

Horizon Scanning Series

The Effective and Ethical Development of Artificial Intelligence: An Opportunity to Improve Our Wellbeing

Human Rights

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1 Introduction

The Australian Human Rights Commission (Commission) welcomes the invitation from the Australian Council of Learned Academies (ACOLA) to provide this input paper in relation to artificial intelligence (AI) and human rights.¹

Technology, including AI, is developing at an unprecedented pace, and its power and applications continue to evolve. The human rights implications of new and emerging technologies is an issue requiring detailed examination, and for that reason is the subject of a major project currently being undertaken by the Commission.² The discussion in this paper is therefore general in nature, and, where indicated below, preliminary.

2 Artificial Intelligence and Human Rights

2.1 Human rights framework

Human rights are fundamental rights enjoyed by all people. They embody the idea that all humans are born free and equal in dignity and rights. These inherent and inalienable standards apply across all aspects of human life, including those affected by new and emerging technologies such as AI.

Human rights are protected by a number of international instruments. The Universal Declaration of Human Rights (UDHR),³ the International Covenant on Civil and Political Rights (ICCPR)⁴ and the International Covenant on Economic, Social and Cultural Rights (ICESCR)⁵ are the cornerstones of the modern framework for international human rights law. In the 70 years since the advent of the UDHR, this framework has proven robust and capable of adapting to changing circumstances and technologies. This should give confidence that it will help us navigate the new challenges to and opportunities for the protection and promotion of human rights that AI presents.⁶

Human rights law tends to be expressed in general terms. International human rights treaties rarely refer expressly to a particular domain, such as new technologies. The task is to apply existing human rights principles to an Australia in which AI is increasingly prevalent. The universal nature and application of human rights provides a 'protected code to which all nations can subscribe and all people aspire'.⁷

In addition to the UDHR, ICCPR and ICESCR, other international treaties deal with specific human rights issues and the needs of particular groups of people. For example, there are treaties relating to discrimination against women, racial discrimination, children and people with disability.⁸

International human rights instruments impose obligations on the nation states that are signatories to them. There is also a growing acceptance that non-government actors also have a responsibility to protect human rights. States are obliged to take measures

to respect, protect, and fulfil the human rights of all those within their jurisdiction. That means that states must:

- not themselves implement measures which impermissibly limit human rights
- protect individual's human rights from limitation by others, and
- take positive measures to advance human rights.

Human rights are interrelated, interdependent and indivisible. Some human rights (such as the right to life, or the right not to be subject to torture) are absolute. Most human rights may be subject to some degree of limitation, provided that any limitation is necessary and proportionate to achieve a legitimate purpose, such as the protection of another human right.

2.2 Key human rights engaged by artificial intelligence

AI technologies could engage many human rights. This section provides a non-exhaustive list of some significant human rights implications for AI. The discussion below recognises that AI has the capacity both to promote and to interfere with human rights. More detailed consideration of the human rights likely to be most seriously engaged by AI is one of the matters presently under consideration by the Commission as part of its Human Rights and Technology project.

(a) Right to equality and non-discrimination

All persons have the right to be treated equally and without distinction or reference to attributes such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status concerning their inherent and inalienable civil, political, social, economic and cultural rights.⁹

AI technologies may improve access to services and improve outcomes across a range of socio-economic indicators. Improvements may be through better systems or interventions in health or education, for example, or targeted programs and services for groups who experience vulnerability and disadvantage.

On the other hand, AI systems can lead to algorithmic bias, which can, in turn, cause impermissible discrimination.¹⁰ In addition, unequal access to new technologies, such as AI, may exacerbate inequalities, especially where access is affected by factors such as socio-economic status, disability, age or geographic location.¹¹

(b) Right to equality before the law

All persons have the right to equality before the law, courts and tribunals, including access to procedural fairness and review.¹² Any form of discrimination on the basis of race, colour, nationality or ethnicity is prohibited in the administration of justice.¹³

AI tools can be used in decision making, including in the justice system. For example, the COMPAS tool is used by some United States court systems to aid judges in determining questions about bail and sentencing. Depending on how they are developed and deployed, those tools can reduce, reflect or exacerbate bias.¹⁴ Biases founded on racial or other protected attributes in decision making may impinge on the right to a fair hearing.

