



Proceedings

# The Intersection of Animals and Global Sustainability—A Critical Studies Terrain for Better Policies? †

Iris M. Bergmann

School of Geosciences, The University of Sydney, Sydney, NSW 2006, Australia; iris.bergmann@sydney.edu.au † Presented at the 1st International Electronic Conference on Animals—Global Sustainability and Animals: Science, Ethics and Policy 2020, 5–20 December 2020; Available online: https://ieca2020.sciforum.net/.

Abstract: At the UN-level, it has only recently been acknowledged that the welfare of animals is not, but should be, part of the sustainable development agenda. With the outbreak of the COVID-19 pandemic, the interconnections between animal welfare and protection on the one hand, and on the other hand, ecosystem destruction, species extinction, the climate crisis, industrial animal agriculture and the emergence of zoonoses, have come to the fore. Arguments have also been made that sustainability and animal protection is something of an oxymoron with, in particular, farm animals being treated as vehicles to achieve sustainability rather than being agents who under a justice perspective should be beneficiaries of the sustainability transition. To address the un/sustainabilities in the nexus of animals and sustainability, critical theory perspectives draw out pathways for transformation. Critical Sustainability Studies is being formulated. Critical Animal Studies is already well established. Both converge in what could develop into a new field, Interspecies Sustainability Studies. Moreover, we are observing the birth of another new field, the Veterinary Humanities, with indications of a Critical Veterinary Humanities emerging. In this paper, it is discussed what critical theory perspectives bring to the intersection of animals and global sustainability. In conclusion, it is suggested that interspecies sustainability needs to be conceptualised as a critical theory to address the multiple sustainability crises and to protect animals, end their exploitation and facilitate their flourishing.

**Keywords:** interspecies sustainability; critical theory; critical sustainability studies; critical animal studies; veterinary humanities; animal welfare; multispecies justice; sustainable development

Citation: Bergmann, I.M. The Intersection of Animals and Global Sustainability—A Critical Studies Terrain for Better Policies? Proceedings 2021, 73, 12. https:// doi.org/10.3390/IECA2020-08895

Published: 4 December 2020

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2020 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).

## 1. Introduction

The COVID-19 global pandemic made us painfully aware of the consequences of our use and treatment of animals, domestic and wild. The IPBES [1] states that the same environmental changes caused by human activities that lead to species extinction on a global scale, drive climate change and pandemic risk. One of the main drivers of environmental changes is rising meat production [1]. The IPBES refers specifically to changes in the way we use land, and expand and intensify animal agriculture, leading to deforestation, forest degradation, expansion of pasture and encroachment into wildlife habitat. Another driver is wildlife trade [1]. All these activities and changes in turn directly and indirectly harm trillions of wild and domestic animals [1–4].

In the first Global Sustainable Development Report [5], there is a 43 word recognition that animal welfare is not but should be part of the sustainable development (SD) agenda. In the meantime, the direct and indirect negative impacts of our actions on wild and domestic animals continue to grow, expand and diversify, often misleadingly justified under the SD and climate change agendas (e.g., [6,7]).

The IPBES [1] (p. 62) echoes calls from scientists, scholars, civil society and other actors for transformative change to re-assess the relationship between people and nature, to

Proceedings **2021**, 73, 12 2 of 7

reduce global environmental changes, to conserve and restore nature, and to shift societal paradigms, goals and values. It concludes transformative changes are necessary to reach many, if not all, of the SD goals.

This paper responds to the discrepancy of our realities and the rhetoric of sustainability and SD. The purpose of this paper is to draw attention to the nature of the sustainability and SD discourse, to the differences between the notions of sustainability and SD, and to bring attention to the need for critical approaches to sustainability and animal studies to achieve transformation. The significance of this paper is that it identifies the theoretical and thematic foci that can amplify the transformative potential of the discourse in the intersection of animal protection and sustainability, for theory, policy, and practice.

