

Cambridge University Press & Assessment 978-1-009-61384-2 — Evolution and the Fate of Humankind Peter A. Corning Frontmatter More Information

Cambridge Elements =

Elements in Applied Evolutionary Science
edited by
David F. Bjorklund
Florida Atlantic University

EVOLUTION AND THE FATE OF HUMANKIND

Peter A. Corning
Institute for the Study of Complex Systems

THE EVOLUTION INSTITUTE





Cambridge University Press & Assessment 978-1-009-61384-2 — Evolution and the Fate of Humankind Peter A. Corning 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/9781009613842

DOI: 10.1017/9781009613835

© Peter A. Corning 2025

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.

When citing this work, please include a reference to the DOI 10.1017/9781009613835

First published 2025

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

ISBN 978-1-009-61384-2 Hardback ISBN 978-1-009-61381-1 Paperback ISSN 2752-9428 (online) ISSN 2752-941X (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.



Cambridge University Press & Assessment 978-1-009-61384-2 — Evolution and the Fate of Humankind Peter A. Corning Frontmatter More Information

Evolution and the Fate of Humankind

Elements in Applied Evolutionary Science

DOI: 10.1017/9781009613835 First published online: February 2025

Peter A. Corning
Institute for the Study of Complex Systems

Author for correspondence: Peter A. Corning, pacorning@complexsystems.org

Abstract: In recent years we have come to understand better the forces that have shaped biological evolution over the course of time. Evolved purposiveness (teleonomy) in living systems themselves has been an important influence. Cooperative effects (synergies) of various kinds have also been influential. And the bioeconomics (functional costs and benefits) have been important constraints. Now we are facing a mounting survival crisis that may determine the future of life on Earth. We need to make a major course change, utilizing our insights into these important influences. Here is a review, and a "prescription."

Keywords: evolution, teleonomy, synergy, bioeconomics, climate change

© Peter A. Corning 2025

ISBNs: 9781009613842 (HB), 9781009613811 (PB), 9781009613835 (OC) ISSNs: 2752-9428 (online), 2752-941X (print)



Cambridge University Press & Assessment 978-1-009-61384-2 — Evolution and the Fate of Humankind Peter A. Corning Frontmatter More Information

Contents

	Introduction	1
1	"Life Ascending"	2
2	Designers versus Tinkerers in Evolution	4
3	Teleonomy in Evolution	5
4	Some Ghosts in the Machine	7
5	Teleonomy and Natural Selection	9
6	Lamarckism in Evolution	13
7	Behavior and Evolution	15
8	Mind in Evolution	17
9	The "Synergism Hypothesis" Revisited	20
10	Synergy and the Bioeconomics of Evolution	22
11	The Evolution of Humankind	29
12	"Unite or Die"	32
	References	41