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**EDITORIAL** 

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Rethinking research with methodologies of art practice

**Abstract** 

This issue of *Technoetic Arts* encompasses eight articles by artists and scholars from around the globe who engage with methodologies of art practice within research that reflects on technological and ecological change, contributing to the discourse on the inclusion of subjective experience in research. The articles by authors Dulmini Perera, Kate Doyle, Nora S. Vaage, Merete Lie, Nikita Peresin Meden, Kristina Pranjić, Peter Purg, Nicolaas H. Jacobs, Marth Munro, Chris Broodryk, Semi Ryu, Rahul Mahata, Doreswamy, Sana Altaf and Aqib Javid Parry form a collection that crosses disciplines and genres to engage in fundamental critique of existing modes of enquiry and conclusion. The texts situate art and design methodologies in particular cultural contexts and in relation to frameworks defined by research methodologies of the sciences and humanities to gain agency for critique and to counter a sense of inevitability that has come to mark the most recent crises.

**Keywords:** art-based research, technological change, ecology, agency, systemic design, critical cybernetics, subjective observer, Roy Ascott

As the first half of the twenty-first century's second decade nears its end, oblivescence appears to have 'taken care' of the COVID-19 pandemic. Yet, the phenomenon of crisis has not vanished. Wars have spread, and global warming threatens many locations on planet Earth. A sense of inevitability might be the source of ignorance, yet it can also be the source of

fundamental critique and the beginning of a renewed sense of agency. It is within this context that artists, designers, scholars in art and design disciplines, as well as Indigenous researchers from a wide variety of backgrounds, have emphasized the need for renewed reflection on the methodologies employed in processes of enquiry. In particular, there has been growing attention to critical and systemic transdisciplinary methodologies. How mainstream research has arrived at conceptualizations of what we see and encounter is questioned. It needs to be questioned; the continuing crises have made it clear.

Considering that this journal's founder, Roy Ascott, is well known for his early engagement with cybernetics in art and art education (Ascott and Shanken 2003; Sloan 2019), it might be of interest to readers that cybernetic modes of enquiry, with their focus on the inclusion of subjective observers, have recently received a push in attention. The 2024 publication *The* Blind Spot by Adam Frank, Marcelo Gleiser and Evan Thompson mentions cybernetics, albeit briefly, as one of the modes of enquiry that are defining a new desirable approach to conceiving research that incorporates the researcher's subjective experience. The book, however, does not cover cybernetic history, and Norbert Wiener's early and explicit contribution to the discussion, entitled 'The role of the observer' (1936), for instance, is not mentioned. The open-access essay collection Cybernetics for the 21st Century (2024), edited by Yuk Hui, takes a more explicit stance towards cybernetics and is a valuable collection beyond filling gaps in research on cybernetic methodologies. Importantly, the collection also includes contemporary enquiries from scholars beyond the Anglo-American and Central-European contexts in which cybernetics is typically discussed. At last, the list of well-known authors who have recently engaged with questions of subjective observers in research would not be complete without mentioning a recent blog post by Stephen Wolfram entitled 'Observer theory' (2023) as well as a related, highly publicized podcast (Wolfram and Jaimungal 2024).<sup>1</sup>

The articles collected in this issue of *TA* are situated within this rising interest in engagements with ecological and technological enquiries from a methodological point of view and contribute to the discourse on the inclusion of subjective experience in research. The journal issue opens with an article by Dulmini Perera that explores the work of Mary Catherine Bateson with a particular focus on the re-conceptualization of change as a basis of ecological thinking.

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<sup>&</sup>lt;sup>1</sup> Thanks to Paul Pangaro for sending links to the Wolfram podcast and blog post, and Stuart Umpleby for notifying me of the review of *The Blind Spot* in the *Science* magazine (Gomez-Marin 2024).

Furthering the work of her father, the cybernetician Gregory Bateson, narratives play an important role in Mary Catherine Bateson's approach to a better understanding of change. Employing a methodology that incorporates narrative practice and, thus, abductive reasoning, she integrates change into the conceptualization of ecology. One could easily expand Perera's arguments further by applying the critique to the ongoing development of ubiquitous AI-driven environments. As I outlined in the editorial for Issue 21.1 of *Technoetic Arts*, 'Turning queries into questions', abductive reasoning is vital for processes that should remain open to a variety of possible futures. Abductive reasoning dissolves paradox and complements scientific reasoning. It integrates suggestive futures and is the method of reasoning at the basis of art and design practice (Westermann and Gupta 2023: 5–6).

