



# Transdisciplinarity for socially responsible artificial intelligence: Aligning expertise in social sciences and computing research



## Workshop Report

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RMIT UNIVERSITY, MELBOURNE



## **Transdisciplinarity for Socially Responsible Artificial Intelligence: Aligning Expertise in Social Sciences and Computing Research**

### **Convenors**

- Ms Joann Cattlin, Associate Research Fellow – Social Change Enabling Impact Platform, RMIT University.
- Professor Lisa M. Given (FASSA, FASIS&T), Director, Social Change Enabling Impact Platform, Director, Centre for Human-AI Information Environments (CHAI), Professor of Information Sciences
- Dr Alexandra Ridgway, Lecturer, Criminology and Justice Studies, RMIT University
- Professor Falk Scholer, Director, Centre for Human-AI Information Environments (CHAI), Professor of Information Access and Retrieval

**Date and place:** Monday 30th June and Tuesday 1st July 2025, RMIT University, Melbourne.

### **Supporters**

This workshop was funded by the Academy of Social Sciences in Australia workshop grant, RMIT's Centre for Human-AI Information Environments, and RMIT's Social Change Enabling Impact Platform.

### **Citation**

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## Overview

The workshop 'Transdisciplinarity for Socially Responsible Artificial Intelligence: Aligning Expertise in Social Sciences and Computing Research' was held at RMIT University, Melbourne on 31st June and 1st July 2025. The workshop was conceived and developed by an interdisciplinary team: Ms Joann Cattlin, Professor Lisa M. Given (FASSA, FASIS&T), Dr Alexandra Ridgway, and Professor Falk Scholer, all from RMIT University.

The workshop sought to explore and raise awareness of the current challenges associated with development and adoption of artificial intelligence (AI), develop researchers' understanding of transdisciplinarity, and develop a transdisciplinary research agenda that integrates social science and technology methodologies, perspectives, and expertise. While many researchers are exploring the implications of AI, they often work in the confines of single disciplines or sectoral communities. Developing transdisciplinary research projects, involving a diversity of disciplines and individuals and organisations from outside the university, requires development of new capabilities, relationships, and research practices.

This workshop brought together researchers from different career stages, backgrounds, and social science and technology disciplines, to explore how social research perspectives can inform the lifecycle of AI design, development, adoption, and evaluation. Many of the researchers involved have a combination of professional and scholarly expertise, including collaborative research partnerships with stakeholders in government, community and industry. This enabled consideration of a broad range of relevant policy, ethical, and social implications with technical expertise, generating new ways of thinking and new approaches for developing research collaborations.

This workshop provided opportunities for researchers to develop an understanding of transdisciplinary research methodologies and critically reflect on what is involved in taking a transdisciplinary approach to research for socially responsible AI. The workshop facilitated in-depth discussions to co-create transdisciplinary research and policy agendas and identify researcher capabilities and research and policy gaps. The workshop also aimed to create a new network of diverse expertise, develop a research agenda, create outputs to raise awareness of the challenges, and lay the groundwork for future collaborative partnerships.

The workshop received funding from the Academy of Social Sciences Workshop Program, RMIT's Social Change Enabling Impact Platform and RMIT's Centre for Human-AI Information Environments.

## Context

Advances in AI are affecting people's lives, from how they seek and access information, to automating business processes, and delivering health support (Given, et al., 2024). However, new developments often focus on technology innovations (e.g., large language models), specific applications (e.g., manufacturing), or governance (e.g., copyright). Despite a few exceptions (Molnar, 2024; Neves, et al., 2023; Carr, 2020), human experiences can be sidelined, compartmentalised, or limited to specific AI-related functions in current research. There is often little consideration of the people using these tools or the implications for their quality of life, employment or education.

Despite calls for transdisciplinarity (Polkinghorne, et al., 2024; Renn, 2021), social research for AI remains hindered by disciplinary silos. Social scientists embed human experience in technology-focused research, including developments for socially responsible AI, but often sit outside technology disciplines or industries driving AI development. By linking social scientists and technology researchers and developers, this workshop supported capacity building for transdisciplinarity and defined research and policy agendas that position people at the forefront of future AI research and development.



