

# Open the pod bay doors please, HAL

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AI is a powerful tool. However, it must be limited — it is not simply a benign force for good. Humans are the only ones who should be able to make decisions about its creation and application.

We need to create a ‘social licence’ to ensure that those who AI would control have means of participation and recourse such that no system is applied without human beings at its centre. At all times, those who would benefit must be held to account for any of the decisions taken by AI systems. The safety of humans — mental, physical and social — must be incorporated into any AI system, and humans must be entitled to withdraw from any AI system and must be able to give informed consent to any limitation or control imposed by AI. Humans must retain, unimpeded, the right to our quiet enjoyment of life.

AMONG THE GREATEST fears we all have is a lack of control, of matters proceeding which involve us but over which we have no agency. Being a victim appeals to very few.

Australia has a belief in the ‘fair go’. However, this is tempered by the reality of the experience of many, in the workplace and the community. In workplaces, seemingly benign bosses can subscribe to the principles of ‘managerial prerogative’. At its worst, this entails bosses and supervisors conforming to the idea that they alone are the basis of all rational decision-making, with workers having the right to simply obey. In some ways, AI can be seen as an outgrowth of this prerogative, with even less human agency.

In Australia, rights in the workplace are governed by the awards of the

Fair Work Commission (FWC). These instruments, having the force of statute, have been in existence for over a century. They form the basis of the rights and obligations enjoyed by workers. Formerly, awards were the result of a notional ‘industrial dispute’ between employers and unions. They were dynamic and responsive to the needs of workers and employers. Since John Howard’s introduction of WorkChoices in 2006, however, they have been more akin to instruments of administrative law, such that unions and employers apply for variations to the FWC.

This is relevant to any consideration of AI given that rights in the workplace are determined through these instruments and enforced by the FWC and the courts. The only effective rights to a consultation that

most workers have (and a notional defence against the depredations of AI in the workplace) are contained within the provisions known as the Termination, Change and Redundancy Case of 1984. The ‘change’ element is the relevant consideration in this discussion.

As one would imagine, the rights to consultation envisaged under that decision reflect the state of technology in 1984. At the time, workers and employers were grappling with early computerisation. Instruments such as program logic controllers and computer numeric control systems were then novel; it is worthwhile recalling that the most popular home computer (and the first for many), the Commodore 64, had only been introduced in 1982.

The introduction of change requires consultation. In the Manufacturing Award (MA10) — an award that covers approximately 900,000 Australian workers — Clause 41 requires an employer who has made a ‘definite decision’ to introduce ‘major changes in production, program, organisation, structure or technology’ to consult with their workforce.<sup>33</sup> In 1984, this was readily identifiable, and timeframes were created accordingly.

However, those rights appropriate to the time of the Commodore 64 are unlikely to provide significant rights where AI is concerned. When the notoriously anti-union Elon Musk complains about the scorched earth created by the unfettered application of AI, the rights of workers are at significant risk.

AI is ‘artificial’ only because the artifice involved does not need to be initiated by a human. But the directions, the process and the outcome of an AI-generated command all originate with a human.

AI is notorious for its capacity to descend into prejudice and abuse when an extended narrative is expected of it. But this, surely, is reflective of the prejudices of its originators and the data they provide. One of the many complaints about Robodebt, aside from the fundamental illegality at its core,

was the repeated experience of many recipients of the computer-generated letters of demand not being able to engender a response from Centrelink. The mechanistic assertion of debt and the virtually instantaneous garnishing of wages and bank accounts were a source of great stress.

HAL was the computer at the heart of Stanley Kubrick’s film, *2001: A Space Odyssey* (which is based on the novel of the same title by Arthur C. Clarke). HAL was the killer of many astronauts, none of whom could control it. The most important scene occurs when astronaut Dave Bowman asks HAL to allow him to re-enter the spaceship. HAL refuses to cooperate. This is the great fear that is at the heart of every human interaction with AI — that it will not obey a human command.

