Nonhuman Animal Suffering: Critical Pedagogy and Practical Animal Ethics

Kay Peggs

Kingston University, London, United Kingdom

k.peggs@kingston.ac.uk

Barry Smart

University of Portsmouth, United Kingdom

barry.smart@port.ac.uk

Abstract

Each year millions of nonhuman animals are exposed to suffering in universities as they are routinely (ab)used in teaching and research in the natural sciences. Drawing on the work of Giroux and Derrida, we make the case for a critical pedagogy of nonhuman animal suffering. We discuss critical pedagogy as an underrepresented form of teaching in universities, consider suffering as a concept, and explore the pedagogy of suffering. The discussion focuses on the use of nonhuman animal subjects in universities, in particular in teaching, scientific research, and associated experiments. We conclude that a critical pedagogy of nonhuman animal suffering has the capacity to contribute to the establishment of a practical animal ethics conducive to the constitution of a radically different form of social life able to promote a more just and non-speciesist future in which nonhuman animals are not used as resources in scientific research in universities.

Keywords: suffering; ethics; critical pedagogy; universities

Introduction: Critical Theorizing, Pedagogic Practice, and Nonhuman Animal Suffering

In this paper, we discuss the suffering of nonhuman animals as an ethical issue by centering on the interconnections between nonhuman animal suffering and pedagogy, especially in the context of universities. Here we focus on human-centered practices that assume and embody the primacy

of human values and interests within disciplinary fields commonly referred to as the natural sciences — in particular research and pedagogic practices in fields including medicine, biology, and chemistry, as well as more controversially psychology (e.g., see Ledoux, 2002) — in which nonhuman animals are frequently treated as experimental resources. We center our attention on pedagogical practices in which nonhuman animal subjects are used as tools; we do not address forms of natural science in which scientists and researchers seek to develop more complex, empathetic relations with nonhuman animals (e.g., Bekoff, 2007). Drawing on social and philosophical thought about the suffering of humans and nonhuman animals, we engage critically with pedagogical practices within natural science fields that use routinely large numbers of living and dead nonhuman animal subjects in experiments and research.

Annually, millions of nonhuman animals experience suffering as a consequence of being used as "resources" in university teaching and research in the natural sciences. It is difficult to obtain accurate data on the numbers who are used worldwide, but drawing on the most recent available information from "142 out of 179 countries with significant human populations," a conservative figure for 2005 puts the number at 115.3 million nonhuman animals (Taylor, Gordon, Langley, & Higgins, 2008, p. 338). The vagueness of the information is compounded by the fact that, in addition to the use of the whole bodies of dead and alive nonhuman animals, the body parts of dead nonhuman animals are used in laboratories. Although statistical data may provide an impression of the quantitative scale of nonhuman animal subjection in such research, the suffering of each individual nonhuman animal involved is effectively occluded.

In this paper we engage with suffering as the experience of nonhuman animals in universities, with a view to instituting changes in such practices on ethical grounds. To this end, we argue that a critical theoretical analysis and a critical pedagogical framework are required to

promote and practically address the ethics of the ways in which nonhuman animals are exposed to suffering in the course of teaching and research within particular disciplinary fields in universities. Such a practical, ethical orientation is predicated on a critical engagement with, first and foremost, the use of and suffering inflicted upon nonhuman animal subjects in scientific research and experimentation. We argue that a practical ethical position should employ a non-speciesist approach in which nonhuman animals are not used as resources in teaching and research in university institutions. We also note the analytical assessments that indicate nonhuman animals are inappropriate "models" for humans in biomedical research, and we are concerned about the possible suffering and distress experienced by students and staff who are expected, and indeed required, to make nonhuman animals suffer as part of university study.

In order to achieve our aims, we draw on the notion of critical pedagogy to develop the idea of a critical "pedagogy of suffering" that takes as its starting point the importance of the student and teacher encounter (and here we add the nonhuman animal subject) as a critically significant "pedagogical site" where "normal" paradigmatic views, conventions, and positions are outlined, played out, and legitimated (Buhler, 2013). The pedagogical site all too frequently legitimizes the oppression of nonhuman animals in society. It is one of the significant sites where the ethically subordinate being-as-resource or property status of nonhuman animals is constituted, displayed, exploited, and scientifically endorsed. The site is strategically important and ought to be the subject of close critical inquiry and action for critical animal studies analysts.

A critical pedagogy of suffering is able to draw on a wealth of social and philosophical thought that has engaged with suffering. We situate our critical analysis within a broad spectrum of social and philosophical thought that includes the "zoological" writings of Jacques Derrida (2008) and, in respect of the specific notion of a critical pedagogy, we draw on Henry Giroux's

(2011) argument that critical pedagogy can foster the development of "a language for thinking critically about how culture deploys power and how pedagogy as a moral and political practice enables students to focus on the suffering of others" (p. 5).

