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BRIEF REPORT

Rethinking Animal Consciousness Research to Prioritize Well-Being

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Abstract
The authors critique the NY Declaration on Animal Consciousness, which does not denounce continued captivity and invasive research in the pursuit of animal consciousness markers. They argue that such research often increases animal suffering by accepting harmful practices. Instead, they propose a nonanthropocentric, ethical framework aligned with the Belmont Report's principle of beneficence, advocating for noninvasive methods in natural habitats. This approach prioritizes animal well-being, recognizing and safeguarding the intrinsic value of all conscious beings.

Keywords: animal agency; animal consciousness; animal dignity; animal wellbeing; Belmont Report; bioethics; ethical research practices; non-invasive research; precautionary principle; scientism

Can the well-being of nonhuman animals be improved through more intensive study of animal consciousness? This question is central to the 2024 *NY Declaration on Animal Consciousness*,[1,2] which asserts that mammals and birds experience a range of sensory stimuli, including pleasure, pain, and fear. It also acknowledges the realistic possibility that fishes, amphibians, reptiles, cephalopods, decapods, and certain insects share these experiences. Equally, if not more importantly, is whether the well-being of animals need be beholden to more intensive study of animal consciousness? This is a key question notably absent from the content of this recent declaration. To fully appreciate the implications of this question, it is important to consider the broader context in which this declaration was announced.

The declaration, although presented at a conference in New York, USA has international authors and signatories. Its scope extends somewhat beyond the 2012 *Cambridge Declaration of Consciousness*, primarily regarding invertebrates, placing it into global discussions. Given its international relevance, the 2024 declaration also suggests an urgent need for a universal reexamination of current conclusions regarding animal consciousness. We agree. (One of us, B.J.K., signed the declaration because of its recognition that any such reexamination must include a wide array of animals.) However, this reexamination raises significant ethical concerns, particularly regarding the methodologies employed in such research.

The declaration's push for increased scientific research to map consciousness markers often involves holding animals in captivity and subjecting them to invasive, pain-inducing experiments. Because the declaration's acceptance of captivity and invasive research overlooks the harms these practices inflict,[3] this approach promotes greater rather than lesser suffering by animals. Beyond the ethical issues, the declaration's emphasis on a particular scientific approach also reflects a deeper philosophical

commitment that warrants scrutiny. This philosophical commitment manifests in the form of scientism, which is distinctly questionable.

One manifestation of this scientism is the preference for hypothetico-deductive experiments on animals to demonstrate knowledge of widespread nonhuman sentience—a term now encompassing varying degrees of sentience, sapience, and sociality. While ethology and animal science play important roles in studying animals' perception and cognition, they are hardly the only or best sources of knowledge in this area. Everyday interactions with companion animals and observation of wild animals are crucial sources of understanding. As Mary Midgley points out, mixed communities of people and animals presuppose animals as agential beings, with some possessing sophisticated abilities to communicate and understand people, one another, and their environments in ways characteristic of their kind.[4] Appreciating animal sentience is thus more akin to apprehending the subjectivity and personhood of people, rather than purely scientific observation. For this approach, we should look to interpretive research analogies, theories, and practices as found in hermeneutics, anthropology, and qualitative methods.

A significant aspect of recognizing animal sentience and agency lies in understanding the essential desire for life shared by all living beings. The notion that "every living being has in equal measure the hunger for life"[5] carries profound significance. Whether it is a human, a mouse, a cat, or a jumping spider, the desire to live and flourish is a fundamental characteristic shared across species. This desire, though expressed differently, is powerful in each being. It challenges the human-centric view of supremacy by asserting a profound equality in the intrinsic value of all life. Such an understanding also demands that we acknowledge the inherent dignity of all animals—a dignity rooted in their intrinsic worth and their pursuit of life.[6] This perspective invites us to embrace a deeper "reverence for life,"[7] encouraging us to see animals not as subjects for human-centered scientific inquiry but as beings with their own intrinsic worth and agency.[8] In so doing, this understanding reinforces the argument against invasive research methodologies and foregrounds the need for a more precautionary and respectful approach to the study of animal consciousness.

