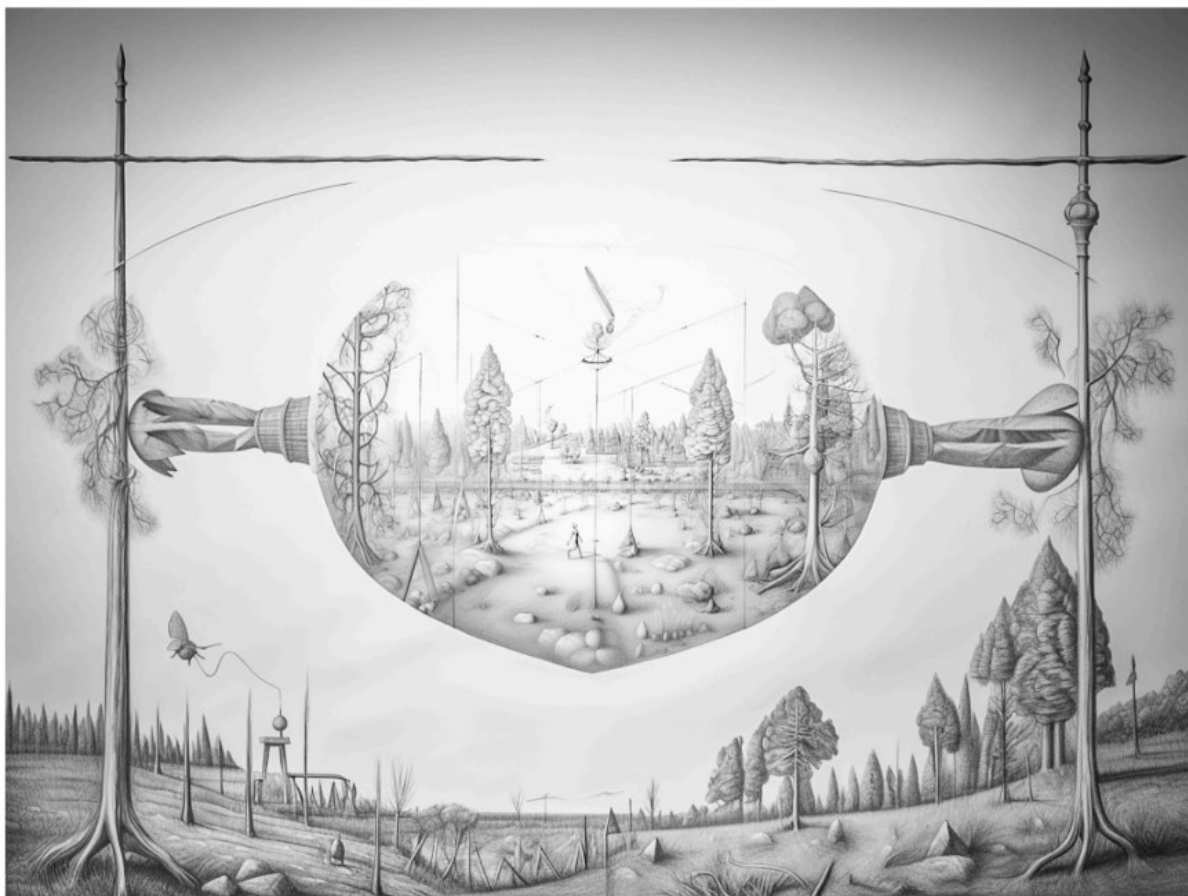AI and Other Scientific Fables
School of Cybernetics, ANU, July 25-26, 2024

This exploratory two-day symposium engages critically and creatively with the idea of the scientific fable and aims to establish a community in Australia around the topic of AI and literature. How does the literary form of the fable enable a type of speculation that is important to the practice of science? Equally, how have scientific understandings of nonhuman life inspired literary fables, particularly in the genres of fantastic and speculative fiction? How can we think about AI itself as a kind of fable involving human and nonhuman characters and perspectives?

Symposium organizer: Professor Chris Danta (christopher.danta@anu.edu.au)

Lev Manovich, *In the Garden*, generated in Midjourney and edited in Lightroom, 2023.