In practical animal ethics terms, we aim to explore the possibility of building a pedagogy that engages critically with procedures and practices as they relate to nonhuman animals in universities. In this regard, we seek to encourage critical pedagogical engagement with two related issues: firstly, with what constitutes suffering and secondly, with speciesism and the suffering inflicted on nonhuman animals in the course of their human appropriation, treatment, and deployment as resources (Ortiz, 2011). This paper engages with these issues by exploring (a) critical pedagogy as a progressive yet increasingly underrepresented form of teaching in universities; (b) suffering as a concept; and (c) the pedagogy of suffering, centering on the use of nonhuman animals in universities, in particular in teaching, scientific research, and associated experiments.

Critical Pedagogy: Disturbing Common Sense Assumptions about Nonhuman Animals

Critical pedagogical approaches are central to the transformation of established assumptions about nonhuman animals. Critical pedagogy promotes the questioning of established practices and assumptions and provides the educational and cultural preconditions for nurturing critical, self-reflexive, and knowledgeable citizens who have the capacity to exercise moral judgements and act in an ethically responsible manner towards all forms of life. Critical pedagogy is crucial, as it radically "unsettle[s] commonsense assumptions" and encourages engagement with "the world as an object of both critical analysis and hopeful transformation" (Giroux, 2011, p. 1 & p. 14). Students who have participated in a critical pedagogical setting have the potential to become

critical agents insofar as they have the opportunity to acquire "skills and knowledge to expand their capacity both to question deep-seated assumptions and myths that legitimate the most archaic and disempowering social practices that structure every aspect of society and to take responsibility for intervening" (Giroux, 2011, p. 172).

Social and philosophical thinkers who advocate critical pedagogy often overlook nonhuman animals in their considerations, thus, with the notable exceptions of work by scholars such as Helena Pedersen (2004) and Richard Kahn (2009), critical pedagogy has rarely explicitly recognized nonhuman animals as being part of its political project. Giroux's (2011) work is a case in point. He does not extend his thinking to nonhuman animals when he refers to the "deep seated assumptions" and "archaic and disempowering social practices" to be questioned, challenged, and overturned (Giroux, 2011, p. 173 & p. 175). He does not refer to, as part of the sphere of critical pedagogy, the forms of suffering, genocide, confinement, and exploitation to which nonhuman animals are subjected in university establishments and social life as a whole (Patterson, 2002). Although nonhuman animals cannot be active and engaged participants in critical pedagogy, they are subjected to suffering through pedagogic practices in schools, colleges and universities, and they can be, indeed should be, in a prominent place within a critical pedagogy, accorded moral and legal status, and not regarded as property or treated as resources to serve human interests (Best, 2002, 2014).

Insofar as critical pedagogy aims to address and counter the exclusion of oppressed subjects, it is appropriate, and indeed politically and ethically necessary, to include nonhuman animals, the multiplicity of species subjected to human-induced forms of domination, oppression, suffering, and genocide (Pedersen, 2004, p. 4). As Kahn (2009) observes in his discussion of eco-pedagogy, the overriding aim of critical pedagogy should be the cultivation of

a wider non-speciesist awareness of how to be in the world. This requires a non-anthropocentric standpoint on the human-induced suffering of nonhuman animals, which can be generated through a critical pedagogy of suffering.

Pedagogy of Suffering

The potential for pedagogy to address suffering effectively has been explored in relation to human experiences, clinical legal contexts, and with respect to human existence more broadly conceived. In an analysis of the limitations of traditional medical pedagogy, a "pedagogy of suffering" has been identified as promising to restore agency to ill humans and counter "administrative systems that cannot take suffering into account because they are abstracted from the needs of bodies" (Frank, 1995, p. 146). A critical pedagogy of suffering in a legal context offers the prospect of opening up discussion on "the ways in which suffering and the responses to suffering are directly related to questions of justice and politics" (Buhler, 2013, p. 416). In a wider-ranging consideration, emphasis is placed on the importance of students grappling with the "complex and difficult problem of suffering ... in order to think about how we should live as humans on this Earth and *how we should tend to the lives of other living creatures, human and nonhuman*" (Martusewicz, 2001, p. 102, emphasis added).

We argue that a critical pedagogy of suffering is able to instill in students an understanding of the specific ways in which "mechanisms function to legitimate the beliefs and values underlying wider societal institutional arrangements" (Giroux, 2011, p. 20) and include the treatment of nonhuman animals. Such a critical approach would center on the ontological and epistemological assumptions, hegemonic cultural and ethical values, and systemic mechanisms

that cause the suffering of nonhuman animals and maintain established scientific research and teaching practices.

A critical pedagogy would seek to challenge the practice of 'normal science', and the assumption that nonhuman animals constitute a legitimate and appropriate resource for experimentation and research in the cause of scientific advancement and the achievement of human progress. Normal scientific research, as Thomas Kuhn (2012[1962]) explains, takes place within an established paradigm, within parameters, assumptions, and understandings that are generally not questioned or challenged. Normal science, "predicated on the assumption that the scientific community knows what the world is like" (Kuhn, 2012[1962], p. 5), accepts, typically without question, the use of nonhuman animals as resources in scientific research and experimentation.