## 2. Sustainability and Un/Sustainable Development

The concepts of sustainability and SD operate at different conceptual levels. Sustainability is understood as an ideal, a guiding principle and normative concept (e.g., [8]). It has roots in ecocentric and systems perspectives, it recognises the inherent worth of nature, and the interdependencies and dependencies of all life and biotic and abiotic communities [9,10]. As a concept, it emerged in the period 40–60 years ago. More often than not, the terms sustainability and SD are used interchangeably which, however, obfuscates and conceals moral and political concerns, and fundamental philosophical differences [9].

SD is a development model describing a negotiated path toward some notion of sustainability. A first global effort of such negotiations was popularised by the Brundtland report "Our Common Future" [11] and was enthroned with the Earth Summit in Rio de Janeiro (UNCED) in 1992. As Borowy [12] (p. 5) suggests, for the formulation of the Brundtland report, tensions needed to be reconciled which involved those between "present versus future generations, economic versus environmental perspectives, North versus South, and scientific accuracy versus political acceptability". The discourse on sustainability and SD is dominated and shaped by these events, and the subsequent UN conferences on SD in 2002 and 2012. During these two latter summits, corporate interests increased their discursive power and became successful in gaining control over the discourse [13]. Thus, the role of business in SD shifted from being largely undefined in 1992, to being considered an SD partner in 2002, and finally to becoming a driver of SD by 2012 [13].

The extreme commodification and appropriation of animal bodies driven to ever extreme heights is a logical development in this historical process. One of the injustices committed against animals raised for food are the biotechnological alterations of their bodies under the banner of efficiency for sustainable production [14]. This has health and welfare implications and further entrenches their status as production systems rather than living sentient beings [14]. Many injustices have been perpetrated under the cloak of SD against animals, humans and nature [15,16].

The SD model is challenged by various justice positions, implicitly or explicitly based on critical emancipatory perspectives. This includes ecological justice [17], social justice [15,16], environmental justice [15,16] and multispecies justice [18]. These varying justice discourses feed into shaping alternative conceptions of sustainability and sustainable development and are contextualised and referred to throughout below.

#### 3. Critical Theories and Sustainability Studies

There are various critical theory positions to draw on [19] and often, it is not made explicit which specifically authors in the field of sustainability studies align themselves with. However, often, the specific theory applied, or the existence of a general critical approach, can be identified "between the lines" through the aims expressed, themes of analysis and expressions used. Common amongst critical theory perspectives investigating the sustainability and SD discourse is, as expressed by Delanty [20] (p. 8), "to seek to disclose the antagonism and contradiction of a society predicated on infinite growth, prosperity and

Proceedings **2021**, 73, 12 3 of 7

progress but with finite resources". This entails investigating structures, practices, ideologies, relations and the political (e.g., [21]). Those applying critical theory generally are interested in understanding political structures and actors, the role of the state and private and public governance, power relations and hierarchies. All emphasise the need to investigate the circumstances that cause and maintain any form of marginalisation (e.g., [22]), promote forms of justice and a strong focus on culture is evident (e.g., [21]). Moreover, they generally have a practice orientation (e.g., [22,23]).

Re-evaluations of sustainability as a concept as such and from a critical perspective have recently been undertaken and five are identified here. Three of them draw explicitly on critical theory [20–22], and two draw on critical perspectives more generally [24,25]. The first three are presented next, the latter two which specifically focus on the intersection of sustainability and animals are discussed in Section 6.

Delanty [20] sees the purpose of critical theory as being the critique of unsustainabilities. He asserts that in doing so, sustainability regains importance by articulating alternatives positioned as critical sustainability [20] (p. 9). He believes that if "sustainability could be redeemed as a critical concept, it is possible that it could be made compatible with radical political ecology", but this requires a shift from an anthropocentric view of the world to an ecocentric view [20] (p. 9).

