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Abstract: A 2-stage strategy to (1) inform and sensitize the public -- through CCTV, web-streaming and crowdsourcing -- about the suffering inflicted on animals in commercial breeding and use for meat, dairy, fur and fashion, followed by (2) a graduated tax on producers, vendors and consumers of animal products, claimable as a rebate by producers, vendors and consumers of non-animal alternative products.

MG: In 2004 the [UK] Court of Appeal referred to animal suffering as being determined by “scientific...value judgements”. Given your background in cognitive science, how would you describe the current degree of scientific understanding of animal suffering or well-being?

SH: It is certain that cognitive psychobiologists whose research is devoted to understanding how animals think (cognition) and feel (sentience) have extensive knowledge and evidence about what is required for animal well-being. Neither the law nor the courts have come anywhere near giving this evidence the weight it deserves, in the way it has done for the medical and psychiatric evidence on human well-being.

Notice that I am using ordinary-language terms such as thinking, feeling and well-being rather than abstract technical terms that formalise and desensitise what is really at issue. Another such ordinary-language term that everyone understands is suffering. Many current laws allow enormous amounts of suffering to be inflicted on animals - suffering that is evident to anyone who looks and feels, and that does not need “scientific” analyses to "prove" the victims are indeed suffering.

Trying to protect animals from suffering operates under an enormous logical handicap, well-known to philosophers: the “other-minds problem.” It is logically impossible to know for sure (“prove”), even for scientists, whether and what any entity other than oneself is feeling. Even language is not a guarantor: if someone says “that hurts,” they could be pretending, or they could even be a robot - a zombie, that does not feel at all. Logically speaking.

But it is obvious to all who are trying to be honest about the problem of human-inflicted animal suffering that it is disingenuous to invoke the ‘other-minds problem’ in order to create doubt about suffering in animals where we would not invoke it in the case of humans. We know that just about all mammals and birds suffer if they are confined, deprived of access to their kin and kind, or forcibly manipulated. We recognise the mammalian and avian signs of stress, pain, fear and depression; and where we lack personal experience (such as with reptiles, fish or invertebrates), there are not only scientists but lay people — with abundant experience observing and caring for animals — who are highly capable and more than willing guide us.

It would be a shameful pretence to act solemnly as if there were any uncertainty about the vast, obvious amounts of gratuitous and indefensible agony that humans are inflicting on animals in the bred-animal product industries.

“Stress” is a formal, sanitised term for harm - both physical and mental, both felt and unfelt - that is incurred by an organism’s body. There do exist some subtle cases of stimulation, manipulation, and background conditions where it is not yet known scientifically whether they are stressful. Those are the
‘unresolved scientific problems’. But the elephant in the room — the countless instances and practices that not only virtually all cognitive psychobiologists but all decent laymen would immediately recognise as suffering — are still so immeasurably widespread, legally permissible, and un-policed today that we are far from reaching cases where there is any genuine uncertainty that calls for scientific expertise.

MG: In the same judgement it was stated that emergent “evidence...[for] an identifiable deficit in net well-being” caused by restricted feed could give credence to a legal challenge against the practice. Does this type of statement imply courts trailing behind scientific consensus in their reasoning?

SH: It is very hard, even for a cognitive scientist, to force oneself into the sanitized, almost psychopathic jargon of “restricted feed” and “identifiable deficit in net well-being” when the question really being asked is whether starving chickens causes suffering.

“Broilers” have been selectively bred to grow from chicks into adult-sized (indeed pathologically oversized and deformed) invalids in an extremely short time. Not only does this put tremendous strain on their bodies and legs (crippling them and sometimes making their legs snap off) but it makes them so ill that they cannot survive till breeding age unless the ones that are to be used as breeders are systematically starved throughout their short, agonized lives so as to slow the rate of their devastating growth enough to allow their pathological genotype to keep being reproduced.

Of course it causes suffering to be kept constantly on the threshold of starvation. There is hardly the need for the learned opinion of “poultry scientists” to attest to this — unless one is trying to make mischievous or malevolent use of the “other-minds problem” to protect economic interests.

MG: Is there scope for greater cooperation between lawyers and scientists regarding animal welfare? How do you think this could be achieved?

SH: Yes, there is enormous scope. And enormous good will as well, especially among the younger generation of lawyers. And “cognitive psychobiologists” are also people -people who know that nonhuman animals, like human ones, are feeling creatures that can be, and are being, made to suffer gratuitously by economics-driven industry, perverted, industry-driven “animal science,” and uninformed as well as misinformed consumer demand. If asked, the impartial experts are well-equipped and eager to inform the public and protect and help promote sentient animals' well-being. That is the convergence and collaboration that the journal (Animal Sentience) is devoted to fostering.