This science glosses over problematic ethical issues and the growing body of critical scientific evidence that indicates the failure of the "animal model": that is, that it can be harmful, indeed dangerous, to use this research as a basis for treating humans (Balls, 2012). Where the use of nonhuman animal subjects in experiments and research is addressed in normal science, it generally tends to be to dispute whether at least some nonhuman animals experience subjective feelings of pain and suffering. And even when the prospect of nonhuman animal suffering is recognized, it is described as "difficult to assess" and thus scientifically unverifiable (Sneddon, n.d.).

The idea that suffering is unverifiable scientifically is criticised by Marian Stamp Dawkins (2008) who argues that suffering is not an elusive, non-scientific term, but rather it is "an important part of biology and can be measured" (p. 942). She presents this as being especially important for nonhuman animals who are subjected to scientific experiments because

she suggests that assessments of their subjective experiences of suffering have the potential to offer a way of "improving animal welfare in the real world" (2008, p. 942). A comparable view is taken by Donna Haraway (2008) who argues that humans should adopt a sharing-caring attitude towards nonhuman animal research subjects so that they "… do the *work* of paying attention and making sure that the suffering is minimal, necessary, and consequential" (p. 82, emphasis in original).

There is an unexplicated assumption in such approaches that normal scientific research, in which nonhuman animals are used in experiments for the benefit of humans, can and indeed should continue because there can be a "'humane use' of animals by humans" (Donaldson & Kymlicka, 2011, p. 3). What this amounts to is an assertion that the experiences of nonhuman animals who are subjected to experimentation can be made "less deadly, less painful" and that their impoverished lives should be made as full and as interesting as possible within the conditions imposed on them (Haraway, 2008, p. 77 & pp. 89-90). Rather than arguing against the use of nonhuman animals the emphasis is placed upon organizing laboratories more efficiently and showing more care and consideration towards nonhuman animal subjects who nevertheless continue to be exposed to pain and suffering in the course of scientific research (Rollin, 2006).

We advocate a radical shift away from the "humane use" approach to a non-anthropocentric alternative that focuses on abolishing the use of nonhuman animals in scientific research and on ceasing practices that expose them to the forms of suffering to which they are routinely exposed. This would entail releasing nonhuman animals from their abject subordinate role in the "master and slave, manager and resource, steward and ward, or creator and artefact" binary that humans have imposed upon them (Donaldson & Kymlicka, 2011, p. 3).

The University and the Suffering of Animals

The domination and exploitation of nonhuman animals by humans is rarely accorded recognition, and the university is potentially a key site within which this can be redressed through critical pedagogy. Reflecting on this issue, Pedersen (2010) argues that

> [A critical animal pedagogy possesses the potential] to make in-depth interventions in the power structures and political economical forces in which human–animal relations are embedded, explore forms of counter–hegemonic resistance, draw on (and contribute to) activist knowledge, and problematize the very assumption of what makes certain bodies (human and animal) accessible for instrumental ends. (p. 88)

Such a pedagogical approach aims to criticize and dismantle rather than reinforce the notion of nonhuman animals as commodities. However, appropriate space for a critical pedagogy "is not always easily created in academia" (Pedersen, 2010, p. 88). This is a great loss, as the educational system is well-placed to act against oppression and injustice, and to contribute significantly to an ethical reconfiguration of human-nonhuman animal relations (Masschelein, 1998). In the pedagogic process, university lecturers and researchers can seek to ensure that students are able to recognize how different ethical orientations structure their relations with human and nonhuman animals.

In particular, a critical pedagogical approach is able to expose and challenge the speciesist hidden curriculum, as well as the associated practices that subject nonhuman animals to suffering and then, in response, substitute an alternative: one that emerges from supporting students in their development of critical thinking, empathy, and active citizenship and that does

not involve subjecting nonhuman others to domination, oppression, suffering, and violence (Pedersen, 2004, p. 5).

Within higher education, nonhuman animals are used in the classroom for teaching "systematics, anatomy, physiology, pharmacology, and psychology" (Sathyanarayana, n.d., p. 77). Each year in the course of normal[1] pedagogic practices in schools, colleges, and universities nonhuman animals are dissected (involving the cutting up of dead animals for anatomical study) or vivisected (involving anatomical study of and experimentation using living nonhuman animals, which may include cutting, burning, shocking, drugging, starving, irradiating, blinding, or killing) (Sathyanarayana, n.d., p. 77). Millions of nonhuman animal subjects are treated in these ways.

For example, Freedom of Information requests submitted by the UK student newspaper *The Tab* to all universities in the UK revealed that over 1.3 million animals were killed in UK universities in 2012 (Hodges, 2013). According to the U.S. Department of Agriculture, Animal and Plant Health Inspection Service, in the U.S. in Fiscal Year 2010, 1.13 million nonhuman animals were used in experiments (USDA, 2011, p. 2). But these figures are a gross underestimate, as the nonhuman animals counted in the statistics are only those who are offered some "protection" (Peggs, 2015). For example, the U.S. Federal Animal Welfare Act excludes "cold-blooded" nonhuman animals and rats, mice, birds, reptiles, amphibians, and nonhuman animals used in agricultural experiments. Rats and mice comprise the vast majority of all laboratory subjects used (Goldberg, 2002).

