

## CONTINENT OF CURIOSITIES

The collection of curiosities was a popular pastime for wealthy, educated eighteenth-century European gentlemen, and few creatures aroused more curiosity than those that arrived from Australia. But collections demand to be organised, and the process of classification reveals patterns to life that cannot be ignored. From a leisurely occupation, the science of biology was born. *Cabinets de curiosités* expanded to become national museums, with specimens from Australia playing an integral role in all kinds of biological debates. Australian museums now foster their own research and continue to provide major and sometimes unexpected perspectives on international developments in many areas of science, from anthropology to space exploration.

Continent of Curiosities follows the thread of individual natural history stories inspired by specimens and scientists of one of Australia's oldest museums, Museum Victoria. Together, these stories weave an eclectic path through the history of biological science from an Australian perspective, with insights into the people and places which influence the way we see and understand the natural world around us.

Dr Danielle Clode is a lecturer in zoology at the University of Melbourne with an interest in the history of Australian biology Her previous book, *Killers in Eden*, is now a major ABC TV documentary. She is currently working on an account of early French naturalists in Australia.



# CONTINENT CURIOSITIES

A Journey Through Australian Natural History

DANIELLE CLODE





### CAMBRIDGE UNIVERSITY PRESS

Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore, São Paulo

Cambridge University Press 477 Williamstown Road, Port Melbourne, VIC 3207, Australia

Published in the United States of America by Cambridge University Press, New York

 $www. cambridge.org \\ Information on this title: www. cambridge.org/9780521866200$ 

© Danielle Clode 2006

This publication is copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 2006

Printed in China through Bookbuilders

A catalogue record for this publication is available from the British Library

National Library of Australia Cataloguing in Publication data

Clode. Danielle.

Continent of curiosities: a journey through Australian

natural history.

Bibliography

Includes index.

ISBN-13 978-0-521-86620-0 hardback

 $ISBN\text{--}10\ 0\text{--}521\text{--}86620\text{--}0\ hardback}$ 

1. Museum Victoria – History 2. Naturalists – Victoria – Melbourne, 3. Natural history – Australia. 4. Natural history museums – Victoria – Melbourne. I. Title. 069.07509945

ISBN-13 978-0-521-86620-0 ISBN-10 0-521-86620-0

Cambridge University Press has no responsibility for the persistence or accuracy of URLS for external or third-party internet websites referred to in this publication and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.

Every effort has been made to trace and acknowledge copyright. The publishers apologise for any accidental infringement and welcome information that would rectify any error or omission in subsequent editions.



# CONTENTS

	Foreword by Iom Griffiths	V11
	Acknowledgements	xi
Part 1	VISIONS FROM THE OLD WORLD:	
	THE LAST 500 YEARS	1
1	Curious collections	3
2	A beast named Su	13
3	Local knowledge	29
Part 2	INTO THE FORESTS:	
	THE LAST 250 000 YEARS	41
4	Water, water everywhere	43
5	Forests of fire	57
6	The mystery of the reappearing possums	71
Part 3	FROM FOSSILS AND BONES:	
	THE LAST 250 MILLION YEARS	85
7	The case of the missing mollusc	87
8	Brainbox	101
9	The ape case	115
Part 4	VISIONS OF NEW WORLDS:	
	THE LAST 4.5 BILLION YEARS	129
10	Lines in the sea	131
11	Shifting continents	147
12	Is there life on Mars?	159
	Sources	173
	References	189
	List of illustrations	202
	Index	206



# FOREWORD

THIS BOOK EXPLORES the magic of museums. We are all captivated, I think, by the awe and fascination that Danielle Clode feels when she enters our great collection palaces. What lies in their basements? What stories stir among the artefacts of nature and of history that sit together in museum cabinets?

That great British hunter of natural curiosities, Alfred Russel Wallace, who makes an appearance in these pages, was considered 'a conjurer' by the Malayan islanders he interrogated in the 1850s. He was collecting shells, insects, birds and animals, hunching over them with intense concentration, drying and preserving specimens, reverently packing them and taking them away in boxes. Islanders watched him at work in the jungle and concluded that he must have been a shaman! And in his way he was. Science has generally fought to distinguish itself from magic, but sometimes it has enjoyed the confusion. Wallace's mind, fresh from the intellectual ferment of industrial Britain, was spinning a theory with these curiosities. His specimens were captured and suspended in time so that they could voyage across the earth. They were destined for a museum, where they would tell a story. But what story? What was the connection between this thing in his hands, so recently stilled, and the ideas that excited him and his society?