WORKSHOP FACILITATORS AND PARTICIPANTS

To galvanise research addressing complex, AI-related challenges facing governments, businesses, and communities, holistic, transdisciplinary approaches are critical (Given, 2024). The workshop provided researchers with support and guidance to develop practices that prioritise genuine, deep engagement across sectoral and disciplinary boundaries. For example, researcher training generally does not support development of skills in communication with broad audiences or coordination of engagement with communities outside academia. One of the most effective ways of developing these skills is through collaboration with peers in other disciplines and sectors, which was realised in the workshop. Early and mid-career researchers engaged with senior experts in the workshop, across disciplines, to develop capabilities and ensure AI tools in the future can be created and used in socially responsible ways.

## Workshop

The workshop format was designed to engage participants in generative activities that would explore the key challenges in AI development and implementation, develop capabilities in transdisciplinary research, and generate a range of outcomes for the future, including publications, events, relationships and a research agenda. The workshop participants (see appendix A) included researchers at all career stages from a range of disciplines and institutions, including sociology, criminology, law, health, computing, linguistics, information science and philosophy.

The two-day program included keynotes, presentations, and discussion activities. Keynotes by two internationally recognised researchers on the societal implications of AI development and use provided expert insights and context for the discussions, while also engaging broader audiences of researchers and the public.



## Presentations

The opening keynote by Professor Julia Powles (University of Western Australia and University of California, Los Angeles' Institute for Technology, Law & Policy), explored how AI has challenged established norms, disrupted decision-making, and reshaped the conditions under which research operates, with far-reaching consequences for researchers and institutions. Professor Powles presented the choices researchers now face and urged reflection on what we know, what society has overlooked, and how we move forward in an AI-infused world. The keynote was open to RMIT staff and students and attracted over 40 attendees.

Professor Lisa Given presented on “What does it mean to engage in transdisciplinary research?” providing workshop participants with an overview of transdisciplinary research practices as a primer for discussions on epistemological, methodological, and disciplinary considerations. Dr David Downes (Manager, Research Impact and Translation, RMIT) provided an overview of engaging with policy makers and facilitated discussion on development of policy briefs.

The closing keynote was presented by Professor Emily M. Bender (Professor of Linguistics and Adjunct Professor in the School of Computer Science and the Information School, University of Washington, USA). Professor Bender is a world-renowned researcher with expertise in multilingual grammar engineering, computational semantics, and the societal impact of language technology. In her public scholarship, Emily brings linguistic insights to lay audiences to cut through



PROFESSOR JULIA POWLES, OPENING KEYNOTE.

the hype about AI and facilitate understanding of the actual functionality of the systems being sold under that name. Her keynote explored the way AI tools and systems work in practice and the implications of the hype and doom discourse associated with AI development and adoption.



PROFESSOR EMILY BENDER KEYNOTE EVENT ATTRACTED A LARGE PUBLIC AUDIENCE

Following Professor Bender's talk, an in-conversation interview with Dr Kobi Leins explored the key challenges faced by organisations and individuals in responding to AI implementation, the wide-ranging consequences for people, the environment and society, and the need for critical reflection. The event was recorded by ABC Radio National for broadcast on the *Big Ideas* show and attracted media attention. The keynote included a book launch and sales, attracting an audience of 250 members of the public, researchers, educators, and students.

## Activities



The workshop program involved a series of iterative roundtable discussions and mapping activities that tackled both the practice of transdisciplinary research and identified the challenges relating to AI requiring investigation. These activities were organised around four key themes that were identified by the convenors from the literature and commentary on AI. Participants were allocated to groups to create a diversity of experience, disciplinary perspectives, and expertise. Groups documented their discussion using post its and large posters through iterative activities. Regular rotation of groups to view and annotate each set of posters enabled identification of shared insights and diverging perspectives.

The four themes that were the focus of discussion group were:

1. Socially responsible AI – Facilitated by Professor Lisa Given

Development of socially responsible AI requires consideration of ethical, regulatory, governance, and legal aspects. Integration of expertise from social science and technology disciplines, and industry/policy, is needed from research design, through implementation and evaluation. This theme examined international trends and best practices, including how Australia can best position itself for adoption of socially responsible AI practices by linking social sciences and technology disciplines, directly.