[1] We use the term "normal" pedagogic practices to echo Kuhn's (2012[1962]) concept of "normal science," as we are referring to the regular work of teachers who are working in a range of educational institutions and who work within an established paradigm of understanding.

Normal scientific practice in the physical sciences is anthropocentric. As Pedersen (2004) observes, the value assigned to nonhuman animals by humans within science and beyond "is instrumental rather than intrinsic: we relate to them in accordance with their usefulness for us, rather than as beings living for their own sake and with their own purposes" (p. 2). As we have seen, the "humane-treatment" approach to nonhuman animal suffering leaves this instrumental relation undisturbed. Pedersen (2004) makes clear the ways in which, within universities, studies of human and of nonhuman animals are subject to and are structured and organized in terms of distinctively different value systems that serve to legitimate the suffering of nonhuman animals in the course of normal pedagogic practice and scientific research.

The objectification, oppression, and suffering of nonhuman animals in the course of scientific experimentation, research, and teaching in universities is, for the most part, viewed uncritically, indeed is generally regarded as "normal" and "natural," and by implication necessary to further human interests and wellbeing (Pedersen, 2004, p. 2). To the scientists involved the "animals become tools, a means to an end" (Birke, Arluke, & Michael, 2007, p. 17). Humans are able to treat nonhuman animals in this way because they are viewed as bilaterally "Other" to humans (Peggs, 2012). The objectivity accorded to scientific knowledge and the process of knowledge production conveys the impression of value neutrality; knowledge, as Giroux (1981) argues, "is often treated as an external body of information, the production of which appears to be independent of human beings" (p. 19).

This serves to obscure the relationship between knowledge that is "valued" and the economic, political, cultural, and social interests with which such knowledge is articulated (Giroux, 2011). Regarding nonhuman animals, this "valued" knowledge legitimates the anthropocentric status quo and serves to justify the prevailing power relations that exist between

human and nonhuman animals, and leads to the latter being subjected to all manner of suffering in the name of science. Consequently, as Carol Adams (1995) reflects, "animal experimentation seems less a scientific question than a power issue" because it is "disenfranchised bodies" that are used to increase scientific knowledge (p. 138).

In the university institution, nonhuman animal subjects are exposed to levels of harm and suffering that would be regarded as unacceptable for humans (Henry & Pulcino, 2009). Students, under the guidance of university staff, are required to undertake procedures that lead to the injury and death of nonhuman animals. This is understood to be acceptable and indeed often is a requirement of their studies. The reflections of Animal Studies scholars provide illuminating illustrations. For example, in the course of training to be a biologist, the Animal Studies scholar Lynda Birke (1999) recalls that she was expected to dissect nonhuman animals and work on nonhuman animal tissues for experimental purposes (p. vi). Being absorbed in the university's definition of the situation, Birke conformed to institutional expectations.

This is not surprising when we consider the reflections of the Animal Studies scholar Arnold Arluke, who found there were "moments when he performed prosaic experiments on rodents" during his participant observation in a laboratory (Arluke & Sanders, 1996, p. 28). Studies about student responses are similarly revealing. Bill Henry and Roarke Pulcino (2009) found that students' support for or opposition to the use of nonhuman animal subjects in research and experiments differs according to gender (women are less likely to support), thoughts about the nonhuman animals who are the subjects in the research (students are more accepting of research that uses mice than chimpanzees and dogs), and the level of harm induced by the research (students are more likely to oppose research that results in death or injury). This echoes the broader-based research of Deborah Wells and Peter Hepper (1997) who found that, in

general, people are less likely to concur with research and experiments that result in the suffering of nonhuman animals. So, although the institutional setting has a profound influence on students' involvement in research and experiments that use nonhuman animal subjects, it is also true that concerns about the suffering of (at least some) nonhuman animals can engender opposition to such university-based research practices.

As we have seen, Stamp Dawkins (2008) maintains that the adoption of a scientific measurement of nonhuman animal suffering makes possible ways of alleviating their suffering, in the university institution and beyond. Technicians, Named Animal Care and Welfare Officers (NACWOs), and veterinary practitioners are employed to recognize and monitor the suffering of nonhuman animals in the laboratory with a view to improving their welfare (Cruden, 2012; Hawkins, 2002). As NACWO Joanna Cruden (2012, p. 18) comments, "Nothing makes me feel happier than to see an improvement in the life of an animal in a research laboratory. Animal welfare is a passion of mine...." This approach has been termed "welfarist" because it accepts that nonhuman animal welfare matters, but only secondarily as it is subordinated to "the interests of human beings" (Donaldson & Kymlicka, 2011, p. 3).

Further evidence of this is found in William Russell and Rex Burch's (1959) notion of the 3Rs that seeks to (a) replace (find alternatives to the use of nonhuman animals), (b) reduce (the numbers of nonhuman animals used), and (c) refine (i.e., keep nonhuman animal suffering to a minimum where it is "unavoidable"), with the aim being to improve the wellbeing of the remaining vast numbers of nonhuman animals subjected to pain and suffering in the course of scientific research.

