Rollin, Bernard (2017) [Raising the moral consciousness of science](#). *Animal Sentience* 16(8)

DOI: 10.51291/2377-7478.1230

Date of submission: 2017-10-22

Date of acceptance: 2017-10-24

This article has appeared in the journal *Animal Sentience*, a peer-reviewed journal on animal cognition and feeling. It has been made open access, free for all, by WellBeing International and deposited in the WBI Studies Repository. For more information, please contact wbisr-info@wellbeingintl.org.

Raising the moral consciousness of science

Commentary on [Birch](#) on *Precautionary Principle*

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Abstract: Precaution on behalf of sentient animals should not be tempered by the questionable principle of the amorality of science.

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Over the past half-century, there is no question that societal concern for animal welfare has increased steadily and exponentially. But the form it has taken is something of a crazy-quilt not based on any sort of rational strategy. Some of it has been in the form of consumer rejection of products derived from the suffering of innocent animals. For example, as early as the 1970s a survey of the readers of *Glamour Magazine*, certainly a group pre-disposed towards enhancing their personal appearance, revealed that the vast majority thought experimentation on animals was too great a price to pay for new cosmetics. Largely as a result of efforts by the cosmetics industry responding to societal pressure, the testing of cosmetics on live animals through such invasive and scientifically questionable tests as the LD50 and the Draize test has been significantly curtailed through the development of molecular biological alternatives functioning at the cellular level.

In a similar manner, animal agricultural practices perceived by consumers of animal products to be morally unacceptable, such as severe confinement of egg-laying hens in battery cages, were eliminated by such chains as McDonald's, beginning in 2001. In 2008, I convinced Smithfield farms to eliminate extreme confinement of pregnant sows in gestation crates when their own polls of consumers indicated that 78% disapproved of such high confinement.

In some cases, the welfare of animals used for human purposes has been legislatively encoded, more often in state than in federal law. In 1967, the federal Animal Welfare Act was passed, but was notorious for its inadequacy. The purpose of the Act was primarily to assure pet-owners that their animals would not be kidnapped and sold to animal research laboratories. Although it covered housing and transport of some research animals, the 1967 Act expressed no concern about the actual design or conduct of research. For the purposes of the Act, well over 90% of the animals used in research – rats, mice, and birds – were not animals.

Also not covered by any federal legislation is the use of animals in industrial agriculture, arguably the cause of more suffering than all the other animal uses combined. Although farm

animals used in biomedical research are covered in the Animal Welfare Act, no agricultural activities are. Shamefully, as of this writing, there is not a single analgesic approved for use in food animals, despite the fact that they are subject to numerous surgical procedures and such painful modalities as hot iron branding. Equally shameful is the fact that the Humane Slaughter Act does not cover birds, leading to horrendous slaughter practices for poultry.

And although my colleagues and I were able to convince Congress in 1985 of the need to pass an amendment to the Animal Welfare Act requiring control of pain and distress in research animals, to this day rats and mice are excluded from its protection. On the other hand, all animals used in federally funded animal research are protected by National Institutes of Health guidelines and rules. This represents an incoherent political solution to a moral problem.

Although a paper chronicling all the absurdities and inadequacies of legislative control of animal suffering would have to be significantly longer than my brief discussion, enough has been said to show the reader the need for a rational basis for public policy regarding animal welfare. The target article by Birch (2017) is a well-reasoned and well-written exposition of the possibility of using the Precautionary Principle as a rational basis for according sentience to animals in order to protect them. In essence, Birch is arguing that in situations where failure to enact policy on matters encompassing animal cognition – most particularly animal pain (and presumably animal distress) – could lead to harm to animal welfare, one should give the animals “the benefit of the doubt.”

This point is incisively and subtly explored by Birch. It is evident that if such a regulatory principle were put in place in an all-encompassing legislative form, the absurdities noted above would be mitigated at least and probably eliminated altogether. Since the Precautionary Principle is well-established and accepted, particularly in Europe regarding such issues as climate change, it seems to be a reasonable strategy for animal welfare.

