PARADIGM SHIFTS AFOOT:
A Review of James Bridle's *Ways of Being*

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James Bridle. *Ways of Being*. Picador, 2021. Pp. 384. Paperback $20.00; e-Book $12.99. (9780374601126)

This review explores the resources and insights of James Bridle's vision for a transition from the individualistic paradigm of Western civilization to an inclusive "more-than-human" paradigm that encompasses the whole of human and non-human phenomena—animals, plants, planetary resources, and technologies. Bridle's work is connected to resonant themes and authors across disciplines that illustrate the potential for *Ways of Being*, published in 2022, to become a path to a brighter planetary future for all beings.

In *Ways of Being* James Bridle invites us to explore and respect the world beyond our Western-civilization-framed and human-specific awareness. Bridle has curated a vast scope of knowledge bases to share their understanding of the thoroughgoing entanglement of human experience with the non-human. The book is rich with scholarly resources, from scientific research to historical narratives, and philosophical treatises. As a sociologist, I am struck by Bridle's capacity to deftly apply what we are learning of the intricacies of individual and population dynamics among all sorts of phenomena to the patterns of governance across cultures and historical eras. Bridle cites multiple lenses to provide historical, cross-cultural, and cross-species examples of randomness, collaboration, and adaptation, enlightening us with alternatives to the persistent hierarchies that have led those of us grounded in concepts of independent existence to destroy planetary resources and to contribute to recent patterns of dystopian governance.

Bridle explores how we might learn from the "nature of the increasingly smart machines we are building, and something radical about the shared nature of language itself" (169). The book is eloquent as it challenges the functions and limitations of language to express our fundamental relationship with all that we experience and the multiple ways those experiences are random and play out randomly through thoroughgoing relationality.

To explore these themes, Bridle's work resonates with many different disciplines and intellectual movements. When Bridle extols the virtues of nonbinary thinking, they resonate with the spirit of The Consilience Project, which presents humility and continuous learning to be the most appropriate dispositions for dealing with complex challenges about which even experts disagree, such as climate change, mass migration, wealth disparity, nuclear war, and pollution, among others.[1] Where Bridle's examples pertain not only to human and non-human life forms, but also to politics and technology, their work resonates with the systems thinker Donella Meadows.[2]

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Meadows identifies the leverage points most likely to bring about systemic change. She considers paradigm change to be the second most powerful lever and transcendence of paradigms to be the most powerful. Bridle's promotion of nonbinary thinking aligns with Meadow's conception of the transcendence of paradigms, as it does not merely introduce a new or different paradigm but opens us up to multiple ways of perceiving at any given time.

Ways of Being also aligns with the expanding genre of Indigenous literature testifying to ways of living *with* nature and recent findings in physics and biology that identify ways we are indeed connected to everything in the universe.[3] A prime example of Indigenous literature, cited by Bridle, is Robin Kimmerer's *Braiding Sweetgrass*.[4] Kimmerer teaches botany and is an enrolled citizen in the Citizen Potawatomi Nation. She shares with her university students both Western science-based agricultural practices and the Indigenous practices that include how different vegetables share nutrients with one another and the soil. The phrase "We are in Nature and Nature is in us" is attributed to numerous sources as it captures the interdependence of all phenomena. In elegant prose, Kimmerer enlightens us with what it must be like to have internalized an integral relationship with all of Nature—challenging those of us who have internalized the Western paradigm of isolated phenomena. Since we see what we believe, it is not easy for many of us to experience the world in ways that we did not learn during our formative years. As the sociologist of knowledge Karl Mannheim explains, "From our society we learn not only what to think but how to think."[5] In this vein Bridle challenges us to extend political rights to non-humans and technologies:

> The world we want to live in, the only world we can live in, is one in which rivers and trees, oceans and animals, survive and thrive, in order that we can survive and thrive too. Political agency is a powerful tool for asserting this possibility. And in the long run, it will be clear that we will survive and thrive in an age of intelligent, autonomous machines by making the same assertions. The role we imagine for non-human animals determines the kind of world we too will have in our shared, more-than-human future (273).

I do question Bridle's expectations "that we can survive and thrive with intelligent, autonomous machines," by giving them "political rights," yet one of Bridle's major contributions is their deep dive into the inadequacies of current computational technology to accommodate the complexities and unknown processes of the world (173). Bridle clarifies how binary computers, unlike analog machines, misrepresent the human and more-than-human world we inhabit. Bridle identifies a primary fallacy of our current binary digital computers:

> One of the greatest misunderstandings of the twentieth century, which persists into the present, was that everything was ultimately a decision problem. . . . From this error flows all kinds of violence: the violence which reduces the beauty of the world to numbers, and the consequent violence which tries to force the world to conform to that representation, which erases, degrades, tortures, and kills those things and beings which do not fit within the assumed system of representations (178).