In our view, the "welfarist" or humane-treatment stance leaves unquestioned fundamental issues that should be at the heart of human actions in respect of nonhuman animal suffering in

university institutions (and beyond). The heart of the matter centers on at least three questions: (a) what is meant by suffering, (b) what are the ethics of the human imposition of suffering on others, and (c) what role can the university institution play in challenging the human-induced suffering of nonhuman animals. We address these questions in the rest of this paper.

On Suffering: Durkheim, Schopenhauer, and Derrida

Although suffering is said to defy definition (Kleinman & Kleinman, 1996, p. 125), it is believed to be all-pervasive in human lives. In Arthur Schopenhauer's (2004) view, our lives are synonymous with suffering: "[i]f the immediate and direct purpose of our life is not suffering then our existence is the most ill-adapted to its purpose in the world" (p. 3). Emile Durkheim's (2005) answer to the question about why human life is inextricably intertwined with suffering centers on his impression that humans endure perpetual conflict between the wants and needs that are driven by our senses and the moral values that draw us away from concentrating on our individual wants and needs (p. 37).

Accordingly, all human moral acts involve sacrifice, which gives rise to our "wretchedness and our grandeur": wretchedness because we are fated to suffer and grandeur because it is this that distinguishes us from nonhuman animals (Durkheim, 2005, p. 38). Durkheim's (2005) narrow definition of suffering leads him to conclude, equally narrowly, that suffering is the prerogative of humans as "[t]he animal takes its [sic] pleasure in a unilateral, exclusive movement: man [sic] alone is obliged, as a matter of course, to give suffering a place in his life" (p. 38). In short, we are concerned with our own suffering.

Iain Wilkinson (2005) puts it succinctly, "[w]henever humanity records its voice, then it always speaks of suffering" (p. 1). However, as we have seen, human thought, generally has moved on from the idea that only humans suffer – humans now acknowledge that (at least some) nonhuman animals suffer as well. But human suffering continues to be privileged, in traditional ethics, over the suffering of all others (Linzey, 2009, p. 9), and much less attention is paid to the scale and diversity of the suffering existences of nonhuman animals (Peggs & Smart, in press). So, when we turn to the suffering of nonhuman animals, the scales are quite different and are heavily weighted against them.

It seems that, at best, two kinds of morally-relevant suffering are accorded recognition: human suffering and the suffering of nonhuman animals (Linzey, 2009, p. 9). One example can be found in scientific developments associated with gene theory and genetic modification. The Cartesian concept of the animal as machine that Midgley (2002[1979]) considered to have been radically undermined has rematerialized in the form of genetically modified nonhuman animals who (it is presumed) may be engineered by humans to feel no physical pain when subjected to scientific experimentation and by implication may not suffer from the associated torment and distress (Gardner & Goldberg, 2007). This physical, pain-centred, and thus constrained conceptualization of suffering (to say nothing about the anthropocentric "morality" on which such developments would be based) is restricted to nonhuman animals.

Such a conceptualization would not be applied to humans whose suffering is assumed to include "experiences of bereavement and loss, social isolation and personal estrangement … [and] can comprise feelings of depression, anxiety, guilt, humiliation, boredom and distress … [and may] all at once be physical, psychological, social, economic, political and cultural" (Wilkinson, 2005, pp. 16-17).

The idea that human suffering is different, more troubling, more significant, and thus (more) morally relevant compared to that of nonhuman animals is based on the notion that human suffering extends well beyond physical pain. For example, in his discussion of suffering, Schopenhauer (2004) argues that "the lot of the animal appears more endurable than that of man [sic]" (p. 6) because humans possess a "more highly charged nervous system," they think about "absent and future things," have stronger emotions and by virtue of their faculty of reflection and capacity for knowledge their life "is more full of suffering than the animal's" (2004, p. 9).

Nonhuman animals, in Schopenhauer's (2004) view, are lacking in thought and the intense sensations experienced by humans, and as a consequence are content with "mere existence" (p.8) and have an "enviable composure and unconcern".(p.7) Although Schopenhauer (2004) recognizes that "every animal ... suffers pain," he adds "it nowhere approaches the pain which man is capable of feeling, since even the highest animals lack thought and concepts" (p. 10). Schopenhauer's views contrast starkly with those outlined in the eighteenth century by Jeremy Bentham (1907) who argues that the matter that warrants nonhuman animals being granted equal consideration is not whether nonhuman animals are able to reason or talk, but that they can and do suffer (chapter xvii., n122).

The idea that human suffering is more important than that of nonhuman animals informs the "moral orthodoxy" on which the treatment of nonhuman animals in universities is based in Europe, the USA, and beyond (Peggs, 2015). There may be recognition that nonhuman animals have an interest in not suffering, but this interest is simply overridden in the pursuit of the "greater" good of humans (Garner, 2005, p. 15). This moral orthodoxy is far removed from a non-speciesist critical pedagogical approach capable of promoting a more just and non-speciesist future. Reflecting on beliefs about the ontological status of the human-nonhuman animal divide

and the supposed "ethical" practices predicated upon it in his dialogue with Elisabeth Roudinesco, Derrida argues:

> The relations between humans and animals *must* change. They *must*, both in the sense of an "ontological" necessity and of an "ethical" duty ... I am on principle sympathetic with those who, it seems to me, are in the right and have good reasons to rise up against the way animals are treated: in industrial production, in slaughter, in consumption, in experimentation. (Derrida & Roundinesco, 2004, p. 64, emphasis in original)

Derrida's (2008) deconstruction of the human-nonhuman animal ontological binary and critical reflections on the ways in which animals are being subjected to "medico-industrial exploitation, overwhelming interventions … [in their] milieus and reproduction, genetic transplants [and] cloning" (p. 80) are integral to the constitution of a critical pedagogical approach to the suffering of nonhuman animals.