The way we are doing it is through “open peer commentary.” Every “target article” published in the journal is circulated around the world, across all specialities — to zoologists, ethologists, ecologists, evolutionists, psychobiologists, legal scholars, bioethicists, nutritionists, veterinarians, social scientists and animal activists — inviting them to provide commentary that elaborates, integrates, critiques, supplements or applies the content of the target article. The commentaries are published as formal mini-articles following the target article; the author responds to them. The journal is online and open access so that the target articles as well as the commentaries can be published as soon as they are reviewed and accepted. The target article by the biologist Brian Key on whether fish feel pain has already drawn over 50 commentaries. Among the target articles currently undergoing commentary are ones by: a philosopher (Colin Klein) and a biologist (Andrew Barron) on insect sentience; an economist (Yew-Kwang Ng) on welfare biology; a law professor (Martine Lachance) on veterinary reporting of abuse; a philosopher (Mark Rowlands) on animal personhood; a cognitive psychologist (Arthur Reber) on the origins of mind, and a psychologist (Thomas Zentall) on cognitive dissonance in animals and humans.

Among the signs of progress are the growing number of countries and states where animals are being
formally accorded the legal status of sentient beings with biological needs (instead of just property). Just here in Montreal, the Student Animal Legal Defense Fund of McGill University convened an important and influential symposium on animal law in 2010. (It was this symposium that made me into a vegan!) In the same year, the International Research Group on Animal law of the Université du Québec à Montréal (UQAM) convened an international animal law conference in Paris on Animal Suffering: From Science to Law. Since then both France and Quebec have granted animals sentient-being status. A new course on animal law, offered by Professor Alain Roy (specialist in child protection law) at the Université de Montréal was filled with one hundred law students on the very day it was announced.

I will be directing the 7th Summer School in 2018 of the Cognitive Sciences Institute at UQAM, whose theme will be The Other-Minds Problem: Animal Sentience and Cognition.

MG: You are passionate about pushing for CCTV in abattoirs. What would you like to happen?

SH: Not just in slaughterhouses. In all locales where animals are commercially bred, confined, or used in any way by humans.

The strategy is in two phases:

**Phase I (Public Sensitisation)**

1. Adopt a law that recognises animals as sentient beings with biological and psychological needs.

2. Require, by law, 24-hour, 360-degree audio/video surveillance and recording at all locales where animals are commercially bred, confined, or used in any way by humans in order to monitor and ensure that the animals biological and psychological needs are being met according to existing regulations (which of course are far from adequate).

3. As the enormous volume of surveillance recordings cannot possibly all be inspected by government inspectors, all the recordings must be coded, web-streamed and made permanently open-access online, so that their inspection can be crowd-sourced for public inspection: A clear description of the pertinent existing regulations (with which the producers need to comply) has to be made available online for the general public, and relative to those existing regulations, any citizen can then report any observed violation, noting the code of the video on which it occurs and the timing of the violation.

4. Not only will this help immeasurably to ensure that existing (inadequate) regulations are complied with, and thus ensure that what goes on is only that which is allowed by existing law, but it will have the even more important effect of allowing the public to witness all the horrors that go on that are still allowed by the existing laws (especially in industrial breederies, transport and slaughterhouses).

5. It is these “authorised” horrors that Ag-Gag laws and lobbying are aggressively trying to prevent the public from witnessing.

6. The hope is that once the public has open access to the full scale of the horrors (especially in industrial breederies, transport and slaughterhouses) the majority of thus-sensitised citizens will exert pressure on their elected lawmakers not only to make existing regulations increasingly rigorous, in the protection of animals’ biological and psychological needs, but also for introducing legislation for a reduction in what is permissible and a transition to alternatives to animal production and consumption:

**Phase II (Graduated Taxation on Animal Production and Consumption)**
1. Require, by law, a surcharge on the production, vending and consumption of animal products, available as a rebate to incentivise the production, vending and consumption of non-animal alternatives.

2. The percentage surcharge can be increased with time.

3. The surcharge should be imposed on all three involved parties: the producer, the vendor and the consumer.

4. The rebate should likewise be available to all three parties: the producer, the vendor and the consumer. (The implementation of the rebate will be complicated initially, but that should not be accepted as an excuse for not imposing the surcharge. With thought, testing and planning, a fair, efficient rebate system can be developed by the time the graduated surcharge reaches significant levels.)

5. For producers, especially, the rebates will provide strong incentives to produce non-animal alternatives.

6. All surplus in the tax revenues should be used to provide sanctuary for the former production-animals that are liberated by the change in production and consumption patterns. And any left-over from that should be used to invest in the development of non-animal alternatives.

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