

Cambridge Elements

Elements in Environmental Humanities

edited by

Louise Westling

University of Oregon

Serenella Iovino

University of North Carolina at Chapel Hill

Timo Maran

University of Tartu

DEEP HISTORY, CLIMATE CHANGE, AND THE EVOLUTION OF HUMAN CULTURE

Louise Westling
University of Oregon



CAMBRIDGE
UNIVERSITY PRESS

Cambridge University Press & Assessment
978-1-009-25733-6 — Deep History, Climate Change, and the Evolution of Human Culture
Louise Westling
Frontmatter
[More Information](#)



Shaftesbury Road, Cambridge CB2 8EA, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre,
New Delhi – 110025, India

103 Penang Road, #05–06/07, Visioncrest Commercial, Singapore 238467

Cambridge University Press is part of Cambridge University Press & Assessment,
a department of the University of Cambridge.

We share the University's mission to contribute to society through the pursuit of
education, learning and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781009257336

DOI: 10.1017/9781009257343

© Louise Westling 2022

This publication is in 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 & Assessment.

First published 2022

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

ISBN 978-1-009-25733-6 Paperback

ISSN 2632-3125 (online)

ISSN 2632-3117 (print)

Cambridge University Press & Assessment 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.

Deep History, Climate Change, and the Evolution of Human Culture

Elements in Environmental Humanities

DOI: 10.1017/9781009257343
First published online: August 2022

Louise Westling
University of Oregon

Author for correspondence: Louise Westling, lhwest@uoregon.edu

Abstract: This Element follows the development of humans in constantly changing climates and environments from *Homo erectus* 1.9 million years ago, to fully modern humans who moved out of Africa to Europe and Asia 70,000 years ago. Biosemiotics reveals meaningful communication among coevolving members of the intricately connected life-forms on this dynamic planet. Within this web, hominins developed culture from bipedalism and meat-eating to the use of fire, stone tools, and clothing, allowing wide migrations and adaptations. Archaeology and ancient DNA analysis show how fully modern humans overlapped with Neanderthals and Denisovans before emerging as the sole survivors of the genus *Homo* 35,000 years ago. Their visions of the world appear in magnificent cave paintings and bone sculptures of animals, and more recently in written narratives like the Gilgamesh epic and Euripides' *Bacchae* whose images still haunt us with anxieties about human efforts to control the natural world.

Keywords: climate change, migrations, cultural development, cave painting, animal haunting

© Louise Westling 2022

ISBNs: 9781009257336 (PB), 9781009257343 (OC)
ISSNs: 2632-3125 (online), 2632-3117 (print)

Contents

Introduction: Who Are We?	1
1 Life Emerges	4
2 Hominin Emergence	13
3 <i>Homo Sapiens</i> Appears	31
4 Monumental Architecture, Towns, and Cultural Separation from Wildness	44
Summary and Conclusion	58
References	60