In scientific and public discourses, the bilateral division "human" and "animal" is typically based on the assumption of "natural" or innate differences that derive from characteristics attributed to each designated group (for discussion see Peggs, 2012). This human-nonhuman animal binary that is integral to modern science and social and philosophical thought is challenged by Derrida (2008, p. 14) as is the "authority" exercised by humankind over "every living thing that moves on the earth" (Genesis, 1:26-28; translated by Dhormes, cited in Derrida, 2002, p. 384).

Acknowledging the nonhuman animal sacrifices of antiquity, "the traditional exploitation of animal energy," and other manifestations of human domination over nonhuman animals,

Derrida (2008) adds that "in the course of the last two centuries these traditional forms of treatment of the animal have been turned upside down" by developments in specific forms of knowledge and associated techniques of intervention (p. 25). The scientific and technological "subjection of the animal," exemplified by the industrialization of processes of the production of nonhuman animals as food for human consumption and the treatment of animals as tissue resources for scientific experimentation in the cause of enhancing human wellbeing, is designated by Derrida (2008) as "violence": humankind does all it can to "dissimulate this cruelty or to hide it from themselves, in order to organise on a global scale the forgetting or misunderstanding of this violence that some would compare to the worst cases of genocide" (pp. 25-26).

Knowledge and images of the forms of violence ("industrial, mechanical, chemical, hormonal and genetic") to which humans have been subjecting nonhuman animal species for two centuries lead Derrida (2008) to reflect on the questions provoked about suffering caused and the pity and compassion aroused (p. 26). Distancing himself from the preoccupation with the question of whether "animals can think, reason, or speak," (Derrida 2008, p. 27), Derrida asserts in his dialogue with Roudinesco that "[w]e cannot imagine that an animal doesn't suffer when it is subjected to laboratory experimentation…" (Derrida & Roudinesco, 2004, p. 70). We do not need time in a university to learn this. However, the history of the natural sciences and of philosophy has constituted a largely anthropocentric story, a narrative that embraces and affirms rather than challenges notions of human supremacy.

The study of nonhuman animals brings us to the limits of our knowledge, and this should encourage us to engage continuously in critical inquiry into the particularities of nonhuman and human forms of being and established forms of knowledge and knowing (Gruen & Weil, 2010).

What is "undeniable" as Derrida (2008, p. 29) remarks, is that nonhuman animals can and do suffer and that the relationship between human and nonhuman animals must change, indeed that it is a necessity, an "ethical duty" (Derrida & Roudinesco, 2004, p. 64), one that a critical pedagogy of suffering can help to nurture.

Concluding Remarks: Cultivating a Critical Pedagogy of Suffering

In this paper we have taken issue with the anthropocentric hierarchy that prioritizes human interests and concerns over those of nonhuman animal subjects who are continuously taken for granted as resources, accorded a subordinate status, denied agency and rights, and subjected to pain and suffering in the cause of a humanly-constituted problematic notion of "progress" (Peggs, 2012). The pursuit of this hierarchy has led to a relentlessly transformative and resource-intensive way of life, and the prospect of the extinction of around half of all nonhuman animal and plant species by the end of the twenty-first century (Wilson, 1994). What is now required is "a seismic cultural shift" to liberate nonhuman animals, to transform their status and achieve a "shift from animals as objects to animals as subjects," to accord them moral and legal status, to recognize their preferences and desires, to not expose them to suffering and pain, and to respect their right to live (Best, 2002, 2014).

Within Western social and philosophical thought, and more broadly within modern social and cultural life, human interest and existence is regarded as of far greater value than the wellbeing of nonhuman animals. How are we to transform the value system and institutional practices (in universities and beyond) that persist in reproducing human-induced suffering of nonhuman animals, and instead engender care and respect for nonhuman animal lives and

consideration for the multifarious nature of their experiences? Derrida (2008) takes issue with anthropocentrism and with the human-nonhuman animal binary, arguing that the constituted "abyssal rupture doesn't describe two edges, a unilinear and indivisible line, Man and Animal in general" (p. 31). What lies beyond "the edge of the *so-called* human" is not "The Animal" but a "heterogeneous multiplicity" of relations between species.(Derrida 2008, p.31)

Critical of the injustice and violence to which nonhuman animals are exposed in contemporary society and sympathetic in some respects to the animal advocacy movement, Derrida's (1991) focus is on what he terms "the ethics and the politics of the living," precisely that with which a critical pedagogy needs to engage (p. 117).