The only divergence I have with Birch concerns his stated desire to remain in accord with scientific evidence. I am not taking an anti-science, Luddite position. Rather, I base my claim on the fact that systematic ignoring and/or denial of the reality of animal pain and other forms of animal cognition during the 20th century by both the veterinary and scientific research communities, particularly those forms related to suffering, was based not on scientific evidence but on positivistic ideology and expediency.

The biological and psychological sciences were solidly rooted in Darwinian evolutionary theory. Darwin himself had declared that psychological traits were as continuous phylogenetically as were morphological and physiological ones (Darwin 1871, 1872). He had even done elegant experiments on the rational problem-solving abilities of earthworms (Darwin, 1886). Yet twentieth-century psychological science, both Anglo-American behaviorism and European ethology, rejected the study of animal consciousness (Schiller 1957). Lloyd Morgan – best known for articulating “Morgan’s Canon,” often cited as the basis for eliminating consciousness from psychology – only used his Canon to eliminate the unnecessary attribution of “higher consciousness”; he was otherwise a *panpsychist* who believed that consciousness was present throughout the phylogenetic scale and indeed in all of nature, including inanimate nature! J.B. Watson, the founder of behaviorism, eschewed consciousness to create a “technology of behavior.”

Animal consciousness was denied out of self-serving moral assumptions in order to avoid the inescapable moral and societal consequences of performing invasive research on beings who

could suffer. And practice inexorably followed theory. When I was presenting to Congress what became the 1985 Amendments to the Animal Welfare Act (making control of pain and distress in research animals federally mandatory), I did a literature search on laboratory animal analgesia at the Library of Congress, and found only two papers, one of which declared ironically that there ought to be papers on the subject. Since the passage of that law, one can now find more than 13,000 papers.

In sum, Birch has presented a persuasive approach that one can hope will serve to create a rational and coherent basis for policy responsive to the societal concern about animal welfare.

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ANIMAL CONSCIOUSNESS

On **November 17-18, 2017**, the NYU Center for Mind, Brain and Consciousness, the [NYU Center for Bioethics](#), and NYU Animal Studies will host a conference on [Animal Consciousness](#).

This conference will bring together philosophers and scientists to discuss questions such as: *Are invertebrates conscious? Do fish feel pain? Are non-human mammals self-conscious? How did consciousness evolve? How does research on animal consciousness affect the ethical treatment of animals? What is the impact of issues about animal consciousness on theories of consciousness and vice versa? What are the best methods for assessing consciousness in non-human animals?*

Speakers and panelists include:

[Colin Allen](#) (University of Pittsburgh, Department of History & Philosophy of Science), [Andrew Barron](#) (Macquarie, Cognitive Neuroethology), [Victoria Braithwaite](#) (Penn State, Biology), [Peter Carruthers](#) (Maryland, Philosophy), [Marian Dawkins](#) (Oxford, Zoology), [Dan Dennett](#) (Tufts, Philosophy), [David Edelman](#) (San Diego, Neuroscience), [Todd Feinberg](#) (Mt. Sinai, Neurology), [Peter Godfrey-Smith](#) (Sydney, Philosophy), [Lori Gruen](#) (Wesleyan, Philosophy), [Brian Hare](#) (Duke, Evolutionary Anthropology), [Stevan Harnad](#) (Montreal, Cognitive Science), [Eva Jablonka](#) (Tel Aviv, Cohn Institute), [Björn Merker](#) (Neuroscience), [Diana Reiss](#) (Hunter, Psychology), [Peter Singer](#) (Princeton, Philosophy), [Michael Tye](#) (Texas, Philosophy)

Organizers: Ned Block, David Chalmers, Dale Jamieson, S. Matthew Liao.

The conference will run from 9am on Friday November 17 to 6pm on Saturday November 18 at the NYU Cantor Film Center (36 E 8th St).

Friday sessions will include “Invertebrates and the evolution of consciousness”, “Do fish feel pain?”, and “Animal consciousness and ethics”.

Saturday sessions will include “Animal self-consciousness”, “Animal consciousness and theories of consciousness”, and a panel discussion.

A detailed schedule will be circulated closer to the conference date.

Registration is free but required.

Register [here](#).

See also [the conference website](#).