Ferreira [22] emphasises the articulation of a strong ecological orientation promoting ecological justice (see [16]). Ecological restoration is the central focus. The human community is seen as inherently a part of, rather than apart from, the wider ecological world and this "relational ethos serves as the epistemological foundation of novel, dynamic worlds where healing and justice are at the front and center of our cultural and ecological identities" [22].

Fuchs [21] explicitly draws on the critical theory approaches of the Frankfurt School and foregrounds an analysis of the role of class, capitalism, domination and exploitation in the current SD model. Special attention goes to the role of power asymmetries in relation to class inequalities, gender inequalities, racism, nationalism and others in the analysis of sustainability. He insists that critical sustainability consists of four dimensions, that is environmental, economic, political and cultural un/sustainability [21] (p. 455). In contrast to what is called for from an ecological justice position [17,22], Fuchs [21] (p. 455) subsumes nature under environmental sustainability. Rather than measuring growth by GDP which mainly means the growth of private businesses' profits, Fuchs [21] explains that economic sustainability needs to consider that it is labour, not capital, that produces human wealth. He asserts that communication, specifically internet communication, has become a basic human need as it supports cultural capacities, *inter alia*. He emphasises cultural sustainability whereby culture is understood as the system of the reproduction of the human mind and body, which requires recognition of and respect for humans' identities and personalities, and institutions that nourish human skills [21].

Neither Fuchs [21] nor Delanty [20] or Ferreira [22] extend their arguments to animals. In fact, Fuchs [21] appears to have a strong anthropocentric orientation. However, Delanty [20] and, even more so vehemently, Ferreira [22] express commitment to ecocentrism.

### 4. Critical Animal Studies

Critical Animal Studies (CAS) emerged at the beginning of this century. CAS scholars have developed a CAS-specific critical theory by, *inter alia*, drawing on existing critical theories. CAS focuses on animal exploitation, their historical roots, and the political and institutional structures that make it possible, in order to identify pathways to end animal exploitation. CAS scholars also aim to understand the actual life situations of animals who are enmeshed in human society, as experienced physically and emotionally by the animals themselves [26] (p. ix). Importantly, CAS scholars are motivated by political and ethical commitments to improving the plight of animals, and to bringing about transformation and justice for animals [27,28]. CAS scholars strive to "translate their normative

Proceedings **2021**, 73, 12 4 of 7

frameworks into practical action and praxis" [23]. The uniting understanding of CAS is "that animals' lives and deaths are deeply political, that they cannot be separated from intersecting forms of justice (e.g., what can broadly be described as social, political and environmental justices in the human context), and that hierarchical orders are a primary source of animals' subordination" [28]. In that sense, it an be broadly stated that CAS embraces all notions of justice that critical sustainability studies embraces, but has extended them to apply to animals.

Wadham [29] recently also turned to critical theory in the tradition of the Frankfurt School and describes its potential for animal studies, a potential that CAS scholars have made use of for two decades, as follows:

"First, it reveals how animals (and people) are engaged within hierarchical relations and the implications of this for individual animals or animal groups. That is, Critical Theory enables us to understand the marginalization of domestic animals... and its wider significance. Second, Critical Theory provides a practical framework through which we might begin to challenge the marginalization of particular individuals or groups of nonhuman actors. Third, the normative ambitions of Critical Theory promise a new political imaginary that can advance the idea of this broader, more inclusive moral community." [29] (p. 4).

## 5. Veterinary Humanities

Seen through a CAS lens, the animal and veterinary sciences can hold a problematic position as they can be perceived as enablers and facilitators of animal control, use and exploitation, through their positions and roles in the structural and institutional systems where animals are used (see e.g., [24]). The emergence of the new interdisciplinary field of Veterinary Humanities is therefore of particular interest. The term Veterinary Humanities has been introduced by Weich [30]. She explains that this new field considers the veterinary sciences within their social entanglements and with historical, moral-philosophical and political theory perspectives [30] (p. 245). The field has critical ambitions as it sets out to investigate the moral, normative and political dimensions of the veterinary sciences within the context of multi-species realities [30].

