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## BIOPOLITICS AND ANIMAL SPECIES IN NINETEENTH-CENTURY LITERATURE AND SCIENCE

Principles of species taxonomy were contested ground throughout the nineteenth century, including those governing the classification of humans. Matthew Rowlinson shows that taxonomy was a literary and cultural project as much as a scientific one. His investigation explores animal species in Romantic writers including Gilbert White and John Keats, taxonomies in Victorian lyrics and the nonsense botanies and alphabets of Edward Lear, and species, race, and other forms of aggregated life in Charles Darwin's writing, showing how the latter views these as shaped by unconscious agency. Engaging with theoretical debates at the intersection of animal studies and psychoanalysis, and covering a wide range of science writing, poetry, and prose fiction, this study shows the political and psychic stakes of questions about species identity and management. This title is part of the Flip it Open Programme and may also be available Open Access. Check our website Cambridge Core for details.

MATTHEW ROWLINSON is Professor of English at the University of Western Ontario. He is the author of *Real Money and Romanticism* (Cambridge University Press, 2010) and *Tennyson's Fixations: Psychoanalysis and the Topics of the Early Poetry* (1994). His edition of Tennyson's *In Memoriam* was published in 2014.

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MATTHEW ROWLINSON

*University of Western Ontario*



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*To the memory of Elizabeth and Hugh, my mother and  
father*

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*[T]he unknown of a science is not what empiricist ideology thinks: its “residue,” what it leaves out, what it cannot conceive or resolve; but par excellence what it contains that is fragile despite its apparently unquestionable “obviousness,” certain silences in its discourse, certain conceptual omissions and lapses in its rigor, in brief, everything in it that “sounds hollow” to an attentive ear, despite its fullness.*

—Louis Althusser, Reading “Capital”

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## *Preface and Acknowledgements*

This book is about a cluster of problems in human–animal relations in the nineteenth century. It belongs to the field of literary animal studies, both because in it I presume that the techniques of literary analysis can produce historical understanding, and because, as Jacques Derrida wrote, poetry has a special privilege in thinking about animals.<sup>1</sup> The first part of the book concerns poetry about non-human animals that intervenes in the age-old debate on their capacity to speak. There is an immense literature of speaking animals; my topic is a contrasting tradition that deprives them of speech and makes poetic onomatopoeia a medium for their extralinguistic utterance. In the nineteenth century, in a turn of events that is one of the book's points of departure, this poetic technique was appropriated for science, and onomatopoeic renderings, or “spellings,” of their songs became a tool with which naturalists could assign birds heard in the wild to their proper species.<sup>2</sup>

The writings I will study here have as context the decentering of the species concept over two centuries of history.<sup>3</sup> Europeans' expeditions of exploration and conquest introduced them to new types of flora and fauna worldwide. The seventeenth-century development of microscopy revealed the existence of new types of life on hitherto unsuspected spatial scales; in the late eighteenth century, discoveries in geology enlarged life's extension on the scale of time and began to establish the regular extinction of previous forms and the serial appearance of new ones. A result of these developments was the Linnaean taxonomical revolution of the eighteenth century, and ensuing debates about the nature of species, including discussion by the Comte de Buffon and Lord Monboddo of the relation between human and non-human animal species.

In the same period, species became more plastic. Speculation on species transmutation was frequent in the natural philosophy of late eighteenth-century Germany; Charles Darwin's grandfather Erasmus also believed in the mutability of species. More centrally for the purposes of this book,

eighteenth-century animal breeders like Robert Bakewell developed techniques of herd management and record-keeping that enabled them to modify species in type more quickly and predictably than had hitherto been possible. In the field of political economy, Thomas Malthus's *Essay on the Principle of Population*, published in 1798, viewed species populations as modifiable in number by influences coming to bear on their rates of reproduction and mortality. Darwin acknowledged scientific breeding and Malthusian political economy as major influences on his work; more generally, they established the basis for a nineteenth-century understanding of species as biological populations with sex and death as basic influences on the species body's number and type.

*Biopolitics and Animal Species* does not undertake a comprehensive view of either of its topics, certainly not of biopolitics, the emergence of living populations as targets of power, which Michel Foucault viewed as "one of the basic phenomena of the nineteenth century."<sup>4</sup> A comprehensive history of the species concept from Linnaeus and Buffon to Darwin is a book I wished for while I was thinking about this one, but it isn't what I have written, and indeed I have come to the conclusion that no such history is possible. In something like Karl Marx's sense, the concept has no history because it is ideological; it has no independent existence, and once it becomes unmoored from theology, it has no clear and determinate sense for anyone who uses it. Species nonetheless *matter* in the nineteenth century, as objects of desire and identification; as populations subject to improvement, protection, and extinction; and as subjects of scientific inquiry.

In the absence of a stable referent, this book argues that the species concept becomes associated with symptomatic behaviour in those who use it, and indeed that species identity itself is held to depend on different kinds of automatic and unmotivated action. This argument will be pursued in three distinct fields. After an introductory chapter, Part I is on poetry about species: poems that use onomatopoeia as a technology for species identification and more generally poems in which species are given voice; nonsense poetry, which I will read as onomatopoeia's antithesis, and which we will see also to be engaged in representing species.

Part II consists of a close reading of the motifs of automatism and unconscious action in the writing of Charles Darwin. I will argue that Darwin is preoccupied with these topics because, while he never develops a systematic concept of species, species play an indispensable role in his theory as agents in natural selection and as the objects it works to improve; they are thus invested with different kinds of agency that cannot know

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itself as such. In Chapter 5, I argue that Darwin's figures of unconscious and automatic agency had an important influence on Sigmund Freud, and, in an argument to be taken up in Part III, that the subject of Freudian psychoanalysis is shaped by a problematic in the species concept.