(c) Right to privacy

Article 17 of the ICCPR provides that no one shall be subjected to arbitrary or unlawful interference with their privacy, family, home or correspondence, nor to unlawful attacks on honour and reputation.¹⁵

The right to privacy is becoming increasingly hard to protect due to the ease and power of collection, distribution and analysis of information, and especially personal information, enabled by new AI technologies. In particular, AI enables new capabilities and impacts for surveillance technologies, which may be deployed by government and non-government bodies. For example, AI-powered facial recognition technology can impinge on an individual's privacy as well as a range of other human rights,¹⁶ including: the right to: hold opinions;¹⁷ peaceful assembly;¹⁸ liberty and security of person, and protection from arbitrary arrest;¹⁹ freedom of movement;²⁰ freedom of thought, conscience and religion;²¹ and equality before the law.²²

(d) Freedom of expression

Everyone has the right to hold opinions without interference, and the right to freedom of expression, including the freedom to seek, receive and impart information and ideas of all kinds.²³

AI tools may be used to influence or manipulate social media newsfeeds,²⁴ as well as in advertising and search engine results.²⁵ These kinds of interferences can significantly impede the enjoyment of this right, as freedom of expression includes the free exchange of ideas and information.

(e) Right to life

Every human being has the right to life.²⁶

AI can be used in ways that threaten this right, especially when deployed to create new forms of weapons. At the same time, AI can promote the right to life through more accurate and targeted use of machinery—such as in the field of medical diagnostics, thereby mitigating and averting loss of life. Individual AI-powered technologies can themselves both harm and promote the right to life. For example, unmanned aerial vehicles, also known as drones, can be used as lethal autonomous weapons as well as to transport vital medical supplies to hard-to-reach places.²⁷

(f) Right to benefit from scientific progress

All persons have the right to enjoy the benefits of scientific progress and its applications.²⁸

AI can provide many benefits to people—for instance it can improve the enjoyment of human rights such as the right to life and access to health.²⁹ Human rights law requires states to take appropriate steps to ensure that all sectors of the community benefit from these applications of AI.

(g) Right to work

All people have the right to work, which includes the right to the opportunity to gain their living by work which they freely choose or accept.³⁰

The Australian robotics industry benefits our economy by employing almost 50,000 people and generating revenue of \$12 billion.³¹ Conversely, AI automation technologies have the potential to displace an estimated 3.5 million workers in Australia in coming years.³²

2.3 Issues for specific groups

Different Australian population groups are, and will be, affected by AI technologies differently. Some population groups are particularly vulnerable to human rights abuses— especially when they are affected by decisions that are made, or informed by, AI-powered systems.

(a) Rights to equality, non-discrimination and equality before the law

Examples of applications of AI technologies with potentially discriminatory consequences include algorithms and tools that:³³

- target advertising of job opportunities on the basis of age, gender or some other characteristic such that, for example, people over a certain age never become aware of an employment opportunity;³⁴
- exclude applicants with mental illness;³⁵
- lead police to disproportionately target certain groups, such as young people and people from particular racial, ethnic or minority groups;³⁶
- entrench gender inequality, bias³⁷ and stereotyping;³⁸ and
- direct police to lower socio-economic areas, entrenching or even exacerbating the cycle of imprisonment and recidivism.³⁹

Risk assessment tools that are employed in the administration of justice may use algorithms based on undisclosed criteria, or variables that result in algorithmic bias when applied to large datasets. The NSW Police's risk assessment tool, 'Suspect Targeting Management Plan (STMP), sought to target repeat offenders and people police

consider are likely to commit future crime.⁴⁰ Analysis of those targeted by police revealed that Aboriginal and Torres Strait Islander young people were disproportionately targeted as compared with other groups within the community.⁴¹

(b) Right to benefit from scientific progress

While some AI technologies provide significant benefits to people with disability, others are inaccessible for people in this cohort.⁴² Similarly, while children and young people face fewer difficulties using technology, they are particularly vulnerable to the potential harm of new technology, such as a breach of privacy, or exploitation, made possible by the use of social media platforms.⁴³

Women's economic and other opportunities may be compromised through the disparity in global access to technologies.⁴⁴ In order to ensure that access to the benefits of AI technologies is universal, specific tools and approaches need to be developed to address the issues new technologies raise for specific groups.⁴⁵

(c) Right to work

Some job types, and socio-economic groups, are more likely to be adversely affected through increased automation of tasks. The consequences of widespread automation are likely to be different for women and men, with implications for socio-economic equality and the global gender gap.⁴⁶

(d) Right to social security

Given the huge number of decisions that governments must make, there is obvious attraction in using AI in its decision-making processes. Some of these decisions may be in areas which particularly concern vulnerable people, such as in determining eligibility for, or compliance with, government assistance programs. This brings the risk that some of the limitations of AI (or of poorly designed AI systems)—especially problems such as algorithmic bias—could lead to infringements of individuals' human rights.

