DIVERSITY



Mainstreaming the humanities in conservation

Correspondence

George Holmes, School of Earth and Environment, University of Leeds, Leeds LS2 9JT, UK. Email: g.holmes@leeds.ac.uk

Article Impact Statement: Including humanities research alongside natural and social science will make conservation fairer and more effective.

THE ENVIRONMENT AS A HUMANITIES SUBJECT

Anthropogenic biodiversity loss is, by definition, a human and social issue. Understanding humans and their societies is an essential part of mitigating biodiversity loss, and to do so, conservation must engage with relevant knowledge. In recent years, there has been a push to "mainstream" the social sciences into conservation science, practice, and policy as a counterpoint to the perceived dominance of the natural sciences (Bennett et al., 2017). This is driven by a growing recognition that the natural sciences alone are insufficient to address conservation problems. Conservation biology has become increasingly diverse, with an ever-widening range of interdisciplinary approaches reflected in academic journals, scholarly institutions, scientific societies, and conservation organizations, as well as in grounded conservation work. Yet, if conservation is to fully "think like a human" (Adams, 2007)—a necessary step for solving conservation problems—it must become more interdisciplinary still by integrating environmental humanities into conservation education, science, and practice.

Environmental humanities has emerged in recent decades as a broad interdisciplinary movement, geared toward understanding the relationship between society and the nonhuman environment. Key questions revolve around language and meaning, history and culture, value and ethics—foundational areas for humanities research that recognizes that knowledge is inseparable from human subjectivity and that current and future social and ecological needs are best served by a greater understanding of culture and values (Small, 2013). The movement is based on

concepts and methods that, although also drawing on the more traditional science-based disciplines, are primarily derived from humanities disciplines, such as literary and cultural studies, history, philosophy, and religious studies (Emmett & Nye, 2017).

At the same time, environmental humanities shows that humanities research is not just about human beings and that, even when it is, it is just as likely to interrogate human arrogance as it is to celebrate human achievement and to question the very idea of the human itself (Rose et al., 2012). Although humanities scholarship on the more than human is broad, sometimes encompassing subjects not directly related to conservation, such as domestic animals, it puts the interactions between nonhuman species, natural environments, and humans (particularly the ethics of these relationships) at the center of its approach. Recent examples include work in multispecies ethnography (Kirksey, 2014), human-animal studies (Marvin, 2019), and postcolonial ecocriticism (Huggan & Tiffin, 2015). Environmental humanities has produced a sizeable body of relevant work and has its own journals, conferences, research centers, and degrees, yet, it is still largely unintegrated into conservation, although it offers unique and useful insights and perspectives.

DEFINING THE CONSERVATION HUMANITIES

We consider conservation humanities to be an emergent subsection of environmental humanities that focuses on biodiversity loss and efforts to address it and studies these efforts

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2021 The Authors. Conservation Biology published by Wiley Periodicals LLC on behalf of Society for Conservation Biology

Conservation Biology. 2021;1-4. wileyonlinelibrary.com/journal/cobi

¹ School of Earth and Environment, University of Leeds, Leeds, UK

² School of English, University of Leeds, Leeds, UK

³ Rachel Carson Center for Environment and Society, LMU Munich, Munich, Germany

through humanistic ideas and methods. It provides insights into questions of human culture, values, history, and behavior, including both that of conservationists and those upon whom they seek to act. Following Sandbrook et al.'s (2013) crude but useful distinction between social science on and for conservation, humanities scholarship encompasses both pure research on conservation, studying conservation as a social and cultural phenomenon (e.g., Drayton, 2005), and applied research for conservation, aiming to contribute to conservation's normative mission to address biodiversity loss by providing a detailed understanding of humanity's interactions with nature and illuminating possibilities for improvement (Szabó & Hédl, 2011).