Another manifestation of the scientism embedded in the declaration is an implicit commitment to a philosophy of science known as verificationism. This viewpoint sees science as the process of assembling data and testing hypotheses and theories to verify truth. It emerged historically from a scientific belief that all reality, including human and animal agency, was deterministic, certain, and thus predictable.[9] Yet verificationism has been debunked as it became clear that the cosmos is too complex to be entirely predicted—uncertainty, probability, and complexity prevail. Therefore, science in all forms involves the falsifiability of interpretations, and thus continual refining of better versus worse causal explanations—aptly termed falsificationism.[10] Our understanding of truth—such as the meaning and significance of animal consciousness—is contingent and contextual. For understanding the minds of animals, the implications of this realization are profound: conducting research *in situ* best reflects the complex contextualities of animals' lives.

This shift from verifying truth to falsifying error is crucial, but it only scratches the surface of a broader critique of scientism within the NY Declaration. In light of these scientific and philosophical concerns, it is necessary to recognize the ethical implications, particularly the agency of both humans and animals. Humans are agents of their own lives, are aware, self-aware, and capable of making decisions while relating to others and their environment.[11] Findings on animal cognition, emotion, and culture—from everyday observations to scientific research—underscore that many animals, whether companion animals, those used in research and agriculture, or free-living wild animals, also possess agency.[12]

Building on the ethical significance of this recognition, it becomes clear that respecting the intrinsic value of animals challenges the practices—implicit or otherwise—endorsed by the NY Declaration. Scientifically, the study of animals calls for methodologies that respect animal agency and autonomy generally, and seek to understand individual variation of animals in particular. In the social sciences, this reasoning has replaced the misguided reliance on a universalizing behaviorism and fostered the growth of interpretive inquiry in its many forms. This methodological shift is necessary to understand human agency, and it is equally needed in our understanding of animals, especially the beings addressed by the NY Declaration.

Ethically, we recognize that human agency co-constitutes intrinsic value in ourselves.[13] Similarly, animals possess intrinsic moral value that is inherent to their being, independent of their utility to humans or their resemblance to human beings. They are ends in themselves, not merely means for human manipulation, whether for scientific research or other purposes. Thus, scientific methodologies that truly respect this intrinsic value are inconsistent with captive and invasive research. While a likeness to human beings is one way to understand and appreciate animal value, it is not the basis for their intrinsic value. Therefore, this inherent value challenges the practices implied and made explicit by the NY Declaration.

The importance of such an approach is further amplified by the parallels drawn between the principles protecting human subjects and those that should apply to animals in research. Animals—vertebrates and invertebrates alike—deserve greater consideration, protection, and opportunities to flourish than the declaration offers. We propose an aspirational approach that prioritizes animal well-being through a nonanthropocentric lens,[14] and one that does not privilege scientistic knowledge and approaches over other more richly ethical epistemologies. This proposal aligns with the principles of protection for human subjects outlined in the 1979 *Belmont Report*[15] and echoes the 2020 call for a parallel Belmont Report for Animals by Ferdowsian and colleagues.[16]

Drawing upon the original Belmont Report as Ferdowsian et al. did was insightful, as the report played a pivotal role in establishing bioethics as both a discipline and a component of public policy. Inspired by this foundational text, Tom Beauchamp and James Childress[17] developed the principalist approach to bioethical reasoning, emphasizing autonomy, beneficence, nonmalfeasance, and justice as its core principles. Hope Ferdowsian et al.'s call for a Belmont Report for Animals illustrates how these principles can be directly applied to animal well-being, highlighting the ethical obligations we have toward animals in research.

Ferdowsian et al.'s call for a broader application of these principles to animals is rooted in historical bioethics. They discuss how the principles outlined in the Belmont Report, which protects vulnerable human subjects through respect for autonomy, beneficence, and justice, should also be applied to animals in research. Ferdowsian et al. argue that animals possess varying capacities for self-determination and goal-seeking, which reflect their autonomy. Applying the principle of beneficence to animals means minimizing research harms and maximizing benefits, regardless of the animal's level of autonomy. However, achieving justice for animals presents a significant challenge. As Ferdowsian et al. note, animals are often chosen for research due to their availability and manipulability, a practice exacerbated by societal and institutional biases. Consequently, the harms inflicted on animals remain high, while the benefits to anyone—human and other-than-human—are vanishingly low.