A critical pedagogy of nonhuman animal suffering should inform the ethics of teaching and research in university institutions, by freeing nonhuman animals from the forms of suffering to which they are routinely exposed at the hands of humans in contemporary society and allowing them the freedom to stay alive, but this will not be easy to achieve. A critical pedagogy of suffering, which seeks to oppose the speciesist uses of nonhuman animal subjects in scientific research in university institutions, will constitute merely a beginning. It will promote a critical engagement with the ethics and politics of suffering to which nonhuman animals are exposed and thereby contribute significantly to the constitution of a practical animal ethics that moves beyond "welfarist" concerns to a position that releases nonhuman animals from their abject subordinate role.

Much has changed since Clifton Flynn (2003) wrote about the institutional hardships endured when he was trying to gain approval for his course on "human–animal studies." But if academic orthodoxy seems to pose less of an obstacle to "human-animal studies" courses now than in 2003 (DeMello, 2010), it is important to recognize how much the institution of the

university has been transformed by the imposition of a neoliberal agenda on higher education (Giroux, 2014). A critical pedagogy of nonhuman animal suffering is long overdue, but the practice of critical pedagogy itself is increasingly threatened within the neoliberal university. But will there ever be a better time to give due consideration to the "ethic of reverence for life" (Schweitzer, 1923), to seriously engage with and seek to transform the relationship between humans and nonhuman animals?

References

Adams, C. (1995) N*either man nor beast: feminism and the defense of animals.* New York: Continuum.

Arluke, A., &. Sanders, C. (1996). *Regarding animals.* Philadelphia: Temple University.

Balls, M. (2012). The conflict over animal experimentation: is the field of battle changing? *ATLA*, *40*, 189-191.

Bekoff, M. (2007). *The emotional lives of animals: a leading scientist explores animal joy.* California: New World Library.

Bentham, J. (1907[1789]). (Reprint of 1823 edition). *An introduction to the principles of morals and legislation*. Oxford, United Kingdom: Clarendon Press. Retrieved April 14, 2014, from http://www.econlib.org/library/Bentham/bnthPML18.html.

Best, S. (2002) Legally blind: The case for granting animals legal rights. Speech delivered for Animal Rights 2002. Retrieved April 15, 2014, from http://www.impactpress.com/articles/augsep02/blind8902.html.

Best, S. (2014). *The politics of total liberation: revolution for the 21st century*. New York: Palgrave-Macmillan.

Birke, L. (1999). *Feminism and the biological body.* Edinburgh, United Kingdom: Edinburgh University Press.

Birke, L., Arluke, A., & Michael, M. (2007). *The sacrifice: how scientific experiments transform animals and people.* Indiana: Purdue University Press.

Buhler, S. (2013). Painful Injustices: encountering social suffering in clinical legal education. *Clinical Review, 19,* 405-428.

Cruden, J. (2012). Working with animals in research. *ATLA 40,* 18–19.

DeMello, M. (2010). *Teaching the animal: human – animal studies across the disciplines.* New York: Lantern books.

Derrida, J. (1991). "Eating well," or the calculation of the subject: an interview with Jacques Derrida. In E. Cadava, P. Connor, & J-L. Nancy (Eds.), *Who comes after the subject* (pp. 96-119). London, United Kingdom: Routledge.

Derrida, J. (2002). 'The animal that therefore I am (more to follow)'. *Critical Inquiry*, *28*(2), 369-418.

Derrida, J. (2008). *The animal that therefore I am.* New York: Fordham University Press.

Derrida, J., & Roundinesco, E. (2004). *Jacques Derrida: for what tomorrow. A dialogue. translated by Jeff Fort.* Stanford, CA: Stanford University Press.

Donaldson, S., & Kymlicka, W. (2011) *Zoopolis: a political theory of animal rights.* Oxford, United Kingdom: Oxford University Press.

Durkheim, E. (2005). The dualism of human nature and its social conditions. *Durkheimian Studies, 2,* 35–45.

Flynn, C. (2003). A course is a course, of course, of course (unless it's an animals and society course): challenging boundaries in academia". *International Journal of Sociology and Social Policy. 23*(3), 94 .-108

Frank, A. W. (1995). *The wounded storyteller: body, illness and ethics*. London, United Kingdom: University of Chicago Press.

Gardner, R. M., & Goldberg, A. M. (2007). Pain-free animals: an acceptable refinement? *AATEX, 14(Special Issue),* 145-149. Proceedings of the 6th World Congress on Alternatives & Animal Use in the Life Sciences, August 21-25, 2007, Tokyo, Japan. Retrieved April 20, 2014, from http://altweb.jhsph.edu/wc6/paper145.pdf.

Garner, R. (2005). *Animal ethics.* Cambridge, United Kingdom: Polity.

Giroux, H. A. (1981). *Ideology, culture and the process of schooling*. Philadelphia, PA: Temple University Press.

Giroux, H. A. (2011). *On critical pedagogy.* New York and London: Continuum International.

Giroux, H. A. (2014). *Neoliberalism's war on higher education*. Chicago: Haymarket Books.

Goldberg, A. M. (2002). Use of animals in research: a science–society controversy? The American perspective: animal welfare issues. *Altex: Alternatives to Animal Experimentation, 19*(3), 137-139.

