

Cambridge University Press & Assessment 978-1-108-98705-9 — Biological Cognition Bryce Huebner , Jay Schulkin Frontmatter More Information

Cambridge Elements =

Elements in the Philosophy of Mind edited by Keith Frankish The University of Sheffield

BIOLOGICAL COGNITION

Bryce Huebner
Georgetown University
Jay Schulkin
University of Washington





Cambridge University Press & Assessment 978-1-108-98705-9 — Biological Cognition Bryce Huebner, Jay Schulkin 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/9781108987059

DOI: 10.1017/9781108982191

© Bryce Huebner and Jay Schulkin 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 978-1-108-98705-9 Paperback ISSN 2633-9080 (online) ISSN 2633-9072 (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 978-1-108-98705-9 — Biological Cognition Bryce Huebner , Jay Schulkin Frontmatter More Information

Biological Cognition

Elements in the Philosophy of Mind

DOI: 10.1017/9781108982191 First published online: November 2022

> Bryce Huebner Georgetown University Jay Schulkin University of Washington

Author for correspondence: Bryce Huebner, bryce.huebner@georgetown.edu

Abstract: This Element introduces a biological approach to cognition, which highlights the significance of allostatic regulation and the navigation of challenges and opportunities. It argues that cognition is best understood as a juggling act, which reflects numerous ongoing attempts to minimize disruptions while prioritizing the sources of information that are necessary to satisfy social and biological needs; and it provides a characterization of the architectural constraints, neurotransmitters, and affective states that shape visual perception, as well as the regulatory capacities that sustain flexible patterns of thought and behavior.

Keywords: allostasis, adaptive behavior, vision, learning, chemical signaling systems

© Bryce Huebner and Jay Schulkin 2022

ISBNs: 9781108987059 (PB), 9781108982191 (OC) ISSNs: 2633-9080 (online), 2633-9072 (print)



Cambridge University Press & Assessment 978-1-108-98705-9 — Biological Cognition Bryce Huebner , Jay Schulkin Frontmatter More Information

Contents

1	Introduction	1
2	Seeing Things That Matter	16
3	Learning What Matters	39
4	Social Living	53
5	Complex Trade-Offs and Higher Cognition	61
	References	68