<u>Schedule for AI and Other Scientific Fables</u>
Birch Building, School of Cybernetics, ANU, July 25-26, 2024

Day 1. Thursday July 25
All sessions on day 1 of the symposium will be held in <u>Birch 1.33</u>, which is located on level 1 of the Birch Building (35) at the ANU.

9.30-10.00 <u>Welcome</u>.

Katherine Daniell, Director of the School of Cybernetics

10.00-10.30 <u>Session 1</u>. Chair: Chris Danta

Kathryn Gledhill-Tucker: *Campfire* (reading + talk)

10.30-11.00 <u>Morning tea</u>. Birch Building, level 1 kitchen.

11.00-12.30 <u>Session 2</u>. Chair: Kathryn Gledhill-Tucker

Judith Bishop: Fables of the AI Child

Tyne Daile Sumner: Alice's Adventures, Ambiguity & AI

12.30-1.30 <u>Lunch</u>. Birch Building, level 1 kitchen.

1.30-3.00 <u>Session 3</u>. Chair: Judith Bishop

Baylee Brits: Misalignment and the Fable

Monique Rooney: A Fable of a Narrating Brain in Andrea Long Chu's "China Brain" (2021)

3.00-3.30 <u>Afternoon tea</u>. Birch Building, level 1 kitchen.

3.30-5.00 <u>Session 4</u>. Chair: Sarah Collins

Chris Danta: Fabulous Devourment in Philip K. Dick

Charles Paulk: Demonic Multitudes: Monstrous AI
Day 2. Friday July 26
All sessions on day 2 of the symposium will be held in the <u>Birch Innovation Space</u>, which is located on level 2 of the Birch Building (35) at the ANU.

9.30-11.00 <u>Session 5</u>. Chair: Chris Danta

Panel discussion: The challenges and opportunities of working at the intersection of literary studies/humanities and AI

11.00-11.30 <u>Morning tea</u>. Birch Building, level 2 kitchen.

11.30-1.00 <u>Session 6</u>. Chair: Tyne Daile Sumner

Jasper Montana: Suzie and the Dark Vessels: Satellite Data, Environmental Subjects, and Fable in Ocean Governance

Isabel Richards and Ella McCarthy: Climate Change Fables and Their Calls to Action

1.00-2.00 <u>Lunch</u>. Birch Building, level 2 kitchen.

2.00-3.30 <u>Session 7</u>. Chair: Baylee Brits

Sarah Collins: "He's not there. He doesn't reflect": The Mimetic Nonhuman in Hoffmann and Offenbach

Bridget Vincent: Klara and the Reader

3.30-4.00 <u>Afternoon tea</u>. Birch Building, level 2 kitchen.

4.00-4.30 <u>Session 8</u>. Chair: Chris Danta

Screening of *Moonrise* (2021; 11 minutes) and *Requiem* (2023; 16 minutes), two short films in the *Archival Futures of Outer Space Film Quartet*, co-created by **Ceridwen Dovey** and **Rowena Potts**.

4.30-5.00 <u>Wrap up</u>.

ABSTRACTS for AI and Other Scientific Fables, July 25-26, 2024

Judith Bishop (La Trobe): Fables of the AI Child

This talk will explore three fables of artificially intelligent robot children: Astro Boy, The Creator and Being (The Digital Griot). I will argue that in these narratives of AI children, as in the broader AI discourse, AI is positioned both as a moral learner and a moral educator of humankind. This talk relates these narratives to the tradition of the fable as a tale that seeks to wield a moral influence. It also draws on AI engineering concepts such as alignment and reward policy that address the need for the moral education of AI. The fables of the AI child discussed in this talk suggest that adult humans can learn from the moral perspectives of AI children. At the same time, the fiction of the vulnerability and emotionality of AI children is a potent means of instilling trust and reducing resistance to powerful technological developments. Developing an awareness of the operation of these AI fables in current discourse may prove important to maintaining a critical stance in relation to the vision and values underlying technological developments at a time of rapid change and radical uncertainty about the future of human life with AI.