The starting point of Veterinary Humanities is the proposition that there is no neutral purely science-based veterinary science [30] (p. 246). It is recognised that how health and ill-health are defined is of a social and political nature, culturally dependent, and emergend in an ongoing dialogue between society and the veterinary fields [30] (p. 245). Questions are asked about the structures and powers involved in phenomena such as veterinisation which is seen as an offspring of medicalisation [31]. For example, Broz discusses processes of veterinisation where the world is described in purely medical terms, where experts manage ways of living, where particular actors participate in such processes which are intensified in times of crisis [31]. This has increasing relevance in a world of escalating environmental crises which present health and welfare challenges for animals, in particular when these challenges are perceived to directly impact human interests such as human health and economic systems (e.g., [32]). Veterinary Humanities therefore has a critical role to play for the discourse in the intersection of animal protection and sustainability.

#### 6. Interspecies and Multispecies Sustainability Studies

Bergmann [24] and Rupprecht et al. [25] developed frameworks for inter- and multispecies sustainability respectively. For the purpose of this paper, multispecies and interspecies sustainability can be considered interchangeable terms. Rupprecht et al.'s [25] (p. 2) starting point is that "the current sustainability concept focuses on a perceived generational conflict, namely between those currently living and those yet to be born, rather than situating this relationship in broader contexts of intrahuman and interspecies relationProceedings **2021**, 73, 12 5 of 7

ships". They explore these broader contexts and develop a multispecies sustainability concept built on the interdependence of all life. Their focus is strongly on ecological justice, which is linked in their work with environmental and social justice. They developed four multispecies sustainability-derived future scenarios. One of them, the "shared futures of multispecies wellbeing scenario" [25] (p. 7, Figure 5), is characterised by seven aspects, three of which show parallels to the aspects of Bergmann's model [24] listed below, including "mutual flourishing", "multispecies operational autonomy" and "biocultural diversity". The other four aspects describing the nature of their multispecies wellbeing scenario are "world in which many worlds fit", "post-development and degrowth pluriverse", "limited wants/unlimited means" and "sufficiency-oriented economies".

Bergmann [24] developed a model of interspecies sustainability suited for situating practices, industries, communities or activities in relation to interspecies sustainability. Her focus is on animal-human relations and the animal condition which are understood as a guide for structures and institutions to enable the flourishing of these relations and conditions. She identified aspects that need to be addressed to achieve conditions of interspecies sustainability and which are viewed through ecojustice and multispecies justice concerns. These include the flourishing of animal agency and justice, animal physiological and psychological integrity, animal cultures and knowledge systems, inter- and intraspecies relationality, naturalness and ecocentrism. Animal representation and governance are also considered. To assess the progress toward interspecies sustainability, she developed an analytical tool, the Layers of Engagement with Animal Protection. This can be applied in a policy or research related context, to identify at what layer a particular discourse and affiliated practices for animal protection take place. The layers range from those striving to maintain the status quo through to reform and to those aiming at transformation. The Layers of Engagement have been further developed in a subsequent paper [33]. In her case study, she found that the most significant impediments to improving the lives of animals are based in the cultural and socio-cultural realms, and within a problematic understanding of what is nature and what is not nature.

## 7. Conclusions

It has been demonstrated that there are convergences between critical approaches to sustainability studies and to animal studies. All identify the cultural and political domains as important foci to advance sustainability and animal protection. Some are framed more within environmental and social justice dimensions, others within ecojustice and multispecies justice dimensions. There is strong commitment to practice, and some of the studies presented in this paper include case studies that demonstrate the dialectic relationship between theory and practice. For reasons of justice and considering the escalating ecological crises, critical approaches should adopt an ecological and multispecies justice framework. Interspecies Sustainability Studies needs to be critical in outlook to contribute to solutions for transforming governance, institutions, and cultures for a truly sustainable world. Veterinary Humanities can be expected to make important contributions for the intersection of animals and global sustainability. Attention needs to be paid to the role of conceptualisations of nature and how they can facilitate or hinder transformation for interspecies sustainability, to protect animals, end their exploitation and thus make a sustainable future possible for all.