Discussing the work of the nineteenth-century composer Robert Schumann, Kate Doyle's article 'Paradox, cybernetics and infinite poetry' takes the discussion of subjective enquiry in a different direction. Exploring the relation of form and time and the dissolution of paradox in art from a cybernetic perspective, Doyle highlights the potential of art to raise awareness of the models we live by. The use of language plays a vital role in this re-conceptualization of a process of enquiry, and as the article becomes its enquiry, it shifts into poetry – the dynamic form of an everyday possibility. Firmly rooted in posthumanist feminist discourse, the article by Nora Vaage and Merete Lie entitled 'Blood, sweat and tears: Kinning otherwise through art' explores the potential of bioart projects to reconceive the relationship between humans and other living species, such as plants and fungi. Reflecting on what they call the 'molecular gaze' (39 in this issue) – a zooming into dimensions generally not perceived by humans – the authors highlight its potential as a basis for a new ecological awareness. However, they also highlight that important factors affecting the human–other-species interrelationship might be invisible from the molecular perspective.

'Taming the Forest: Embracing the complexity of art-sci research through microhistory, bioeconomics and intermedia art' by Nikita Peresin Meden, Kristina Pranjić and Peter Purg presents an ongoing educational project bridging bioeconomics, environmental history, policy and art practice. The focus of the authors' enquiry is on the potential of art–science collaborations to reveal bias in the narratives on biological environments with a focus on the biodiversity of forests. The researchers highlight the synergies between the modes of enquiry of the sciences and the arts. In this particular case, art does not only act as a mediator but also

as an archive of an unrecoverable lived experience, as the forest in the Slovenian Karst region that is the object of research has been subjected to forest fires since the project began.

Shifting to an exploration of contemporary technology in the training of artists, the text 'Embodied performance with digital visual effects technology: Empirical results of a digital acting programme' by Nicolaas H. Jacobs, Marth Munro and Chris Broodryk evaluates the impact of digital technology on performance art and presents a case study of a new acting programme. The focus of the presented research is on the evaluation of this programme in digital acting and the related strategies in embodied acting that aim to link imagination, action and emotion within a digital context. Considering a general shift in the social media realm to digital performance rather than written communication, I assume there might be even a need for a digital acting programme for non-actors. For such a programme, this article's case study would present key foundational insights.

The article 'Facing, mirroring and echoing in human—avatar symbiosis' by artist Semi Ryu presents research on the potentiality of digital performance in a medical context. For the past eight years, Ryu's work has situated itself at the intersection of art, health and virtual reality. Her *Embodied Avatar Performances* (EAP) have involved critically ill patients who have benefited from an engagement with an avatar that is designed to foster a healing process. Using insights from Korean healing rituals and translating them for virtual reality, a key strategy in the design of these avatars is the replication of the behaviour of the human counterpart to create a bond. Ryu's work highlights the potential of digital technology for human health and emphasizes the importance of an artist's intuition when employing such technologies.

'The digital turn in *Chhau* dance of Purulia: Reconfiguring authenticity in a post-pandemic scenario' by Rahul Mahata and Doreswamy explores questions of identity and authenticity in the context of a West Bengal folk performance practice. *Chhau* dance is a living folk practice that does not solely serve the entertainment of tourists. As such, not purity but relevance to everyday lived experiences is important. Not unsurprisingly, *Chhau* dance integrates, in symbolic form, global influences and lived experiences that do not appear to belong to a local tradition, such as the recent COVID-19 pandemic. The study suggests that conceptions of identity and authenticity will need to be reconsidered from a radical decolonial perspective that permits local traditions to reflect on all the influences that mark contemporary daily life.

The last article in this journal issue is related to a collaboration with Professor Gupta of Chandigarh University in India and was developed from a contribution to the Third International Conference on Contemporary Perspectives in English Language, Literature and Cultural Studies. The article by Sana Altaf and Aqib Javid Parry concludes the collection with an exploration of the radical subversion of dystopian science fiction by the Jamaican—Canadian writer Nalo Hopkinson. Entitled 'Nalo Hopkinson's Midnight Robber: Blending technology and fantasy in a dystopian narrative', the text explores Hopkinson's appropriation of the dystopian science fiction genre. The re-invention of a vocabulary for science fiction acts in favour of a new science fiction genre that is radically Caribbean, Afrofuturist and feminist. The editorial organism of TA hopes you enjoy this issue with its exploration of methodologies in a wide range of art practices.