Dr Judith Bishop is a Tracey Banivanua Mar Fellow in the School of Humanities and Social Sciences at La Trobe University (2024-2027). She holds a PhD in Linguistics (University of Melbourne), an MPhil in European Literature (Cambridge University) and an MFA in Writing (Washington University in St Louis). An ex-AI industry leader with a passion for understanding the impacts of AI on human diversity and flourishing, she is currently writing a nonfiction book on AI and human data. Judith's third poetry collection, *Circadia* (UQP), was released in April 2024. She writes on unceded Wurundjeri Woi-Wurrung land and pays her respects to Elders past and present. Email: j.bishop@latrobe.edu.au

Baylee Brits: Misalignment and the Fable

"Alignment" is a research and technical practice area that is concerned with the safety of AI, particularly the potential contradictions between human values and AI means and goals. Given its concerns with imagining future AI systems, danger and unexpected forms of intelligence, it is perhaps unsurprising that this research area has a particular affinity with the fable. We find fables in classic alignment texts (the Bostrom / Yudkowsky paper clip machine, for instance) and The Centre for Effective Altruism, in league with the major alignment site 'LessWrong.com' ran a fable-writing contest around AI-alignment issues last year. This interest in the fable is partly because one of the models for alignment imaginaries is evolutionary replacement, which evokes the realm of animals (and small children). Two other potential reasons involve the primacy of revelation for the exponential intelligence increases that Alignment is preoccupied with (the AI apocalypse is classically sudden and total) and the unmasking of a hidden intelligence (an AGI) so common to the Aesopian fables. This paper will try to answer several questions about alignment fables: Is the form of the fable adequate to the situations of catastrophe that alignment theories address? How does the fable migrate

from animals to machines? Why is the fable deemed appropriate for the singular situation inaugurated by a general machinic intelligence? What is the role of enchantment in these fables?

Baylee Brits holds a National Intelligence Postdoctoral Grant and is based at the iCinema Lab at UNSW. At iCinema she organises a research program in 'Augmented Decision Making.' She is trained in literary studies and philosophy and works with computer scientists to find new solutions to wicked problems in artificial intelligence. She has interests in AI and semiotics, abductive narratives, storytelling and decision making, motivated speech and complex systems theory.
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Sarah Collins (UWA): "He's not there. He doesn't reflect": The Mimetic Nonhuman in Hoffmann and Offenbach

Of the three short stories by E.T.A. Hoffmann that are depicted in Jacques Offenbach's operetta *Les Contes D'Hoffmann* (1881), the staging of 'Der Sandmann' ('The Sandman') (1816), with the striking musical depiction of the automaton Olympia, typically receives most attention. Olympia's impressive coloratura passages that scale the dizzying heights of the soprano voice and play up the clockwork quality of her vocal mechanism is rightly viewed as a key moment in Offenbach's treatment of Hoffmann's stories. This, together with the depiction of Hoffmann himself as the central protagonist who is tormented by his own fictional characters, as well as the parallel appearance of successive evil magician-scientists who draw Hoffmann into various Faustian pacts, allows Offenbach to amplify the fantastical in Hoffmann's fiction using the spectacularizing effect of the operatic medium.

Hoffmann's 'The Sandman' is by itself already an exploration of themes that are bound up with the literary history of AI, including anxieties about the limitations of language and infidelities of communication; the blurriness of boundaries between subjects and objects, and between appearances and reality; and the relationship between the human and the non-human. Yet when remediated in operatic form nearly sixty years later, and set alongside two other Hoffmann tales, quite a different reading emerges— one which not only places the tale within debates about experimental psychology and materialist aesthetics in the late-nineteenth century, but which may also suggest a particular ethos or critical posture that is of interest to contemporary discussions of both posthumanism and new materialism today. This paper will examine the expression of this ethos by drawing into dialogue with Offenbach and Hoffmann's automata another prominent trope in Hoffmann's stories, namely reflections and mirrors. It aims to highlight the link between concerns about human-nonhuman relations and discourses about mimesis (extrapolated through the trope of the unreliable mirror image) and the variable affordances of artistic media (which Hoffmann also addressed in his iconoclastic music criticism). I will suggest that this posture involves the valorisation of partial agency, or semi-mechanisation, as a pragmatic approach to what Sedgwick and Frank described in the mid-1990s as the anti-biological tendencies of

theory, and which some (like Barad) claim are still evident in the ongoing linguistic orientation of the 'material turn'.