I remain skeptical of Bridle's apparent acceptance of the belief that AI is something more than data extracted from its context, labeled and categorized by low wage workers, mostly in the Global

South, plus algorithms written to recognize patterns of strings of letters and words. For Bridle, AI is a process distinct in vital ways from what is involved in the making of meaning by complex, multi-faceted human beings entwined with multiple relationships. Bridle does explain the recursive and fractal nature of our complex world where living systems of animals and plants, the "more-than-human world," as they frame it, are in continuous dynamic relationship, including how we understand and construct knowledge about the relationship. Bridle acknowledges the "ecology of technology" to expand how we think about the ways the technologies we create re-form us, with echoes of Marshall McLuhan and Neil Postman.[6]

> We have come, as the shock of more-than-human consciousness testifies, to think of "nature" as something separate from ourselves. . . . It is time to put aside such adolescent solipsism . . . both for the sake of ourselves and of the more-than-human world. There is only nature, in all its flowering, creating microprocessors and data centers and satellites just as it produced oceans, trees, magpies, oil, and us. Nature is imagination itself. Let us not re-imagine it, then, but begin to imagine anew, with nature as our co-conspirator: our partner, our comrade, and our guide (19).

Indeed, Bridle's nonbinary perspective encourages us to consider how AI becomes a part of Nature as we are transformed through using it, more or less as McLuhan explains that we are re-formed by the technology we use. However, I strongly resist accepting AI as anything approximating a living system, no matter how complex its pattern recognition and the vast datasets on which it may be trained. I do not think we need to recognize AI as anything like complex human and non-human living systems to appreciate the capacity of machine processed data to yield interesting and sometimes useful information for specific purposes, such as pharmaceutical and biological research and medical diagnosis.[7] And I can imagine how one might begin to consider AI as *almost human* given the way it can be programmed to mimic human-like behaviors that tap into our cognitive and affective vulnerabilities. Indeed, it is a matter of how much risk we are willing to take to continue to use AI given the level of its footprint on the dwindling planetary energy resources, including its toll on human cognitive capacities, especially on developing minds, and civic life.[8]

To apply Bridle's thinking across the evolution of fields of study is to see how the humanities and social sciences, in their renderings of human experience, are indeed patterns of recursion, collaboration, randomness, and recombination. Mead's "I and the Me," Cooley's Looking Glass Self, Goffman's dynamics of symbolic interaction, and Vanessa Andreotti's "metabolic alchemy of communication," all affirm Bridle's explicit inclusion of human imagination with the processes of nature.[9] One of Bridle's most profound insights into our relationship with digital technology is that "technology embodies the ideas and metaphors of its time, but such tools are turnable to other ends, and so are we" (16). Bridle's insights extend to the entanglement of our imaginations with our technologies in how we think about intelligence:

> Our conception of artificial intelligence—and thus, being modelled on ourselves, of intelligence—is fundamentally flawed and limited. It reveals that when we talk about AI, we're mostly talking about this kind of corporate intelligence, and ignoring all the other kinds of things that AI—that any kind of intelligence—could be (9).

Here Bridle's work resonates with Kate Crawford's *Atlas of AI* in which she explains, "Artificial Intelligence is neither artificial nor intelligent. It is . . . ultimately designed to serve existing dominant interests. In this sense, artificial intelligence is a registry of power."[10] The ecology of technology, formerly acknowledged by McLuhan and Postman, is elaborated by Bridle to embrace uses of technology that can enhance our sense of *being with* rather than having *power over* the multitude of life forms.[11] Bridle's work resonates with emerging themes from multiple sources of knowledge that just might lead us to a reconfigured conception of the world, as they explain:

> [We seek] that form of politics which best describes a yearning towards entanglement, to the mutual benefit of all parties, and sets itself against division and hierarchy. To declare solidarity with the more-than-human world means to acknowledge the radical differences which exist between ourselves and other beings, while insisting on the possibility of mutual aid, care, and growth. We share a world, and we imagine better worlds, together (279–280).

One of the book's most timely contributions is the description of the Ireland Citizens Assembly:

> a gathering of 100 people, 99 of whom were selected at random from the electoral roll. The 100th, a chairperson to manage the proceedings, . . . which were livestreamed on the internet. . . . "The random selection was moderated to ensure a balance of gender, age, location, and class . . . The random assembly isn't 'interpreting' the thinking of a mythical middle citizenry, it represented it, directly" (243–244).