For example, the Department of Human Services' Centrelink launched an automated debt recovery system in Australia in July 2016. The automated system, which came to be known colloquially as 'robo-debt', matched a person's historical Australian Tax Office declared income with Centrelink declared income and calculated any potential debt with some broad assumptions being made about annual salary.

Automation allowed the scale of debt-raising and recovery processes to significantly increase, from approximately 20,000 compliance interventions in 2015-16 to approximately 783,000 interventions in 2016-17.⁴⁷ Since its launch, significant concerns have been expressed about the system, including concerns about: its accuracy, transparency and usability, poor service delivery and communication, and its impact on vulnerable groups.⁴⁸ Such problems, if established, could infringe the right to social security.⁴⁹

3 Protections needed

3.1 Human rights approach

A human rights-centred approach to technology emphasises the importance of developing and deploying new technology in a way that protects and promotes human rights.

We must be aware of the risks that AI and related technology pose to Australians' human rights, and combat these risks.

At the same time, these risks should not blind us to the opportunities that AI presents to Australia, economically, socially and in the protection and fulfilment of human rights. Indeed, it is partly because of these opportunities that Australia needs to ensure the robustness of the human rights protections that are put in place now. Human rights protections can help build the community trust that will be needed to seize these opportunities.

Human rights are universal. The discussion above demonstrates that there is a need to ensure that they are adequately protected and promoted in the context of new technologies. However, there are likely to be a number of acceptable ways to ensure that those developing and deploying new technologies, including those incorporating AI, do so in a manner that respects, protects, and fulfils the human rights of affected people.

As the Australian Human Rights Commission has explained, a human rights approach is similar, but not identical, to an ethical approach.⁵⁰ The two approaches can be brought together: human rights can provide the normative content that can be applied through an ethical framework to developing and deploying new technology.

3.2 Human rights in Australia

As noted above, Australia has ratified several major international human rights treaties.⁵¹ As a party to these treaties, Australia has agreed to respect, protect and fulfil the human rights obligations contained in them. There are a number of mechanisms in Australia which to some degree protect and promote human rights.

(a) Incorporation into domestic law

In order for international human rights law to have full legal effect in Australia, the relevant Australian parliament or parliaments must incorporate the specific provisions of these laws into domestic Australian law. Australia has incorporated some, but not all, of these international human rights treaty obligations in domestic legislation.

Federal law prohibits discrimination on the basis of race, disability, age, sex, sexual orientation, gender identity and some other grounds.⁵² The *Privacy Act 1988* (Cth)

protects primarily information privacy.⁵³ There are also parallel state and territory laws that deal with discrimination and privacy. Two jurisdictions, Victoria and the Australian Capital Territory, have statutory bills of rights.⁵⁴

(b) Executive bodies

Australia has executive bodies that are responsible for promoting and protecting human rights. The Australian Human Rights Commission has primary responsibility in this area, including through a conciliation function (in respect of alleged breaches of federal human rights and anti-discrimination law), education and policy development.⁵⁵

There are also specialist bodies with regulatory and broader functions in respect of specific rights. For example:

- the Office of the Australian Information Commissioner is responsible for privacy and freedom of information, and has regulatory functions regarding privacy⁵⁶
- the Office of the eSafety Commissioner is responsible for promoting online safety, with regulatory functions regarding cyberbullying and image-based abuse⁵⁷
- the Australian Competition and Consumer Commission (ACCC) is the national competition and consumer law regulator⁵⁸ and is currently investigating digital platforms and their impact on Australian journalism.⁵⁹

(c) UN review processes

The Australian Government reports on the nation's compliance with human rights obligations through UN review processes. Some international bodies can hear complaints from a person in Australia alleging that the Australian Government is in breach of its obligations under one of its treaty commitments. In addition, the UN conducts its own investigations, and reports on human rights conditions in countries including Australia. These international processes generally make recommendations or findings that are not enforceable.