## References

Altaf, Sana and Parry, Aqib J. (2024), 'Nalo Hopkinson's *Midnight Robber*: Blending technology and fantasy in a dystopian narrative', *Technoetic Arts: A Journal of Speculative Research*, 22:1, <a href="https://doi.org/10.1386/tear\_00126\_1">https://doi.org/10.1386/tear\_00126\_1</a>.

Ascott, Roy and Shanken, Edward A. (2003), *Telematic Embrace: Visionary Theories of Art, Technology, and Consciousness*, Berkeley, CA: University of California Press.

Doyle, Kate (2024), 'Paradox, cybernetics and infinite poetry', *Technoetic Arts: A Journal of Speculative Research*, 22:1, https://doi.org/10.1386/tear\_00120\_1.

Frank, Adam, Gleiser, Marcelo and Thompson, Evan (2024), *The Blind Spot*, Cambridge, MA: MIT Press.

Gomez-Marin, Alex (2024), 'Experiencing science: Embracing our role as active participants in the universe should be a vital part of science, contend a trio of authors', *Science*, 383:6686, p. 955, <a href="https://doi.org/10.1126/science.adn6303">https://doi.org/10.1126/science.adn6303</a>.

Hui, Yuk (ed.) (2024), Cybernetics for the 21st Century: Volume 1: Epistemological Reconstruction, Hong Kong: Hanart Press.

Jacobs, Nicolaas H., Munro, Marth and Broodryk, Chris (2024), 'Embodied performance with digital visual effects technology: Empirical results of a digital acting programme', *Technoetic Arts: A Journal of Speculative Research*, 22:1, <a href="https://doi.org/10.1386/tear-00123">https://doi.org/10.1386/tear-00123</a> 1.

Mahata, Rahul and Doreswamy (2024), 'The digital turn in *Chhau* dance of Purulia: Reconfiguring authenticity in a post-pandemic scenario', *Technoetic Arts: A Journal of Speculative Research*, 22:1, <a href="https://doi.org/10.1386/tear-00125-1">https://doi.org/10.1386/tear-00125-1</a>.

Meden, Nikita P., Pranjić, Kristina and Purg, Peter (2024), 'Taming the Forest: Embracing the complexity of art-sci research through microhistory, bioeconomics and intermedia art', Technoetic Arts: A Journal of Speculative Research, 22:1, https://doi.org/10.1386/tear 00122 1.

Ryu, Semi (2024), 'Facing, mirroring and echoing in human–avatar symbiosis', *Technoetic Arts: A Journal of Speculative Research*, 22:1, <a href="https://doi.org/10.1386/tear-00124">https://doi.org/10.1386/tear-00124</a> 1.

Sloan, Kate (2019), Art, Cybernetics and Pedagogy in Post-War Britain: Roy Ascott's Groundcourse, London: Routledge.

Perera, Dulmini (2024), 'Orders of change: Mary Catherine Bateson on ecological thinking, narrative practices and attending to worlds in transformation', *Technoetic Arts: A Journal of Speculative Research*, 22:1, <a href="https://doi.org/10.1386/tear-00119-1">https://doi.org/10.1386/tear-00119-1</a>.

Vaage, Nora S. and Lie, Merete (2024), 'Blood, sweat and tears: Kinning otherwise through art', *Technoetic Arts: A Journal of Speculative Research*, 22:1, https://doi.org/10.1386/tear 00121 1.

Westermann, Claudia and Gupta, Tanu (2023), 'Editorial: Turning queries into questions: For a plurality of perspectives in the age of AI and other frameworks with limited (mind)sets', *Technoetic Arts: A Journal of Speculative Research*, 21:1, pp. 3–13, https://doi.org/https://doi.org/10.1386/ tear\_00106\_2.

Wiener, Norbert (1936), 'The role of the observer', *Philosophy of Science*, 3:3, pp. 307–19, <a href="http://www.jstor.org/stable/184668">http://www.jstor.org/stable/184668</a>. Accessed 26 March 2024.

Wolfram, Stephen (2023), 'Observer theory', Stephen Wolfram Writings, 11 December,

https://writings.stephenwolfram.com/2023/12/observer-theory. Accessed 26 March 2024.

Wolfram, Stephen and Jaimungal, Curt (2024), 'Solving the problem of observers &

**ENTROPY** Stephen Wolfram'. YouTube. 21 February, https://www.

youtube.com/watch?v=0YRlQQw0d-4. Accessed 26 March 2024.

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