Thus, this broader application of ethical principles to animals is not a recent development, but rather a continuation of a rich tradition in bioethics, making the discussion surrounding the NY Declaration especially relevant to bioethicists today. Charles Darwin's seminal work, The Descent of Man (1871) laid the foundation for this discourse, recognizing the cognitive and moral capacities of non-human animals.[18] From this historical springboard, the field of bioethics has continuously evolved its consideration of animals. Drawing from these ideas, Van Renssellaer Potter envisioned a global bioethics that would be attuned to the intricate moral ecology involving people, animals and nature.[19] Around the same time, Barbara Orlans and colleagues advanced the bioethics of animal use in biomedical research.[20] Veterinary bioethicists like Michael Fox and Bernard Rollin further expanded these ideas, advocating for comprehensive bioethical frameworks that consider both domesticated and wild animals.[21,22] More recently, Joann Lindenmeyer and colleagues have underscored the importance of animal well-being within the ethics of One Health.[23] Despite the field's primary focus on humans, the ethical status of animals has been and remains a cornerstone of bioethical inquiry. This longstanding concern continues to drive critical debates about the use of animals in medical and health research, challenging us to constantly reevaluate our ethical frameworks.

Extending this rich historical and ethical foundation, we must now consider what a Belmont Report for animals might entail, particularly in the context of animal consciousness research. This next step in bioethical evolution requires us to confront a fundamental contradiction: any consciousness research carried out in captivity inherently ignores animal agency, autonomy, and the innate desire to flourish.

Research captivity is overwhelmingly and intrinsically harmful to animals, to the extent that a vision of justice for animals is incompatible with it. Harms are added to harms when the research is invasive rather than only observational. Thus, the framework we advocate builds on Ferdowsian et al.'s and their predecessors' vision to ensure that scientific and philosophical inquiries into animal consciousness do not exploit animals but instead privilege and support their well-being.

As we deepen our understanding of animal consciousness, our practices must evolve accordingly, guided by ethical principles that prioritize the well-being of all conscious beings,[24,25] and our practices must reflect fresh epistemological insights while simultaneously adhering to our ethical responsibilities. This means not only preventing harm and suffering but also enhancing the lives of animals.

To this end, adopting a strong precautionary approach,[26] which presumes consciousness where there is any possibility, would foster more ethically robust treatment of animals.

Derived from the German "Vorsorgeprinzip," meaning the principle of fore-caring, precaution asks that we foresee, forewarn and prevent harm to people, animals and nature.[27] Precaution is not merely a guideline for scientific uncertainty; it is an ethical principle of policy and practice that applies to questions of scientific uncertainty, including the degrees and kinds of animal consciousness and its relationship to animal well-being. One implication of precaution here is that it reverses the burden of proof. Given the manifest sentience of many other animals, it urges us to discover which animals are not sentient, and thereby focus on falsifying erroneous understandings of animal thought and behavior. Altogether, this principle demands that we not only address uncertainties about animal consciousness but also connect these questions to the well-being of other animals, prioritizing scientific practices which protect that well-being.

This ethical framework challenges us to reconsider our approach to animal research. The pursuit of scientific knowledge does not grant us permission to conduct research that contradicts our understanding of animals' capabilities or compromises their well-being. Instead our ethical responsibilities to other animals demand that we be more scientifically creative, meeting animals and their lives where they are—in the wild. By prioritizing noninvasive methods in natural habitats and respecting the intrinsic value of animals, we can better recognize and safeguard the well-being of all conscious beings.