Danielle Clode's book pursues that question through the basements and back rooms of a great museum. Museum Victoria, which she visited as a child, has since opened other doors to her, those doors that lead beyond the bright, hallowed halls into 'a parallel world'. She describes the mystery and enchantment of its hidden corridors and their denizens. Best of all, she takes us by the hand and shows us how particular, collected objects become endowed with meaning. Museums are sensuous places, particularly in that semi-ordered state behind the scenes. Sights, sounds and smells surround one. There is unexpected beauty and horror to be found.

As is appropriate in a collection of scientific detective stories, Clode offers us a journey back through time – in four stages. First, through

vii



hundreds of years, then thousands, then millions and finally billions, to the formation of planets and the origins of life. But each chapter begins in the present, with the surviving evidence that propels us on our historical and scientific quest.

Clode was supported in this work by Museum Victoria's Thomas Ramsay Science and Humanities Fellowship. This is a wonderful scheme, funded by a bequest, which fosters research and writing across both the sciences and the humanities, that great divide in our intellectual culture. The Museum, by offering such a fellowship, rightly sees itself as an institution that is uniquely placed to bridge these ways of seeing. The collections themselves, in all their materiality and specificity, demand a holistic eye.

Over a decade ago, I was privileged to be a writer in this same museum, also supported by the Ramsay Fellowship. I worked in a corner of the museum overlooked by a stuffed lion in permanent but outmoded rage. At afternoon tea I could talk with Aboriginal people who had travelled far to consult and sometimes claim collections they regarded as theirs. Every day I walked past the gorillas that the foundation director of the museum had imported to Australia in the 1860s to disprove evolution. Museums spill over with stories that are quite likely to contradict one another; they are collections of intellectual fashions as well as of objects; they are institutions that struggle to impose linearity on the labyrinth and bring order to the attic - but fail gloriously. There are no better places to be promiscuous among the evidence, interdisciplinary, even undisciplined, and to be continually reminded of the contingencies of interpretation. The ballast of physical heritage in the basements and back rooms of museums will, hopefully, give these treasured institutions some stability as the storms of short-term management sweep across them.

One of my favourite metaphors for historical research is that of dredging a pond. If the world is a deep pond and we live on the surface, swimming so that we can also breathe, then the historian's job is to dredge the pond, keeping it healthy by continually disturbing the water and its contents. The surface is a busy but – by definition – superficial place, and there is limited room in the limelight at any one time. Things that were once given favoured attention on the surface later sink into the murky depths, forgotten. Historians dredge, continually dredge. Diving can be scary and hazardous, and you can't afford to stay down too long. But the quest is compelling: to remember, remind, discover, bringing to the surface half-familiar shapes, disturbing the superficial present with evidence from the depths.

Museums, galleries and libraries are those depths. They are full of organic matter, they steam with fetid fertility, they glow with a thousand

viii FOREWORD



auras; their true purpose utterly resists rationalisation. They are the greenhouses of our emotional and intellectual gardens. Here are the seeds of ideas and insights; here are the nutrients and warmth and light to help nurture the imagination; here is the deep, rich, smelly earthiness of composted life from which new life grows. I've just described what sounds like a conservator's nightmare, but I think you know what I mean: our collecting institutions are the source of the stories that sustain and disturb us, they are the memory-palaces of our culture.

There is another reason to celebrate this book. It reminds us of the essential link between research and collections in a period when museums increasingly have come to privilege the manager and the designer over the research curator. The stories in this book remind us that objects and ideas are symbiotic, interdependent, and that research at the moment of accession is especially important. There is a danger that public collections can neutralise and diminish the power of objects; some things should never be in collections and some should be let out from time to time. It's important, then, not just to collect the objects alone; we need to collect the stories that hover like a halo about them. It is the paraphernalia that surrounds a relic or specimen — meanings, ideas, functions, feelings, relationships — that makes it come alive again.

So we must ensure that institutional collecting means more than preserving a physical entity. It must also mean conserving an original context. And it necessarily entails creating something new – introducing that object to a world of scholarship and articulating its relationships with the present. The moment for research must be grasped. Collecting institutions must be research institutions.

So, let's follow Danielle Clode now as she takes us on a journey – into the museum's collections and back through time, travelling on the adrenalin of ideas.