Like the broader environmental humanities, the conservation humanities incorporates many disciplines, methods, and sources of data. Literary and media scholars have considered how nature and biodiversity loss are represented in fiction, nature writing, and nature broadcasting; analyzed the stories that conservationists and others tell about the natural world; and investigated how these narratives in turn have shaped biodiversity loss and conservation actions (Huggan, 2013). Historians have used written sources and oral histories to explore how human actions over time have influenced biodiversity and how changes in biodiversity have reshaped human society and culture (Rotherham, 2014). They have also charted the history of the conservation movement itself, particularly the influence of key drivers of change, such as imperialism, scientific progress, and economic transformation (Drayton, 2005; Gissibl, 2016). Cultural anthropologists and human geographers, operating at the fuzzy boundary between humanities and social science, have undertaken similar research on more contemporary cases (West, 2006), often drawing on marginalized modes of knowledge and understanding, such as Indigenous perspectives. Philosophers have examined key concepts and ethical principles underpinning conservation science, identifying ways humans and nonhumans can live convivially (Haraway, 2008).

Despite this work on conservation-related topics within university humanities departments, these approaches have rarely been integrated into conservation science. There have been efforts by ethicists, religious scholars, philosophers, and historians in particular to publish in conservation journals and work within conservation structures, such as IUCN Task Forces and SCB Working Groups, without necessarily making claims for humanities disciplines more broadly (e.g., Pooley, 2014; Szabó & Hédl, 2011). Other humanities approaches, such as literary and media studies, have been largely absent. At present, there are very few conservationists with humanities training. Sandbrook et al.'s (2019) global survey of 9264 conservationists found only 3% of respondents reporting that they were trained in the humanities, compared with 60% who reported training in natural sciences. Conservation degrees focus overwhelmingly on biological sciences despite longstanding calls for greater interdisciplinarity (Gardner, 2020). Moreover, conservationists and natural scientists have rarely contributed to the environmental humanities journals and conferences that have emerged in recent decades. It is an indictment of both the environmental humanities and mainstream conservation science that, despite the volume and quality of their respective work and their shared

interests, these two worlds exist largely in parallel. The same goes for policy and action. Humanities scholars have been slow to engage in work that has direct policy relevance, and they remain underrepresented in global conservation structures, such as IPBES, despite calls for greater inclusion (Turnhout et al., 2012; Vadrot et al., 2016).

THE HUMANITIES' CONTRIBUTION TO CONSERVATION

Our view is that engaging with the humanities can make conservation science—and practice—better, and vice versa, by bringing in new questions, methods, and ways of thinking. This may not make for comfortable or easy conversations, given that humanities research has both the capacity and the tendency to challenge key concepts, unspoken assumptions, and shibboleths in conservation. There are admittedly potential difficulties in the use of different forms of data and evidence in the humanities, particularly qualitative methods strongly grounded in specific times and places rather than the more generalizable quantitative research to which many natural scientists aspire. Following the experience of social scientists, humanities researchers may also find that their critical exploration of the assumptions underpinning the global conservation movement, especially those surrounding controversial practices and topics, ends up generating frustration alongside insight (Redford, 2011). Humanities scholars need to be willing to step out of their discipline and engage with sufficient scientific literacy and with humility, rather than critiquing from on high or afar, to recognize the diversity of disciplines and views already extant within conservation. Recent critical work of relevance to conservation science accommodates such capacious topics as extinction (Van Dooren, 2014), landscape (Ingold, 2020), in and ex situ conservation (Braverman, 2015), the politics of nature and wildlife conservation (Lorimer, 2015), the role of emotions in wildlife conservation (Jørgensen, 2019), how cultural representations of wildlife influence these emotions (Weik von Mossner, 2014), and the meaning and value of biodiversity itself (Garson, 2019). Of course, these topics are not new to conservation biology, but humanities disciplines tend to examine them differently, placing particular emphasis on the meanings they carry, the histories they are built on, and the (often unacknowledged) attitudes underpinning them.