Competing interest. The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Notes

1. Andrews K, Birch J, Sebo J, Sims T. *Background to the New York Declaration on Animal Consciousness*; 2024; nydeclaration.com.
2. Science News Staff. News at a glance: Plants' tree of life, conserving U.S. federal lands, and entertaining invertebrate sentience. *Science* 2024;**384**(6694):1–2.
3. Ferdowsian H, Fuentes A, Johnson LSM, King BJ, Pierce J. Toward an anti-maleficent research agenda. *Cambridge Quarterly of Healthcare Ethics* 2022;**31**(1):54–8.
4. Midgley M. *Animals and Why They Matter*. Athens, GA: University of Georgia Press; 1984.
5. Moore KD. The heart of the scorpion. In Challenger M, ed. *Animal Dignity: Philosophical Reflections on Non-Human Existence*. London: Bloomsbury; 2023:97–105.
6. Challenger M. *Animal Dignity: Philosophical Reflections on Non-human Existence*. New York: Bloomsbury Publishing; 2023.
7. Schweitzer A. The ethics of reverence for life. In *The Philosophy of Civilization*. Amherst, NY: Prometheus Books; 1987:307–29.
8. Coghlan S. An irreducible understanding of animal dignity. *Journal of Social Philosophy* 2024; **55**:124–42.
9. Sorell T. *Scientism: Philosophy and the Infatuation with Science*. London: Routledge; 1991.
10. Chalmers A. *What Is This Thing Called Science? An Assessment of the Nature and Status of Science and Its Methods*. London: Open University Press; 1999.
11. Bevir M, Blakely J. *Interpretive Social Science: An Antinaturalist Approach*. New York: Oxford University Press; 2018.

12. Birch J. *Edge of Sentience: Risk and Precaution in Humans, Other Animals, and AI*. Oxford: Oxford University Press; 2024.
13. Midgley M. *Beast and Man: The Roots of Human Nature*. London: Routledge; 1995.
14. Lynn WS, Baker L, Santiago-Ávila F, Stewart KS. Ethics, wellbeing, and wild lives. In Fine AH, Mueller MK, Ng ZY, Beck AM, Peralta JM, eds. *The Routledge International Handbook of Human-Animal Interactions and Anthrozoology*. New York: Routledge; 2023:438–52.
15. The Commission. *Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research*. Bethesda, MD: The Commission; 1978.
16. Ferdowsian H, Johnson LSM, Johnson J, Fenton A, Shriver A, Gluck J. A Belmont Report for animals? *Cambridge Quarterly of Healthcare Ethics* 2020;**29**(1):19–37.
17. Beauchamp TL, Childress JF. *Principles of Biomedical Ethics*. 8th ed. Oxford: Oxford University Press; 2019.
18. Darwin C. *The Descent of Man, and Selection in Relation to Sex*. Princeton, NJ: Princeton University Press; 1981 (Original work published 1871).
19. Potter VR. *Global Bioethics: Building on the Leopold Legacy*. Ann Arbor, MI: Michigan State University Press; 1988.
20. Orlans B, Beauchamp TL, Dresser R, Morton DB, Gluck JP. *The Human Use of Animals: Case Studies in Ethical Choice*. New York: Oxford University Press; 1998.
21. Fox MW. *Bringing Life to Ethics: Global Bioethics for a Humane Society*. Albany, NY: State University of New York Press; 2001.
22. Rollin BE. *An Introduction to Veterinary Medical Ethics: Theories and Cases*. Ames, IA: University of Iowa Press; 1999.
23. Lindenmayer JM, Kaufman GE, Baker L, Coghlan S, Koontz F, Nieuwland J, et al. One health ethics: "What then must we do?". *CABI One Health* 2022;1–4.
24. Peña-Guzmán D. *When Animals Dream: The Hidden World of Animal Consciousness*. Princeton, NJ: Princeton University Press; 2022.
25. De Waal FB. Non-invasive methods in the study of animal cognition and consciousness. In Vonk J, Shackelford TK, eds. *The Cambridge Handbook of Animal Cognition*. Cambridge: Cambridge University Press; 2021:250–73.
26. Bernard R. *Precautionary Principle, Pluralism and Deliberation*. Hoboken, NJ: John Wiley & Sons; 2016.
27. Bekoff M. Animal consciousness and the ethics of animal research. In Beauchamp TL, Frey RG, eds. *The Oxford Handbook of Animal Ethics*. Oxford: Oxford University Press; 2011:435–58.

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