Gruen, L., & Weil, K. (2010). Teaching difference: sex, gender, species. In M. DeMello (Ed.), *Teaching the animal: human–animal studies across the disciplines* (pp. 127-144). Brooklyn: Lantern Books.

Haraway, D. J. (2008). *When species meet (posthumanities).* University of Minnesota Press.

Hawkins, P. (2002). Recognising and assessing pain, suffering and distress in laboratory animals: a survey of current practice in the UK with recommendations. *Laboratory Animals, 36,* 378-395.

Henry, B., & Pulcino, R. (2009). Individual difference and study-specific characteristics influencing attitudes about the use of animals in medical research. *Society & Animals, 17*(4), 305-324.

Hodges, H. (2013). Tab research reveals uni animal testing figures. *The Tab*, November 12.

Kahn, R. (2009). *Critical pedagogy, eco-literacy, and planetary crisis: the ecopedagogy movement.* New York: Peter Lang.

Kleinman, A., & Kleinman, J. (1996). The appeal of experience: the dismay of images: cultural appropriation of suffering in our times. *Daedalus, 1*, 2.

Kuhn, T. S. (2012[1962]). *The structure of scientific revolutions fifitieth anniverary edition.* Chicago: University of Chicago Press.

Ledoux, S. F. (2002). Defining natural sciences. *Behaviorology Today, 5*(1), 34-36.

Linzey, A. (2009). *Why animal suffering matters: philosophy, theology, and practical ethics.* Oxford, United Kingdom: Oxford University Press.

Martusewicz, R. A. (2001). *Seeking passage: postructuralism, pedagogy, ethics*. New York: Teacher's College Press.

Masschelein, J. (1998). How to imagine something exterior to the system: critical education as problematization. *Educational Theory, 48*(4), 521–530.

Midgley, M. (2002[1979]). *Beast and man.* London: Routledge.

Ortiz, A. (2011). Humane liberation: incorporating animal rights into critical pedagogy. *The Vermont Connection. 32*, 67-77.

Patterson, C. (2002). *Eternal Treblinka: our treatment of animals and the holocaust*. New York: Lantern Books.

Pedersen, H. (2004). Schools, speciesism, and hidden curricula: the role of critical pedagogy for humane education futures. *Journal Of Futures Studies, 8*(4), 1-14.

Pedersen, H. (2010). Teaching the animal. *Humanimalia: A Journal of Human/Animal Interface Studies*, *2*(1), 86-89.

Peggs, K. (2012). *Animals and sociology*. Basingstoke, United Kingdom: Palgrave Macmillan.

Peggs, K. (2015). An insufferable business: ethics, nonhuman animals and biomedical experiments. *Animals* (Special Issue: Ethical and Social Dimensions of Animal Experimentation), *5*(3), 624-642.

Peggs, K., & Smart, B. (in press) Suffering existence: nonhuman animals and the question of ethics. In A. Linzey & C. Linzey (Eds.), *Palgrave handbook of practical animal ethics*. Basingstoke, United Kingdom: Palgrave MacMillan.

Rollin, B. (2006). *Animal rights & human morality*. Amherst, NY: Prometheus Books.

Russell, W. M., & Burch, R. L. (1959). *The principles of humane experimental technique.* London, United Kingdom: Methuen.

Sathyanarayana, M. C. (n.d.). Need for alternatives for animals in education and the alternative resources. *ALTEX Proceedings 2, 1/13, Proceedings of Animal Alternatives in Teaching, Toxicity Testing and Medicine* 77-81.

Schopenhauer, A. (2004). *On the suffering of the world*. London, United Kingdom: Penguin.

Schweitzer, A. (1923). The ethic of reference for life. In *The philosophy of civilization* (Part II: Civilization and Ethics, London, Adam and Charles Black). Retrieved April 25, 2014, from http://www.animal-rights-library.com/texts-c/schweitzer01.pdf.

Sneddon, L. U. (n.d). Can animals feel pain? *The Wellcome Trust.* Retrieved April 28, 2014, from http://www.wellcome.ac.uk/en/pain/microsite/culture2.html.

Stamp Dawkins, M. (2008). The science of animal suffering. *Ethology, 114*(10), 937-945.

Taylor, K., Gordon, N., Langley, G., & Higgins, W. (2008). Estimates for worldwide laboratory animal use in 2005, *ATLA, 36*, 327-342. Retrieved April 15, 2014, from http://www.buav.org/_lib/userfiles/files/Science_Reports/Estimates_For_Worldwide_Laboratory.pdf.

USDA. (2011). Annual report animal usage by fiscal year. U.S. Department of Agriculture, Animal and Plant Health Inspection Service, pp. 1-2, Retrieved April 15, 2014, from http://www.aphis.usda.gov/animal_welfare/efoia/downloads/2010_Animals_Used_In_Research.pdf.

Wells, D., & Hepper, P. (1997). Pet ownership and adults' views on the use of animals. *Society & Animals, 5*(1), 45–63.

Wilkinson, I. (2005). *Suffering: a sociological introduction.* Cambridge, United Kingdom: Polity.

Wilson, E. O. (1994). *The diversity of life*. London, United Kingdom: Penguin.