Professor Sarah Collins is a cultural historian and musicologist whose research centres on music and literary aesthetics and broader intellectual and political currents in the late-nineteenth and early-twentieth centuries. She is the author of *Lateness and Modernism: Untimely Ideas about Music, Literature and Politics in Interwar Britain* (Cambridge University Press, 2019), and *The Aesthetic Life of Cyril Scott* (Boydell, 2013). She is editor of *Music and Victorian Liberalism: Composing the Liberal Subject* (Cambridge University Press, 2019); and, with Paul Watt and Michael Allis, *The Oxford Handbook of Music and Intellectual Culture in the Nineteenth Century* (Oxford University Press, 2020). Her research has also appeared in the *Journal of the Royal Musical Association, Twentieth-Century Music, Music & Letters, Musical Quarterly, Nineteenth-Century Music Review, Angelaki: Journal of the Theoretical Humanities,* and *Cambridge Opera Journal*. Sarah is Chair of Musicology and Deputy Head of School (Research) at the University of Western Australia's Conservatorium of Music. She is co-editor of *Music & Letters*, and a Fellow of the Australian Academy of the Humanities. She has received major prizes for her scholarly contribution including the Dent Medal (Royal Musical Association, UK), and the McCredie Award (Australian Academy of the Humanities). She has held visiting fellowships at Harvard University, University of Oxford, Durham University, and L'École des hautes études en sciences sociales, and has received competitive research funding from a range of sources including the British Academy and Leverhulme Trust, the Australian Research Council, and the European Commission.
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Chris Danta (ANU): Fabulous Devourment in Philip K. Dick

According to Philip K. Dick: "The ultimate in paranoia is not when everyone is against you but when every*thing* is against you. Instead of 'My boss is plotting against me,' it would be 'My boss's phone is plotting against me.'" Dick often introduces chaos into his fiction by turning objects against their human users. In his 1953 story "Colony," a team of surveyors on Planet Blue discover to their horror that a nonhuman organic lifeform on the planet is impersonating humanmade objects such as microscopes, belts, cars and spaceships to devour the human colonizers. Dick constantly describes technological objects camouflaging themselves by impersonating human or animal form ("Second Variety," *Do Androids Dream of Electric Sheep?*). In *Ubik* (1969), technologies gain a sense of agency when they suddenly start to devolve into earlier historical versions of themselves. Underpinning Dick's fiction, I argue, is the fantasy of apparently inert objects becoming animate and devouring the human subject. We can trace the origin of this fantasy to Dick's very first science fiction story, "Beyond Lies the Wub" (1952). This story tells of how the human character Captain Franco kills and eats a highly intelligent pig-like creature from the planet Mars called the Wub, only then to be possessed by this creature. Here, then, is the truly Dickian fantasy of the human colonizer being devoured by the apparently inert object it colonizes/devours.

Chris Danta is Professor of Literature and an ARC Future Fellow in the School of Cybernetics at the Australia National University. His research operates at the intersection of literary theory, philosophy, science and theology. He is the author of *Literature Suspends Death: Sacrifice and Storytelling in Kierkegaard, Kafka and Blanchot* (Bloomsbury, 2011) and *Animal Fables after Darwin: Literature, Speciesism and Metaphor* (Cambridge UP, 2018). He is currently working on an ARC Future Fellowship with the title "Future Fables: Literature, Evolution and Artificial Intelligence." This symposium forms a part of his Future Fellowship.
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Ceridwen Dovey (Macquarie): Screening of *Moonrise* and *Requiem*

Moonrise (2021; 11 minutes) is a film-fable where the Moon speaks back to Earth. *Requiem* (2023; 16 minutes) is a speculative documentary where imagined future astronauts farewell the International Space Station before it is decommissioned and deorbited (with sonnets voiced by real-life astronauts).