2. AI-Enabled Online Information Access – Facilitated by Professor Falk Scholer

Search engines and recommender systems filter and prioritise vast amounts of data, tailoring results to individuals based on preferences, behaviours, and past interactions. With AI, the landscape is shifting. These systems now generate content, potentially amplifying or altering available information, and significantly influencing human perceptions, opinions, and behaviours. This theme explored strategies for development and deployment of information systems that are aligned to ethical considerations, balancing technological innovation with deep understandings of social consequences.

3. AI in the Workplace – Facilitated by Ms Joann Cattlin

Adoption of AI technologies will affect most Australian workplaces, from automation of processes that replace or dramatically change roles, to the transparency and reliability of decision making. There is widespread concern about the speed of change and impact of removing human input (e.g., in hiring and performance processes); this affects how workplaces operate and how they engage with communities. This theme examined the social research and policy implications of workplace adoption of AI.

4. AI for Complex Care – Facilitated by Dr Alexandra Ridgway

AI technologies may improve care for individuals with complex needs, but they also present challenges and risks. Complex needs are driven by various personal and structural factors, including disability, chronic health conditions, family violence, housing insecurity, and financial hardship. These issues often intersect, requiring integrated care responses that span multiple health and social wellbeing services. This theme examined whether and how AI tools may be capable of addressing such complex care needs.

The achievements of the past year are a testament to the dedication and hard work of our team. We are grateful for the support of our stakeholders and look forward to continuing our journey of growth and innovation.

## Outcomes

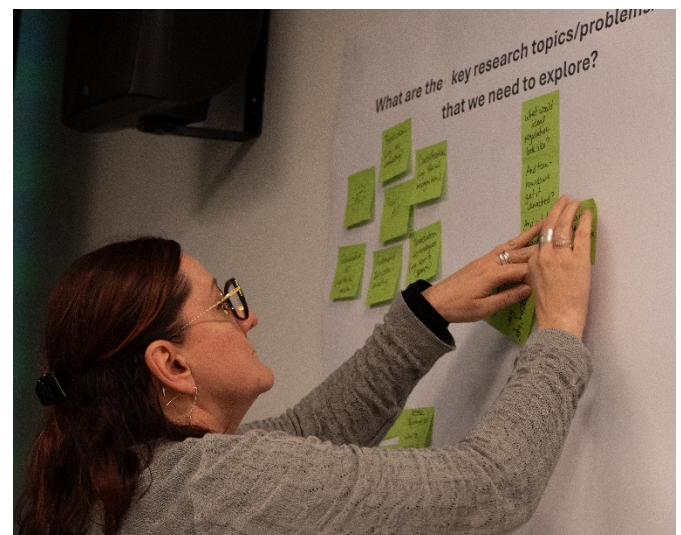
During the workshop participants mapped out a research and policy agenda for AI and identified priority areas and timelines for new collaborative work. Discussions among the participants covered, for example:

### *Identifying key issues related to AI that require transdisciplinary research*

Workshop participants identified the key challenges relating to AI within each of their themes, for example, practical challenges such as effective mechanisms for regulation by government, as well as high level meta-topics, such as the climate implications or ethical considerations. Across the four themes there was consensus on several key issues, such as resistance to AI implementation (the choice to say ‘No’), concerns about bias and inequities, ethics of data used in model training, and the role of human creativity and judgement. Discussions also revealed the importance of clarity in language used to describe AI processes, tools and implementation practices, for example exploring different perspectives on what is understood by “responsible AI” from different disciplinary, sectoral and individual perspectives.

### *Mapping stakeholders*

Discussions highlighted the range of methodological approaches needed for transdisciplinary investigations of AI, as well as technical expertise. Workshop participants discussed significant opportunities to include scholars not only from disciplines represented by participants themselves (e.g. computer science, law, information science, sociology, criminology, communication and media), but also a range of other disciplines (e.g. political science, philosophy, anthropology, social work). Participants also identified a wide range of organisations and individuals that needed to be involved in transdisciplinary projects. Research partners are needed from across government, industry, and community, ranging from individual policy makers and community representatives to government bodies and multinational companies.