Funding: This research received no external funding.

**Acknowledgments:** The author would like to thank Phil McManus for his support for the development and publications of the earlier work that this paper draws on.

**Conflicts of Interest:** The author declares no conflict of interest.

Proceedings **2021**, 73, 12 6 of 7

#### References

1. IPBES. Workshop Report on Biodiversity and Pandemics of the Intergovernmental Platform on Biodiversity and Ecosystem Services (IP-BES); Zenodo: Bonn, Germany, 2020.

- 2. Nordquist, R.E.; van der Staay, F.J.; van Eerdenburg, F.J.C.M.; Velkers, F.C.; Fijn, L.; Arndt, S.S. Mutilating Procedures, Management Practices, and Housing Conditions That May Affect the Welfare of Farm Animals: Implications for Welfare Research. *Animals* 2017, 7, 12.
- 3. Almiron, N.; Faria, C. Climate Change Impacts on Free-Living Nonhuman Animals. Challenges for Media and Communication Ethics. *SMC* **2019**, *7*, 37–48.
- 4. Lacetera, N. Impact of climate change on animal health and welfare. Anim. Front 2019, 9, 26–31.
- 5. Independent Group of Scientists appointed by the Secretary-General Global Sustainable Development Report 2019: The Future is Now–Science for Achieving Sustainable Development; UN: New York, NY, USA, 2019.
- 6. Jacquet, J.; Franks, B.; Godfrey-Smith, P.; Sánchez-Suárez, W. The Case against Octopus Farming. *Issues Sci. Technol.* **2019**, *35*, 37–44.
- 7. Belaunzaran, X.; Bessa, R.J.B.; Lavín, P.; Mantecón, A.R.; Kramer, J.K.G.; Aldai, N. Horse-meat for human consumption—Current research and future opportunities. *Meat Sci.* **2015**, *108*, 74–81.
- 8. Dobson, A. Environment sustainabilities: An analysis and a typology. Environ. Politics 1996, 5, 401–428.
- 9. Hector, D.C.; Christensen, C.B.; Petrie, J. Sustainability and Sustainable Development: Philosophical Distinctions and Practical Implications. *Environ. Values* **2014**, *23*, 7–28.
- 10. Washington, H. Demystifying Sustainability: Towards Real Solutions; Routledge: Abingdon, UK, 2015.
- 11. WCED. Our Common Future; Oxford University Press: Oxford, UK, 1987.
- 12. Borowy, I. Defining Sustainable Development for Our Common Future a History of the World Commission on Environment and Development (Brundtland Commission); Routledge: Milton Park, Abingdon, Oxon, UK; New York, NY, USA, 2014.
- 13. Amaeshi, K.; Ferns, G. Struggles at the Summits: Discourse Coalitions, Field Boundaries, and the Shifting Role of Business in Sustainable Development. *Bus. Soc.* **2019**, *58*, 1533–1571.
- 14. Twine, R. Animals as Biotechnology: Ethics, Sustainability and Critical Animal Studies; Earthscan: London, UK, 2010.
- 15. Lélé, S.M. Sustainable development: a critical review. World Dev. 1991, 19, 607-621.
- 16. Gottschlich, D.; Bellina, L. Environmental justice and care: critical emancipatory contributions to sustainability discourse. *Agric. Hum. Values* **2017**, *34*, 941–953.
- 17. Washington, H.; Chapron, G.; Kopnina, H.; Curry, P.; Gray, J.; Piccolo, J.J. Foregrounding ecojustice in conservation. *Biol. Conserv.* 2018, 228, 367–374.