According to Bridle the experiment, repeated in Canada, France, the Netherlands, Poland, and elsewhere, illustrated the effect of "cognitive diversity," that is, the theory that "the best solutions to knotty, complex problems are best found by starting from the greatest number of different viewpoints and experiences—that is from as wide a selection of people as possible" (246). In these days of democratic precarity, the wisdom of randomness for direct citizen participation needs to be taken seriously. Taiwan and Estonia are additional examples of direct citizen engagement in legislative matters using the internet.[12] Along with Bridle, I believe we remain overwhelmed by the power dynamics of corporate digital tech that still stand against the paradigm of nonbinary thinking, as well as the world of more-than-human beings. This is clear in the deployment of devices before testing for unintended consequences and the vast consumption of energy and mining of resources required to maintain the hardware and large databases. The neo- liberal business model and the will to have power over others remains extant. The hope for a future akin to Bridle's vision resides in resilience, curiosity, and the will to use and share our critical thinking, that we may abide by the second Creation story in the Bible, "to serve and preserve" all in the Garden.

I allude to the Old Testament, a touchstone of Western civilization, to underscore the depth of change involved for a paradigm shift to nonbinary thinking and acceptance of the second story of Creation over the imperative of the first story to "multiply and have dominion." According to ecologist Daniel Hillel, the order of the stories is due to the alignment of rhetorical style of the second story with the stories that directly follow in the Old Testament.[13] Considering the "butterfly

effect," imagine if the second story of the Old Testament had been the first. Might Western civilization have evolved more akin to the Indigenous cultures where it is a given that "Nature is in us, and we are in Nature?" It is worth pondering as we contemplate strategies for shifting and transcending the paradigms of separateness and dominion. Key to our struggle is acceptance of ambiguity and humility. As Bridle says, "This idea of forming new relationships with non-human intelligences is the central theme of this book . . . We must learn to live with the world, rather than seek to dominate it. In short, we must discover an ecology of technology" (11).

We owe gratitude to James Bridle for scaffolding the rethinking of our human relationships with more-than-human creatures and technology while not sacrificing to the corporate digital realm our capacities for critical thinking, collaboration, and intimate interpersonal relationships. Bridle has gifted us with a window onto the wonders of thorough-going interdependence and the aspiration to learn as much as possible from the more-than-human as well as from the technologies of our own creation. As several reviewers suggest, to delve deep into the book's implications, read the book in conversation with others. As several reviewers suggest, to delve deep into the book's implications, read the book in conversation with others. For example, award-winning Journalist Brenna Maloney says, the ideas are "so big, so fascinating and yes, so foreign, you are going to need people to talk to about them."[14]

Stephen Wolfram captures the essence of our existential challenge as he notes "the computational needs to be derivative of an actual relational process rather than the process a derivative of a binary computation."[15] Today we are colonized by the computational but have yet to understand how we are thoroughly entwined with more-than-human living systems. Bridle suggests that we meet the challenge with a paradigm change. "Though the world does not change with a change of paradigm, the scientist afterward works in a different world."[16] Reading Bridle, one might contemplate that the world does change.

NOTES

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[5] Karl Mannheim, *Ideology and Utopia: An Introduction to the Sociology of Knowledge*, trans. Louis Wirth and Edward Shils (Harcourt Brace Jovanovich, 1985).
[6] Marshall McLuhan, *Understanding Media: The Extensions of Man* (McGraw Hill, 1936) and Neil Postman, *Technopoly: The Surrender of Culture to Technology*, 1st ed., 9th print (Knopf, 1993).
[7] Matthew Cobb, "Why your brain is not a computer," *The Guardian*, February 27, 2020.
[8] James O'Donnell and Casey Crownhart, "We did the math on AI's energy footprint. Here's the story you haven't heard," *MIT Technology Review*, May 20, 2025.
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[11] McLuhan, *Understanding Media* and Postman, *Technopoly*.
[12] Irène Dubois, "(Re)inventing Governance in the Digital Age: A Comparative Study of Estonia and Taiwan's E-Participation Dynamics (BA Diss., European School of Political and Social Sciences, 2023). https://doi.org/10.13140/RG.2.2.28092.41604.
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[15] Stephen Wolfram, *A New Kind of Science | Online—Table of Contents*, accessed October 14, 2025, https://www.wolframscience.com/nks/
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