To provide an example, in our current work in the Corridor Talk project (https://conservationhumanities.com), which examines European national parks situated on national borders, we are interested in the role these parks play in local perceptions of place and identity, in human and animal movements, and in exploring conservation as refracted through multiple languages and cultures. Our work covers established conservation topics, such as human—wildlife interactions, invasive species, wildness, and ecological corridors and connectivity, but uses different theories and methods from those typically deployed by our natural scientist colleagues. We emphasize questions about who belongs (both humans and nonhumans) to places within and outside protected area boundaries, which social and ecological

processes are legitimate here, and how different conservation futures for these places are both enabled and constrained by the political and cultural context in which they are currently located. We use text-based approaches to explore how the geomorphology and ecology of the parks are represented in writings and images and how these representations have shaped some of the decisions made about their conservation. We use historical documents to explore how problem species in these parks have been understood and classified in different places and periods and with what practical consequences. We use visual ethnography to explore how humans and animals move through these parks, how this leads to both conflict and coexistence, and whether participatory video can provide new solutions to longstanding human-wildlife conflicts. Such approaches challenge conservationists to engage afresh with the way protected landscapes and their inhabitants are valued and imagined.

A conservation humanities approach can also draw attention to perspectives that have been marginalized, silenced, or neglected but have the potential to enrich conservation debates. Extensive humanities and social sciences work on topics, such as indigenous peoples and colonialism should be an essential part of efforts to create a more representative and inclusive conservation movement (Adams & Mulligan, 2002). The work of humanities scholars and the cultural institutions in which they often work, such as museums, can be a conduit for bringing the voices of the marginalized into conversation with those of the white, male, western natural scientists who tend to dominate conservation discourse (Chambers, 2017; Sandbrook et al., 2019). Integrating the humanities can ensure conservation research focuses not only on truth seeking, but also that it informs and facilitates dialogues on the plural values and visions related to what to conserve and where, how, and why. It can thus help conservation aim for agonistic pluralism rather than illusory consensus (Matulis & Moyer, 2017).

Although conservation overall is "diverse but not divided" (Sandbrook et al., 2019), there are statistically significant differences in the views and values of conservationists related to their disciplinary training. Integrating the humanities is a route toward greater diversity in conservation. As we come to rethink conservation today—what conservation is, what it aims to do, and how it can best go about doing it—it seems incumbent on us to draw, not just on the natural and social sciences, but also on the insights provided by humanities disciplines. Conservation projects should be truly interdisciplinary, embedding humanities insights from the start as an integral part of the process rather than adding them at the end solely to facilitate communication. There are models for this kind of work elsewhere, in fields such as environmental justice or river management (Mould et al., 2018), where the humanities are integrated into research and practice, leading to more reflective and better science and more effective and equitable solutions. The Society for Conservation Biology should consider a Humanities and Culture Working Group to sit alongside its existing Social Science Working Group to advocate for, facilitate, and strengthen humanities training and research in conservation and its application to conservation practice. Calls to incorporate more humanities

research into conservation bodies and decision-making structures may not be new, but they need heeding more than ever.

ACKNOWLEDGMENTS

This work was undertaken as part of the research project "Corridor Talk: Conservation Humanities and the Future of Europe's National Parks," funded jointly by the Arts and Humanities Research Council (UK) and Deutsche Forschungsgemeinschaft (Germany).

ORCID

George Holmes https://orcid.org/0000-0002-5393-5753

Jonathan Carruthers-Jones https://orcid.org/0000-0002-03122455

Graham Huggan https://orcid.org/0000-0002-3375-1033

Katie Ritson https://orcid.org/0000-0002-0665-8597

LITERATURE CITED

Adams, W., & Mulligan, M. (2002). Decolonizing nature: Strategies for conservation in a post-colonial era. Oxford: Routledge.

Adams, W. M. (2007). Thinking like a human: Social science and the two cultures problem. Oryx, 41(3), 275–76.

Bennett, N. J., Roth, R., Klain, S. C., Chan, K. M. A., Clark, D. A., Cullman, G., & Veríssimo, D. (2017). Mainstreaming the social sciences in conservation. *Conservation Biology*, 31(1), 56–66.

Braverman, I. (2015). Wild life: The institution of nature. Stanford, CA: Stanford University Press.

Chambers, I., De Angelis, A., Ianniciello, C., & Orabona, M., et al. (2017). The postcolonial museum: The arts of memory and the pressures of history. Oxford: Routledge.