### *Time horizons, priorities, and next steps*

Workshop participants identified tangible project ideas and prioritised these across time horizons for development and implementation, from short-term (less than 5 years), medium-term (5-10 years), to long term (10 years +). Short-term project ideas, for example, include baseline surveys and scoping reviews to document current trends and gaps in peoples' experiences with AI tools across sectors. Medium- and longer-term project ideas, for example, include regulatory reform and workforce implications of AI adoption.

The workshop leaders are now convening working groups to develop action plans based on prioritisation and horizon mapping. Immediate next steps will include, for example:

- Establishment of a community of practice for transdisciplinary AI research that includes and extends beyond workshop participants, to share the knowledge broadly.
- Participant co-authored white paper(s) to set out a national research and policy agenda for transdisciplinary research on AI.
- Participant co-authored op-ed pieces (e.g. *The Conversation*), journal articles, and conference presentations in various disciplinary venues, responding to priority areas of concern.
- Establishment of a transdisciplinary AI steering group to guide project development and implementation, including identifying new collaborative teams, and partnerships with industry, government, and community bodies.

Participants have already initiated new activities as immediate outcomes of the workshop, including:

- Panel presentation at *United Nations Business and Human Rights Regional Forum: Australia and New Zealand on Smart Tech Safe people; human rights due diligence for business*. (August)
- Co-hosting public lecture by Karen Hao (journalist and author of *Empire of AI*) (September)
- Industry outreach opportunity involving new discipline partnership between criminology and computing (August)
- Book chapter proposal accepted: Ridgway, Alexa, and Lisa M. Given. [Forthcoming, 2026]. "Your ally through it all": The rise and fall of AI mental health chatbots and implications for care." In *Future of Work and Care*, edited by Yinghua Yu, Sheree Gregory, Lutfun Nahar Lata, and Fabian Cannizzo. Palgrave MacMillan.
- Proposal development for workshop at ACM SIGIR 2026 conference in July 2026. (September)

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## Appendix

<b>Participants</b>		
Ms Joann Cattlin (ECR)	Associate Research Fellow and PhD Candidate, Social Change Enabling Impact Platform	RMIT University,
Dr Paul Bowell (ECR)	Lecturer, Sport Innovation Research Group, School of Business, Law & Entrepreneurship	Swinburne University of Technology
*Prof Jacqueline Alderson	Co-Founder and Tech Director, UWA Tech & Policy Lab	University of Western Australia
Assoc/Prof Lukas Parker	Associate Professor, Media and Communication	RMIT University
Prof Alistair Moffat	Professor, Information Retrieval	University of Melbourne
<b>Socially Responsible AI</b>		
Prof Lisa Given, FASSA	Professor & Director, Centre for Human-AI Information Environments	RMIT University
Prof Kay Cook	Professor of Sociology & Associate Dean, Research, School of Social Sciences, Media, Film and Technology	Swinburne University of Technology
Prof Emily Bender	Professor of Linguistics & Director, MS in Computational Linguistics	University of Washington (USA)
Dr Simon Coghlan	Deputy Director, Centre for AI and Digital Ethics	University of Melbourne
Dr Nicole Shackleton	Lecturer, Law	RMIT University
Assoc/Prof Jonathan Kolieb	Co-Director of RMIT's Business and Human Rights Centre, School of Law	RMIT University

<b>AI for Complex Care</b>		
Dr Alexa Ridgway (ECR)	Lecturer, Criminology & Justice Studies	RMIT University
*Prof Nicola Henry	Professor & Deputy Director, Social Equity Research Centre, School of Global, Urban and Social Studies	RMIT University
Dr Elham Naghizade (ECR)	Lecturer, Data Science & AI, School of Computing Technologies	RMIT University
Dr Kate Anderson (ECR)	Vice-Chancellor's Senior Research Fellow	RMIT University
Prof Karin Verspoor	Dean, School of Computing Technologies	RMIT University
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<b>AI and Information Access</b>		
Prof Falk Scholer	Professor & Director, Centre for Human-AI Information Environments	RMIT University
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