignity. This involves navigating a complex terrain of principles, regulations, and ethical imperatives. Achieving an appropriate equilibrium is crucial to guarantee the responsible and ethical implementation of AI technologies.

Mega-tech companies, at the forefront of AI development, play an important role in shaping the future landscape. For these companies, transparency and a dedication to adhere to regulations are essential to foster trust and actively contribute to the safeguarding of human rights. Their actions set the tone for ethical practices in the AI industry, influencing the trajectory of technological advancements.

To sum up, the influence of AI on human rights is extensive and complex. Although the positive changes are clear, it is also essential to carefully weigh the potential drawbacks and take proactive steps. The collaboration between artificial intelligence and human capabilities can lead to remarkable advancements and efficiency. However, preserving the unique qualities, creativity, and decision-making abilities of humans is essential. Effectively managing AI involves finding a nuanced equilibrium between innovation and ethical concerns, emphasizing the importance of upholding human rights and the welfare of members of society. Navigating the dynamic AI landscape demands collaboration among nations, ethical conduct from tech companies, and the establishment of strong regulations, all vital components in shaping a future where AI genuinely enhances humanity's well-being.

Looking ahead, while various international initiatives offer a solid foundation, such as the Governing AI for Humanity of the UN and the current international framework of the Council of Europe's AI Convention, the rapid pace of AI innovation necessitates continuous evaluation and adaptation of these regulatory measures. Policymakers, technologists, and civil society must collaborate to not only mitigate the risks of AI, but also harness its potential for the good of society. The challenge is not only to protect human rights today, but also to anticipate the ethical dilemmas of tomorrow. As AI becomes increasingly embedded in our lives, a global, rights-based approach must remain central to its governance, ensuring a future where technological advancement serves all of humanity equitably and justly.

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