3.3 Opportunities for protection of human rights

The mechanisms discussed above help guard against some of the potential adverse effects of AI technologies on the rights of Australians. However, there remain gaps in how this system promotes and protects human rights in the context of AI. For example, decisions that are wholly or partly informed by AI systems fall outside the scope of traditional forms of regulation for science and technology.⁶⁰

As noted in sections 1 and 2, there are numerous examples of how decisions arising from AI systems can lead to infringements of human rights. Where information about algorithms, datasets and resultant decisions is not available or comprehensible, it is difficult to ensure accountability for affected people.⁶¹

If a process of decision making is opaque, it can be difficult or even impossible to determine whether an impermissible consideration—such as one that is racially biased—has been taken into account.⁶² Decision-making systems that rely on AI can be particularly susceptible to this problem.

Australia and other jurisdictions have started to grapple with these. For example, the Australian Government committed almost \$30 million in the May 2018 Budget to develop a 'Technology Roadmap, Standards Framework and a national AI Ethics Framework to identify global opportunities and guide future investments'.⁶³

Other jurisdictions have approached some of the challenges posed by AI technologies through various initiatives and forms of governance. For example:

- The EU's General Data Protection Regulation (GDPR) harmonises data protection laws across the EU and includes provisions relating to the transfer or export of personal data outside the EU—something that will influence how AI can be used on transnational datasets.⁶⁴ The GDPR also imposes restrictions on how decisions based on automated processes may be made where they have significant effects on an individual.
- New York City's 'Automated Decision making Task Force' is examining the use of AI through the lens of equity, fairness and accountability and recommend redress options for people who are harmed by agency automated decisions.⁶⁵
- The UK's proposed 'AI Code', to be developed across the public and private sectors, including the Centre for Data Ethics and Innovation, the AI Council and the Alan Turing Institute, could provide the basis for future statutory regulation.⁶⁶
- The European Commission's European Group on Ethics in Science and New Technologies has called for a common, international ethical and legal framework for the design, production, use and governance of AI, robotics and autonomous systems.⁶⁷

Co-led initiatives by industry, NGO and academia to guide and frame AI ethical discussions include Open AI⁶⁸ and the Partnership on AI.⁶⁹

(a) Co-regulatory and self-regulatory approaches

In addition to ordinary legislation, self- and co-regulatory approaches can promote and protect human rights in the context of new technologies. These approaches can include accreditation systems, professional codes of ethics and human rights-compliant design. These types of measures are generally led by industry participants and subject-matter experts. They may also influence the actions of manufacturers through the procurement process.⁷⁰

An example of a self-regulatory approach is the proposed cross-sector ethical 'AI code' in the UK, which would require the establishment of ethical boards in companies or organisations that are developing or using AI in their work.⁷¹

(b) Responsible innovation organisation

Gaps in regulation of aspects of AI technologies, especially AI-informed decision making, are cause for concern regarding the human rights of Australians. Significantly, automated and AI-informed decision-making systems will become more widespread across the public and private sectors. Discrimination in these decisions is both more likely and of greater consequence for those already marginalised.⁷² Further, the often undisclosed algorithms employed in these systems⁷³ are challenging the concepts of procedural fairness in decision making. It is essential that the Australian public has trust in the systems and processes employed in the decisions that impact their lives. Discriminatory practices in AI may also prevent Australians from embracing the positive outcomes from AI-informed machine learning.

There may be a need for an independent body to provide institutional leadership on the development and deployment of AI in Australia – promoting what the Australian Human Rights Commission has described as ‘responsible innovation’.⁷⁴ Such a body could play an oversight role in the design, development and use of AI and associated technologies that would help protect the human rights in Australia and at the same time foster technological innovation. Such an organisation would be independently led, drawing together stakeholders from government, industry and the public and private sectors. Its roles and functions could include the establishment of a new governance model that covers the various stakeholders’ interests and relationships, encompassing a framework that harnesses the private sector’s insight and influence, while also protecting human rights.⁷⁵

¹ The Australian Human Rights Commission is established by the *Australian Human Rights Commission Act 1986* (Cth). It is Australia’s national human rights institution.

² Information on the Human Rights and Technology project is available at <https://tech.humanrights.gov.au/>. Australian Human Rights Commission, *Human Rights and Technology Issues Paper* (July 2018), 29-30. At <https://tech.humanrights.gov.au/consultation> (viewed 3 August 2018).

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