Ceridwen Dovey writes fiction (*Mothertongues*; *Blood Kin*) and non-fiction (*On J.M. Coetzee*; *Inner Worlds Outer Spaces*). She has won an Australian Museum Eureka Award for her science writing and is co-founder of The Archival Futures Film Collective (with Rowena Potts). Her latest book of stories, *Only the Astronauts* (Penguin Random House; 2024), continues her experiments with voice and form. A sequel-of-sorts to *Only the Animals* (fables narrated by animals killed in human conflicts), *Only the Astronauts* gives voice to objects launched by humans into outer space. She also collaborates with Zoë Sadokierski as part of the storytelling duo Animal Allegories. Ceridwen is a Macquarie University Research Fellow, and an Artistic Associate at the Powerhouse.

Kathryn Gledhill-Tucker: *Campfire*

Modern algorithms are designed to mine our humanity and extract data, predict our behaviours, influence our decisions, and their effectiveness is amplified by the deliberate obfuscation of their inner workings. We cannot see inside the black box and so our ability to interrogate their influence is compromised. *Campfire* is a piece of speculative fiction that imagines a world in which the invisible algorithms that permeate our lives are made material. How might our relationships with these algorithms change if we could see, touch, and engage with their physical presence? What if every algorithm had a body?

Kathryn Gledhill-Tucker is a Nyungar technologist, writer, and digital rights activist who has spent the last decade working in the tech industry. They are interested in custodial approaches to data management, interrogating systems of surveillance, and using creative technology to explore coding as a liberatory practice. Always grounded in protocols of Caring for Country and Kin, Kathryn's creative practice explores the intersection of activism, futurism, and our relationship with machines. Their poetry has appeared in Cordite, Red Room Poetry, Running Dog, and Best Australian Poems. Their

short stories have been published in *The Rocks Remain* (Wakefield Press) and the blak speculative fiction anthology *This All Come Back Now* (UQP). Kathryn is the Campaigns and Advocacy Manager at Digital Rights Watch, where they champion a human rights-based approach to privacy and online safety. They sit on the board of Overland Literary Journal and have worked in an advisory capacity with arts and technology organisations like PICA, ACMI, and CSIRO. Kathryn is currently working on their first collection of poetry and short fiction.
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Jasper Montana (ANU): Suzie and the Dark Vessels: Satellite Data, Environmental Subjects, and Fable in Ocean Governance

Satellites are an increasingly important technology in ocean governance. As part of complex data infrastructures, they enable the collection of data on otherwise unobservable oceanic processes, from ocean current circulations to movements of marine animals across large areas. However, to *do work* in ocean governance, remote sensing data needs to be brought *down to earth* and re-embedded into earthly logics for conservation and marine management. In this paper, I examine two cases in which scientists and marine managers used satellite data to justify regimes of ocean governance. The first focuses on tracking marine turtles in the Caribbean, where stories about the movements of a celebrity turtle named 'Suzie' were used to bring about regulatory changes in local fisheries. The second focuses on monitoring illegal, unregulated and unreported fishing where stories about the threat of 'dark vessels' enabled the establishment of a marine protected area in the Atlantic Ocean. Satellites produce geo-location data that turns ocean beings into 'minimal animals': stripped of context. In order to be useful, these data points have to be reinscribed into familiar stories of friend or foe, and tied into narratives of identity that ultimately allow their interpretation and enable the legitimisation of ocean governance regimes.

Dr Jasper Montana is a Senior Lecturer at the Australian National Centre for the Public Awareness of Science at ANU, and an Honorary Research Associate at the School of Geography and the Environment at the University of Oxford. Jasper's research interests encompass: science-policy relations; theories and practices of transdisciplinarity; bridging the local and global; and the influence of concepts, metrics and technologies in environmental governance. Jasper's research focuses particularly on nature and biodiversity loss as a contemporary societal challenge and draws from and contributes to science and technology studies, science communication, political ecology, sustainability science, and other interdisciplinary environmental sciences.
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Charles Paulk (ANU): Demonic Multitudes: Monstrous AI