- 18. Celermajer, D.; Schlosberg, D.; Rickards, L.; Stewart-Harawira, M.; Thaler, M.; Tschakert, P.; Verlie, B.; Winter, C. Multispecies justice: theories, challenges, and a research agenda for environmental politics. *Environ. Politics* **2020**, 1–22. doi:10.1080/09644016.2020.1827608.
- 19. Devetak, R. Critical theory. In *Theories of International Relations*; Burchill, S., Linklater, A., Devetak, R., Eds.; Palgrave Macmillan: New York, NY, USA, 2013; pp. 162–186.
- 20. Delanty, G. Critical Theory as a Critique of UnSustainability: 'Damaged life' in the Anthropocene. *Estudios Públicos* **2020**, *159*, 7–37
- 21. Fuchs, C. Critical Social Theory and Sustainable Development: The Role of Class, Capitalism and Domination in a Dialectical Analysis of Un/Sustainability: Critical Social Theory and Sustainable Development. *Sustain. Dev.* **2017**, 25, 443–458.
- 22. Ferreira, F. Critical sustainability studies: A holistic and visionary conception of socio-ecological conscientization. *J. Sustain. Educ.* **2017**, *13*, 1–22.
- 23. Wadiwel, D.; Chen, P. Introduction: New Directions in Animal Advocacy. Anim. Stud. J. 2019, 8, 1-8.
- 24. Bergmann, I.M. Interspecies Sustainability to Ensure Animal Protection: Lessons from the Thoroughbred Racing Industry. *Sustainability* **2019**, *11*, 5539.
- 25. Rupprecht, C.; Vervoort, J.; Berthelsen, C.; Mangnus, A.; Osborne, N.; Thompson, K.; Urushima, A.F.; Kóvskaya, M.; Spiegelberg, M.; Cristiano, S.; et al. Multispecies Sustainability. *Glob. Sustain.* **2020**, *3*, 1–12.
- 26. Pedersen, H.; Stănescu, V. What is "critical" about animal studies? From the animal "question" to the animal "condition." In Women, Destruction, and the Avant-Garde: A Paradigm for Animal Liberation; Socha, K., Ed.; Brill: New York, NY, USA, 2012; pp. ix—xii.
- 27. Taylor, N., Twine, R. (Eds.) *The Rise of Critical Animal Studies: From the Margins to the Centre*, 1st ed.; Routledge: London, UK; New York, NY, USA, 2014.
- 28. Gillespie, K., Collard, R.-C. (Eds.) *Critical Animal Geographies: Politics, Intersections and Hierarchies in a Multispecies World;* Routledge human-animal studies series; Routledge: Abingdon, UK, 2015.
- 29. Wadham, H. Relations of Power and Nonhuman Agency: Critical Theory, Clever Hans, and Other Stories of Horses and Humans. *Sociol. Perspect.* **2020**, *64*, 109–126.
- 30. Weich, K.L. Veterinary Humanities-Moral für Tierärzte und ihre Patienten. Tieraerztl Umschau 2014, 69, 243-247.
- 31. Broz, L. Veterinarization of the Future and its Zoonotic Limits. Conference Presentation at Doing Animal Health in More-Than-Human Worlds, First Digital Conference for the Network of Veterinary Humanities, Vienna, Austria, 8–9 October 2020.

*Proceedings* **2021**, 73, 12 7 of 7

32. Forman, S.; Hungerford, N.; Yamakawa, M.; Yanase, T.; Tsai, H.-J.; Joo, Y.-S.; Yang, D.-K.; Nha, J.-J. Climate change impacts and risks for animal health in Asia. *Rev. Sci. Technol.* **2008**, *27*, 581–597.

33. Bergmann, I.M. Naturalness and the Legitimacy of Thoroughbred Racing: A Photo-Elicitation Study with Industry and Animal Advocacy Informants. *Animals* **2020**, *10*, 1513.