Part III returns to literature, reading literary texts in conjunction with episodes from the history of medicine and from the new science of anthropology to consider how the nineteenth century embodied species, race, and kin groups in fantasized collective bodies having a shared circulation of blood. At its close, the book picks up a thread from Part II and returns to the links between Darwin and Freud, arguing that they shared the concept of a species body that unconsciously bears the traces of its own history, and thus both present their work as a lifting of repression, a bringing to consciousness of knowledge that already has an unofficial existence in poetry, figures of speech, and animal lore.

The book's three parts can be read separately, and to some extent intervene in different fields, including nineteenth-century poetry and poetics, Darwin studies, and the history of medicine. They originated, moreover, as occasional papers on three different topics: poetic onomatopoeia, Darwin and the Freudian symptom, and economies of blood. As I accumulated archives in each of these fields, it struck me that they were all related to the topic of biological species, and this book began to take shape.

My principal hope for it is that the readings of literary and scientific texts it contains will add to our understanding of the nineteenth century. Among the audiences I hope for are readers and teachers of poems about animals, readers and teachers of Darwin, of late Victorian anthropology, and of the extensive late Victorian literature about the shedding, sharing, and circulation of blood. Beyond whatever contribution it makes in the individual readings, the book as a whole also mounts an implicit argument for the value of symptomatic reading as a tool for understanding discourses, like the nineteenth-century discourse of species, that appear in the ruins of theology.

As this narrative implies, *Biopolitics and Animal Species* has been a project with a long gestation, and I have had much help in researching it and in thinking about the problems it takes up. My principal resources in doing the archival work the book includes, especially on the histories of bloodletting and blood transfusion and on the Edinburgh bloodletting controversy, were the Wellcome Library and the British Library. I have relied throughout on the resources of the D. B. Weldon and Allyn and Betty Taylor Libraries at Western University, especially on the remarkable Hannah Collection in the History of Science and Medicine. My sincere

thanks to all these institutions, and to the many librarians who over the years have assisted me.

I also must thank Western University for research funding and for sabbatical release over the years, and above all for the colleagues and students with whom it has been my privilege to work for more than twenty years in the Department of English and Writing Studies and the Centre for the Study of Theory and Criticism. In particular, I was first led to think about Darwin and Walter Scott by an invitation to participate in a conference at Western on “Romanticism and Evolution,” organized by Joel Faflak, Josh Lambier, Chris Bundock, and Naqaa Abbas in 2011; my thanks to them, and especially to Joel, who edited the conference proceedings, in which appeared a version of Chapter 4, alongside the work of eminent Darwinians whose work as presented at the conference had a profound influence on my thinking going forward. Also at Western, I would like to thank the other members of the Animal Studies Research Group, especially the convenors Stuart Cheyne and Raj Banerjee and my colleague Josh Schuster, with whom I have had the privilege of exploring the developing field of animal studies.

Outside Western, I have benefitted from presenting parts of this work in talks; I should note at least two sessions at different meetings of the North American Victorian Studies Association, where I was grateful for conversations with Meredith Martin and Julia Saville, among many others. Alan Bewell and Terry Robertson arranged a visit to the University of Toronto Nineteenth-Century Studies group (WINCS), with Alan in particular offering detailed responses to a version of material here in Part III. Later on, mid-pandemic, Elaine Freedgood arranged an online talk through New York University; Elaine and others including Marjorie Levinson gave valuable responses to some early-stage writing at a moment when I, like everyone, was feeling particularly isolated.

At the close of these acknowledgements, I will mention print publications of different versions of material that has now found its way into this book. Each publication was peer-reviewed, largely by readers who were not identified to me, but to whom I am nonetheless grateful. Charles Rezpka, then the editor of *Studies in Romanticism*, gave a highly clarifying response to a version of Chapter 2 before it appeared in that journal, much improved by his intervention. I continued to appreciate Chuck’s help as I revised it for this volume. Finally, I am deeply grateful to Bethany Thomas and the editorial team at Cambridge, to the anonymous readers for the Press, and to the Cambridge Studies in Nineteenth-Century Literature and Culture

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Above all, my thanks to friends with whom I have been discussing the ideas in this book for years. Peter Stallybrass pointed me towards Edward Lear's nonsense botanies, and also tracked down details of the family history of Sarah Waring, author of *Minstrelsy of the Woods*, to be discussed in Chapter 1. Carla Freccero has been my friend, teacher, and comrade now for forty years; part of this work premiered at a Modern Language Association panel we co-organized, where I met Nicole Shukin. Sharon Sliwinski has generously read parts of this book and has discussed Freud, animals, and many other topics with me here at Western. Above all, thanks to Sasha Torres, from whom, along with much else, I have learned everything there is in this book about sheep.

A version of Chapter 5 was published as "Foreign Bodies: How Did Darwin Invent the Symptom?" in *Victorian Studies*, 52.4 (2010): 535–59. A version of Chapter 4 appeared as "Darwin's Ideas" in *Marking Time: Evolution and Romanticism*, ed. Joel Faflak (University of Toronto Press, 2017), pp. 68–91. Reprinted with permission of the publisher. Parts of Chapter 2 appeared as "Onomatopoeia, Interiority, and Incorporation" in *Studies in Romanticism* 57 (2018): 429–5. Copyright © 2018 Trustees of Boston University. Published with permission by Johns Hopkins University Press. Part of Chapter 1 appeared as "Towards a Theory of Species-Lyric: Darwin, Swinburne, Biopolitics" in *Journal of Pre-Raphaelite Studies* 30 (Spring 2021): 52–62. I am grateful to Indiana University Press, the University of Toronto Press, and the Johns Hopkins University Press, and to the editors of these journals for permission to reprint.

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