The thought experiment known as "Roko's Basilisk" posits that a highly advanced artificial intelligence might one day recreate our present reality as a perfect simulation and vindictively punish those who opposed its development. This dark proposition

sparked considerable panic on the forum where it was first proposed, and has since crossed over into the broader culture, becoming something like internet folklore, urban myth, or creepypasta. The Basilisk is one of many monstrous images linked to recent advances in AI, from comparisons of large language models to Lovecraftian Shoggoths to reports of cryptids emerging from text-to-image generators. Common among them is a conception AI as alien, nightmarish, and vast beyond human comprehension. This paper explores the literary roots of this idea, tracing it through early digital-age science fiction like Harlan Ellison's *I Have No Mouth and I Must Scream* and the writing of Philip K. Dick, to the gothic theory-fiction of the Cybernetic Culture Research Unit, whose work laid the foundations for the effective accelerationism (e/acc) movement now circling cult-like around AI.

Charles Paulk is a researcher working across the School of Cybernetics and the Institute for Water Futures at ANU. He has previously written on the role of Japan in the cyberpunk fiction of William Gibson and the architectural gamespace of *The SIMs*. For SOCY he co-authored *Backbones and Blueprints: Cybernetic Approaches to the Metaverse* and he is currently editing an anthology of speculative fiction.
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Isabel Richards and Ella McCarthy (ANU): Climate Change Fables and Their Calls to Action

There is an emerging tradition of ecological writers using the storytelling format of fables to communicate about our changing climate, often working to promote the need to change the human-nonhuman relation. In this paper, we will examine three key kinds of such climate change stories. The first kind follow the traditional formula of the 'scientific' fable, such as "Amy's Balancing Act", and emphasise animal characters to convey moral messages about climate change and sustainability, sometimes even using animals to represent renewable technologies. The second category involves fable-like stories that use animal case studies to decentre humans, such as popularised messaging about 'saving the polar bears.' The third grouping of stories focus only on human characters to increase individualised moral responsibility and accountability towards climate change, including campaigns such as 'reduce your carbon footprint'. Fable and moral storytelling allow for climate and sustainability messaging to flourish as these tales often have a powerful call to action. This paper will explore modern ecological fables, as well as reimagine classic popular fables through a scientific lens, in a way that enables an important speculation about our relationship with non-human animals, technology, and the planet, during a time of climate crisis and energy transition.

Isabel Richards is a science communicator, podcaster, and cyberneticist at the Australian National University. She explores science in popular fiction, the cultural meanings of science, and the relationships between humans, the environment, and emerging technologies. Isabel is also co-host of Sci_Burst, a next-gen science communication podcast, and collaborator at ANU Popsicule – the university's Science in Popular Culture and Entertainment Hub. She is passionate about sparking curiosity in

people from all walks of life and transforming the way science and technology are integrated with society in the 21st century.
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Ella McCarthy is a science communicator, researcher, cyberneticist, and podcaster at the Australian National University. Ella amplifies systems thinking of relationships between technology, society, and environment to the wider cybernetic community. Ella's research interests are in intersections of art and science, science accessibility, and de-jargoning expert knowledge. Ella is also the co-host of Sci_Burst, a science and popular culture podcast, accessible for everyone!
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Monique Rooney (ANU): A Fable of a Narrating Brain in Andrea Long Chu's "China Brain" (2021)

Andrea Long Chu's "China Brain" (2021), published as an "essay" in the magazine n+1, defies easy categorisation. Neither a traditional fable nor a straightforward fiction, it also challenges the conventional boundaries of an essay. The narrative structure is striking. The story is divided into 12 sections: six focalised through a woman undergoing Transcranial Magnetic Stimulation (TMS) for severe depression, and six through an "I", identified as a brain that occasionally addresses itself explicitly to the reader's brain ("Brain to brain"). The woman, referred to only as "she", responds to a TMS technician's question about her profession by stating that she is a writer. When he asks if she will write about the TMS experience, she responds "probably" and that "the piece will be "a little fictionalized" with "some first person stuff," narrated by "my brain."