TOM GRIFFITHS February 2006

FOREWORD ix



# A C K N O W L E D G E M E N T S

WITHOUT THE INSPIRATION of the curators at the Museum Victoria, the idea for this book would never have germinated. Without the support of the Thomas Ramsay Science and Humanities Fellowship Committee, the book would never have been written. Without the gentle persistence of Robin Hirst and the unwavering efforts of Jenny Darling, Jacinta di Mace and Donica Bettanin, the book might never have been published. For all their encouragement and support in helping this project reach fruition, I am most grateful. Museum Victoria has also provided generous financial support to assist with publication of the book.

Writing a book that covers a diversity of specialties is always a daunting experience and I have relied on the guidance and expertise of many people both from Museum Victoria and elsewhere. Their patience in guiding me through their collections and their research, and their efforts to keep my subsequent musings accurate, have been invaluable, but I take sole responsibility where I have wavered from the path. In particular I would like to thank the following from Museum Victoria (both past and present): Bill Birch, Les Christidis, John Coventry, Tom Darragh, Joan Dixon, Richard Gillespie, Martin Gomon, Forbes Hawkins, Dermot Henry, John Long, Wayne Longmore, Richard Marchant, Rory O'Brien, Tim O'Hara, Gary Poore, Tom Rich, Dianne Riggs, Gaye Sculthorpe, Ron Vanderwal, Ken Walker, Robin Wilson and Alan Yen.

Over the last ten years, my association with the Department of Zoology at the University of Melbourne has enabled me to stay in touch with my own scientific discipline and given me access to an invaluable array of support and expertise. The assistance of the following people has been much appreciated: Rachel Allan, Terry Beattie, Graeme Coulson, Sharon Downes, Mark Elgar, Kath Handyside, June Hook, Garry Jolley-Rogers, David Macmillan, Angus Martin, David Paul, Marilyn Renfree, Laila Sadler, Simon Ward, Barbara Wells, and David Young. Also from Melbourne University, I would like to thank Peter Attiwill, Mark Burgman and Terry Walsh for their assistance with matters botanical and Rod Holmes for gentle guidance on matters historical.

хi



Many other people have read chapters and offered their thoughts, encouragement or criticism and I am grateful for every one of these contributions. In particular I would like to thank Barry Butcher from Deakin University for his insights into the Ape Case, Tom Griffiths and Libby Robin for their thoughts on the Forests of Fire and Terry Walsh from Melbourne Water for his knowledge of Melbourne's water history. The assistance of Patricia Vickers-Rich at Monash University has cropped up in a surprising array of topics, from dinosaur brains and avian fossils to pre-Cambrian life forms. The patient professionalism of Mark Adams and Charles Hussey from the Museum of Natural History, London, in providing data on the acquisition of Wallace bird specimens was greatly appreciated.

Paul Davies and the late Stephen J. Gould were both kind enough to offer their feedback on the chapters on Mars and Trigonia respectively and I am most grateful for their patience, time and encouragement. The encouragement of my undergraduate lecturers Paul Corcoran and the late Frank Dalziel from the University of Adelaide has also been an ongoing source of sustenance to me over many years. Paul's encouraging words to a struggling first-year kept me at university a lot longer than I would ever have imagined, while Frank's ability to justify lectures on dinosaurs in a psychology course proved that anything is possible with a bit of creative thinking.

There have been times when it seemed that the easiest part of this book was writing it. I would like to thank Ian Galloway and Robin Hirst for their ongoing support over the years in my various guises at the museum. Garry Warner and John Kean opened my eyes to a new way of seeing and interpreting science. Aranka McDonald and Jannine Allan provided beautiful illustrations. The assistance of Melanie Raymond, Ingrid Unger, Marija Bacic and John Kean was essential in saving me from drowning in a sea of unsourced images. The efforts and encouragement of Kim Armitage, Sally Chick, Margot Jones, Susan Keogh and Janet Mackenzie at Cambridge University Press kept me going when I could see no end in sight.

Finally, I must thank Jenny Lee and Carolyn Rasmussen for being both mentors and role models. My parents Anne O'Brien and John Clode have patiently read chapters of various books and covered their bemusement at my choice of occupation most tactfully. But most of all I must thank my children Lauren and Rachel – for giving me the best excuse in the world to stay home and write books instead of getting a proper job; and my husband Michael Nicholls – for encouraging me to write but preventing me from becoming obsessed.

Danielle Clode January 2006

хii

ACKNOWLEDGEMENTS