AI has at its heart the involuntary gathering of human data. There should be no question that the right of individuals to ownership of their data is absolute. For promoters of AI, however, no such limitation appears to apply.

In the workplace, AI can be used in multifarious ways. If it is in control, whether work is decent — or safe — is of no concern to a computer; workers are simply units of production. Whether they work seven hours or 20 is of no consequence. In the dystopian vision of HAL, all humans are disposable.

The rights of workers to protect their data must be extended to the community. End-use AI companies gather personal data, without restraint. We need to impose a social license on the generators and users of AI. In particular, workers need to have the right to refuse their data being collected.

We need to ensure that workers’ rights to consultation are enhanced. Just as importantly, such rights need to ensure that humans are not controlled by and do not respond to machines. The calm voice of HAL refusing to open the pod bay doors cannot be replaced by the soothing electronic tones of Jeff Bezos telling Amazon workers when they can go to the toilet.



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# Essays

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## SECTION 1: INTRODUCTION

### **What is responsible AI anyway?**

Professor Jon Whittle – Director, CSIRO's Data61

### **10 examples of AI that are here now and have been embraced by the general public**

Stela Solar – Director, National Artificial Intelligence Centre

## SECTION 2: WHAT DO WE NEED TO BE TALKING ABOUT?

### **A unique opportunity for Australia: bridging the divide between fundamental AI research and usable, embodied AI**

Professor Michael Milford FTSE – ARC Laureate Fellow, Joint Director QUT Centre for Robotics

### **Responsible AI means keeping humans in the loop: what are other social implications of the mainstream adoption of this technology?**

Associate Professor Carolyn Semmler School of Psychology, Faculty of Health and Medical Sciences, The University of Adelaide and Lana Tikhomirov – Australian Institute for Machine Learning (AIML), The University of Adelaide

### **AI is changing the way people work: how do we skill our future workforce to ensure these new jobs stay on shore?**

Professor Katrina Falkner FTSE – Executive Dean of the Faculty of Sciences, Engineering and Technology, The University of Adelaide

### **Responsible data management: a precursor to responsible AI**

Dr Rocky Chen, Associate Professor Gianluca Demartini, Professor Guido Zuccon, and Professor Shazia Sadiq FTSE – School of Computer Science and Electrical Engineering, The University of Queensland

### **Open the pod bay doors please, HAL**

Andrew Dettmer – National President, Australian Manufacturing Workers Union

### **Innovation needs to create value: how do we tool universities to remain relevant to industry needs?**

Professor Simon Lucey – Director, Australian Institute for Machine Learning, The University of Adelaide

### **An AI-literate community will be essential for the continuity of social democracy**

Kylie Walker – Chief Executive Officer, Australian Academy of Technological Sciences and Engineering

## SECTION 3: WHAT ARE THE NEXT STEPS?

### **What are the limits of current AI, and what opportunities does this create for Australian research?**

Professor Anton van den Hengel FTSE – Director, Centre for Augmented Reasoning, Australian Institute for Machine Learning, The University of Adelaide

### **Australia's unfair advantage in the new global wave of AI innovation**

Professor Mary-Anne Williams FTSE – Michael J Crouch, Chair for Innovation, UNSW Business School

### **The \$1 billion dollar question: What should Australia's responsible AI future look like?**

Kingston AI Group

### **What are we doing now to ensure that Australia is recognised as a global leader in responsible AI, and what else should we be doing now and into the future?**

Dr Ian Opperman FTSE – NSW Government's Chief Data Scientist, Department of Customer Service

For acronyms, abbreviations and endnotes please see the composite document with all the essays.



# Responsible AI

Your questions answered

## ACKNOWLEDGEMENTS

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*Cover image: An artist's illustration of artificial intelligence (AI). This image represents the boundaries set in place to secure safe, accountable biotechnology. It was created by artist Khyati Trehan as part of the Visualising AI project launched by Google DeepMind. Source: unsplash*

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