Drayton, R. (2005). Nature's government: Science, imperialism and the "improvement" of the world. New Haven, CT: Yale University Press.

Emmett, R., & Nye, D. (2017). The environmental humanities: A critical introduction. Cambridge, MA: MIT Press.

Gardner, C. J. (2020). Not teaching what we practice: Undergraduate conservation training at UK universities lacks interdisciplinarity. *Environmental Conser*vation, 48(1), 1–6.

Garson, J. (2019). The Routledge handbook of philosophy of biodiversity. Oxford: Routledge.

Gissibl, B. (2016). The nature of German imperialism: Conservation and the politics of wildlife in colonial East Africa. New York: Berghahn.

Haraway, D. (2008). When species meet. Minneapolis, MN: University of Minnesota

Huggan, G. (2013). Nature's saviours: Celebrity conservationists in the television age. Oxford: Routledge.

Huggan, G., & Tiffin, H. (2015). Postcolonial ecocriticism: Literature, animals, environment. Oxford: Routledge.

Ingold, T. (2020). Correspondences. Oxford: John Wiley & Sons.

Jørgensen, D. (2019). Recovering lost species in the modern age: Histories of longing and belonging. Cambridge, MA: MIT Press.

Kirksey, E. (2014). The multispecies salon. Durham, NC: Duke University Press.

Lorimer, J. (2015). Wildlife in the Anthropocene: Conservation after nature. Minneapolis, MN: University of Minnesota Press.

Marvin, G. (2019). The Routledge handbook to human—animal studies. Oxford: Routledge.

Matulis, B. S., & Moyer, J. R. (2017). Beyond inclusive conservation: The value of pluralism, the need for agonism, and the case for social instrumentalism. *Conservation Letters*, 10(3), 279–287.

Mould, S. A., Fryirs, K., & Howitt, R. (2018). Practicing sociogeomorphology: Relationships and dialog in river research and management. Society & Natural Resources, 31(1), 106–120.

Pooley, S. (2014). Historians are from Venus, ecologists are from Mars. Conservation Biology, 27(6), 1481.

- Redford, K. H. (2011). Misreading the conservation landscape. Oryx, 45(3), 324–330.
- Rotherham, I. (2014). *Eco-history: An introduction to biodiversity & conservation*. Cambridge: White Horse Press.
- Rose, D. B., Van Dooren, T., Chrulew, M., Cooke, S., & Kearnes, M., et al. (2012). Thinking through the environment, unsettling the humanities. *Environmental Humanities*, 1(1), 1–5.
- Sandbrook, C., Adams, W. M., Büscher, B., & Vira, B. (2013). Social research and biodiversity conservation. *Conservation Biology*, 27(6), 1487–1490.
- Sandbrook, C., Fisher, J. A., Holmes, G., Luque-Lora, R., & Keane, A. (2019). The global conservation movement is diverse but not divided. *Nature Sustainability*, 2(4), 316–323.
- Small, H. (2013). The value of the humanities. Oxford: Oxford University Press.Szabó, P., & Hédl, R. (2011). Advancing the integration of history and ecology for conservation. Conservation Biology, 25(4), 680–687.
- Turnhout, E., Bloomfield, B., Hulme, M., Vogel, J., & Wynne, B., et al. (2012). Listen to the voices of experience. *Nature*, 488(7412), 454–455.

- Vadrot, A. B., Jetzkowitz, J., & Stringer, L. C. (2016). IPBES disciplinary gaps still gaping. *Nature*, 530(7589), 160.
- Van Dooren, T. (2014). Flight ways: Life and loss at the edge of extinction. New York: Columbia University Press.
- Weik von Mossner, A. (2014). Moving environments: Affect, emotion, ecology, and film. Waterloo: WLU Press.
- West, P. (2006). Conservation is our government now: The politics of ecology in Papua New Guinea. Durham, NC: Duke University Press.

How to cite this article: Holmes, G.,

Carruthers-Jones, J., Huggan, G., et al. Mainstreaming the humanities in conservation. *Conservation Biology*. 2021; 1–4. https://doi.org/10.1111/cobi.13824