This paper examines the significance of the narrating brain in "China Brain," considering the essay's experimental-fictional structure and its thematic engagement with AI. Specifically, I analyse Chu's invocation of philosopher John Searle's Chinese Room Argument (1980), which challenges the concept of "strong AI." I argue that "China Brain" can be understood as a scientific fable in its exploration of AI within the context of the mind/body split, which arguably underscores the philosophical and feminist thought traversing Chu's entire oeuvre. Through this lens, artificial intelligence is revealed to be entangled not only with technological development but also with the very form of the literary itself.

Monique Rooney teaches US literature, film and television in the English Program at the Australian National University. The author of *Living Screens: Melodrama and Plasticity in Contemporary Film and Television* (2015), she is currently completing her forthcoming book *Brow Networks: Taste-making in Contemporary American Art and Literature* (Iowa UP, 2026).
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Tyne Daile Sumner (ANU): Alice's Adventures, Ambiguity & AI

In Lewis Carrol's fantastical novel *Alice's Adventures in Wonderland* (1865), things are never quite as they seem. Bizarre animals and anthropomorphised objects speak in cross-language puns and play rhetorical games with one another and the reader. Reality and reason are undermined. Strange and curious creatures parody well-known didactic poems. Time, space, and language appear ambiguous. As both a form of literary nonsense and an enduring critique of perception, mathematics and social norms, Carrol's text has a great deal to offer the study of human-nonhuman relations in our cybernetical age. Reading *Alice's Adventures* as a series of interconnected fables, this paper will consider the role of fantastic and speculative fiction in developing theories around the ethics and social consequences of AI. Specifically, it asks how Carrol's novel helps us understand rhetorical ambiguity, trickery, and authenticity in the context of machine-generated language. It shows how speculative fiction can help us imagine how human biology can operate alongside various forms of artificial 'thinking.' And finally, like the riddles issued by The Mad Hatter in the novel's famous tea party scene, the paper considers the extent to which the recursive logic of AI has the potential to send us not towards technological salvation but instead render us ontologically and linguistically mad.

Tyne Daile Sumner is an ARC DECRA Fellow in English & Digital Humanities at The Australian National University. She works at the intersection of surveillance studies, digital culture, and literary studies, with a focus on how literary texts help us think about human subjectivity under conditions of datafication. She has published widely on topics ranging from modern poetry and eavesdropping to cultural databases and facial recognition technology. Her most recent book is *Small Data is Beautiful* (co-edited, Grattan Street Press 2023) and she is President of the Australasian Association for Digital Humanities (aaDH).
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Bridget Vincent (ANU): Klara and the Reader

The current prevalence of the term "postcritique" points to a fraught moment in critical history: a moment in which ideas of literary subjectivity, readership, identification, and ideological commitment are being contested and redrawn. In the midst of the postcritical "method wars" and their impasses, an illuminating resource can be found in recent fiction – particularly fiction which explores ideas of interpretation and subjectivity from the margins of these categories. 1 I argue that in Klara and the Sun, Ishiguro's use of an artificially intelligent narrator creates a unique space for the dramatization of controversial questions around literary subjectivity and the limits of the human. In particular, the book has special relevance for ethical discussions about the treatment of textual subjectivities as other minds. Because Klara is an artificially intelligent entity, the other characters and the reader relate to her "as if" she were human, in a manner analogous to the reader's "as-if" treatment of textual subjectivity itself. In presenting a figure that is at once a textual and an artificial consciousness, this

novel can shed new light on current critical and ethical controversies about the virtuality of literary selfhood.

Bridget Vincent is a Lecturer in English at the Australian National University. Her first book, *Moral Authority in Seamus Heaney and Geoffrey Hill*, was published by Oxford University Press in 2022. She writes on modern literature and ethics, and her specific research interests include: public apology in twentieth century writing; ekphrasis; the lyric essay; ecocriticism; and literary attention. She was recently awarded an AIAS-COFUND II Marie Skłodowska-Curie Fellowship at the Aarhus Institute for Advanced Studies. Prior to this, she received a British Academy Rising Star grant for a project on writing and attention, which considered the role of literature in the age of digital distraction and misinformation. Before coming to the ANU, she taught literary criticism at the universities of Nottingham and Cambridge.
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