

David Lockwood – *Alice in Darwin's Wonderland: Lewis Carroll's 'Alice' Books and the Theory of Evolution*

ABSTRACT

Lewis Carroll's two *Alice* books, *Alice's Adventures in Wonderland* and *Through the Looking-Glass*, appeared in the immediate aftermath of the publication of, respectively, Charles Darwin's *On the Origin of Species* and *The Descent of Man*. Carroll's tales are permeated, I argue, by allusions to the ensuing debates about the theory of evolution. Both are exemplary manifestations of the Victorian fascination with the natural world, and especially with the relationship between man and animals. Both are preoccupied with the ways in which living things are classified and categorised. They raise moral questions about predation and eating animals. They draw attention to the extinction of species and reveal a fascination with the prehistoric world newly revealed by contemporaneous geological and paleontological investigations. Most significantly, the *Alices* explore the similarities and differences between human beings and animals, constantly blurring the boundaries between the categories; and tacitly demonstrate that all animals, including humans, are equal in respect of their imperative to survive. To this end they ignore 'natural' hierarchies among animals and repeated show that the animals Alice encounters not only misidentify her but refuse to grant her any special status. All these issues converge on the principal theme of this book. I suggest that the *Alices* are essentially Darwinian texts and engage—inadvertently, perhaps, from Carroll's perspective—with virtually every aspect of Darwin's theory.

My book is in part a response to Laura White's *The 'Alice' Books and the Contested Ground of the Natural World* (Routledge, 2019). This work is underpinned (and, I believe, vitiated) by an unacknowledged personal commitment to Christian fundamentalism and creationism. I suggest that the author twists her arguments to suit a preestablished conclusion—that Carroll wholly rejected Darwin's theory. White assumes, without quite saying so, that he was absolutely right to do so—hardly the foundation for a scholarly appraisal of the topic. I consider that White misrepresents Darwin, shows little understanding of the science or the logic behind his arguments, and overlooks facts that would weaken her case—such as the discovery of *Archaeopteryx*.

My research combines historical investigation and literary criticism, and is underpinned by a background in logic and the philosophy of science. Much is entirely original, dealing with issues that—as far as I'm aware—have never before been discussed in published work.

SYNOPSIS

Introduction

Discusses the role played by Nature in Victorian science and culture, looking in particular at the development of classification schemes and the relation between religion and science. Brief accounts of the main principles of Darwinian evolutionary theory, and of the largely discredited ideas of Lamarckian inheritance by acquired characteristics and of Haeckel's recapitulation theory. Problems associated with the concept of species. The nature of scientific theory, falsifiability and the distinction between logical and scientific/physical possibility.

Chapter One: *Alice* as Natural History

Drawing on the writings of Rose Lovell-Smith and Laurence Talairach, this chapter discusses how the *Alice* books mimic natural history texts. Four themes emerge: (1) the ubiquity and comprehensive scope of references to fauna; (2) Carroll's unconventional treatment of animals; (3) similarities between *Alice* and contemporary natural history writing; and (4) Tenniel's precise and realistic depiction of flora and fauna, employing a style virtually indistinguishable from that of illustrations found in natural history texts. The last point is particularly important, for the significance of some episodes emerges only when Carroll's narrative is considered alongside the illustrations. Although these rarely allude explicitly to evolutionary issues, taken in context they strongly support the Darwinian interpretation of *Alice* presented below.

Chapter Two: Victorian Natural History Writing and Charles Kingsley's *The Water-Babies*

Examines popular natural history writing of the mid-to late-nineteenth century, including the non-fiction texts of the Rev. J. G. Wood, Maria Edgeworth's tales of *Harry and Lucy*, Mrs Gatty's *Parables of Nature* and the scientific fairy tale. Most of the chapter is taken up with Charles Kingsley's *The Water-Babies*, a novel permeated by references to evolution and one which significantly influenced Carroll's tales.

Chapter Three: Carroll's Attitude Towards Evolutionary Theory

Concerned with examining Carroll's attitude towards evolutionary theory, as a prerequisite for trying to grasp his intentions. Survey of both earlier and contemporary accounts of this topic, from William Empson onwards. Most recently, Laura White argues that Carroll intended his tales as a systematic satirical attack on Darwin's theory; indeed, as a refutation of many of the naturalist's arguments.

Chapters Four: Evolution and Morality

Brief discussion of moral issues raised by an evolutionary perspective on *Alice*. Carroll's ethical views, his paper on vivisection, the moral puzzle raised in 'The Walrus and the Carpenter', and morality and chance.

Chapter Five: Evolution and the Struggle for Survival

Fundamental tenets of evolutionary theory as arising in *Alice*: natural selection and predation, the struggle to survive, cannibalism, adaptation to the environment. White's claim that Carroll intended the Caucus Race to demonstrate the incoherence of the notion of 'the survival of the fittest'.

Chapter Six: Evolutionary Motifs in *Alice*

Topics include the pool of tears, apes and monkeys, the pigeon and its eggs, the hippopotamus. Carroll's real insects: the beetle, the gnat and the wasp. The Darwinian interpretation of *Alice* and the selection of illustrations

Chapter Seven: Alice and Mankind's Place among the Animals

The classification of species, scientific versus practical categories, anti-essentialism in species and in language. Anxieties about mankind's place among the animals, natural and social hierarchies.

Chapter Eight: Speciation, Metamorphoses and Hybrids in *Alice*

Speciation and bodily transformation, metamorphoses and hybrid creatures, with particular reference to the Mock Turtle.

Chapter Nine: Transitional Species, Extinction and Prehistoric Animals

Transitional Species. Extinction: The Dodo and the Bread-and-butterfly. The Jabberwock and *Archaeopteryx*.

Chapter Ten: Plants, Gardens and the Seashore

Flora in *Alice*. The *Wonderland* and *Looking-Glass* gardens represent two conceptions of nature – the latter having distinctly Darwinian connotations. Motifs connected with the seashore.

Chapter Eleven: *Alice* and the origin of language

The mid-century debate about the origins of human language: Max Müller, Frederic William Farrar, Hensleigh and Julia Wedgwood. Darwin's belief that elements of language originated in the imitation of animal sounds. I argue that because a conventionalist account of the imitative theory of language origins is available, Carroll—himself a conventionalist—was probably open to Darwin's account.

Chapter Twelve: Devolution, Degeneration and the Other

Victorian anxieties about devolution and degeneration, especially as revealed by the primate appearing in Carroll's and Tenniel's illustrations. Susan Bernstein's 'anxiety of assimilation' and 'anxiety of simianation.' Apes and Irishmen. Alice as invader or colonialist. The Mock Turtle and Gryphon as Assyrian deities. Anna Neill's claim that Carroll is questioning colonialist assumptions.

Chapter Thirteen: Chance, Chaos and Recapitulation in the Darwinian Universe

A. Dwight Culler and the role of chance in Darwinian theory. Greg Myers on didactic dialogues in *Alice*. Jessica Straley on recapitulation theory and Carroll's use of parody. Gillian Beer and George Levine on Darwin's influence on nineteenth-century literature – especially with reference to the emergence of order from disorder.

Conclusion

Appendix: Darwinian allusions in Carroll's poem *The Hunting of the Snark* and in the *Sylvie and Bruno* Books.