

Cambridge University Press & Assessment 978-1-009-54450-4 — The Artificial Womb on Trial Teresa Baron Frontmatter More Information

Cambridge Elements =

Elements in Bioethics and Neuroethics
edited by
Thomasine Kushner
California Pacific Medical Center, San Francisco

THE ARTIFICIAL WOMB ON TRIAL

Teresa Baron
University of Nottingham





Cambridge University Press & Assessment 978-1-009-54450-4 — The Artificial Womb on Trial Teresa Baron 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/9781009544504

DOI: 10.1017/9781009544474

© Teresa Baron 2025

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, with the exception of the Creative Commons version the link for which is provided below, no reproduction of any part may take place without the written permission of Cambridge University Press & Assessment.

An online version of this work is published at doi.org/10.1017/9781009544474 under a Creative Commons Open Access license CC-BY-NC 4.0 which permits re-use, distribution and reproduction in any medium for non-commercial purposes providing appropriate credit to the original work is given and any changes made are indicated. To view a copy of this license visit https://creativecommons.org/licenses/by-nc/4.0

When citing this work, please include a reference to the DOI 10.1017/9781009544474

First published 2025

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

ISBN 978-1-009-54450-4 Hardback ISBN 978-1-009-54449-8 Paperback ISSN 2752-3934 (online) ISSN 2752-3926 (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.

Every effort has been made in preparing this Element to provide accurate and up-to-date information which is in accord with accepted standards and practice at the time of publication. Although case histories are drawn from actual cases, every effort has been made to disguise the identities of the individuals involved. Nevertheless, the authors, editors, and publishers can make no warranties that the information contained herein is totally free from error, not least because clinical standards are constantly changing through research and regulation. The authors, editors, and publishers therefore disclaim all liability for direct or consequential damages resulting from the use of material contained in this Element. Readers are strongly advised to pay careful attention to information provided by the manufacturer of any drugs or equipment that they plan to use.



Cambridge University Press & Assessment 978-1-009-54450-4 — The Artificial Womb on Trial Teresa Baron Frontmatter More Information

The Artificial Womb on Trial

Elements in Bioethics and Neuroethics

DOI: 10.1017/9781009544474 First published online: January 2025

> Teresa Baron University of Nottingham

Author for correspondence: Teresa Baron, teresa.baron@nottingham.ac.uk

Abstract: Artificial womb technology is approaching over the scientific horizon. Recent proof-of-principle experiments using foetal animals have prompted a new surge of bioethical interest in the topic: scholars have asked what ectogenesis would mean for individuals, family, oppressed groups, and society at large; how we can or should regulate the technology; and whose interests motivate ectogenic research. However, a full investigation of the bioethics of ectogenesis must ask, 'how do we get there?' This Element places the research and development process itself under the microscope and explores the bioethical issues raised by human subject trials of ectogenic prototypes. This title is also available as Open Access on Cambridge Core.

Keywords: gestation, artificial womb, research ethics, prematurity, foetus

© Teresa Baron 2025

ISBNs: 9781009544504 (HB), 9781009544498 (PB), 9781009544474 (OC) ISSNs: 2752-3934 (online), 2752-3926 (print)



Cambridge University Press & Assessment 978-1-009-54450-4 — The Artificial Womb on Trial Teresa Baron Frontmatter <u>More Information</u>

Contents

1	Introduction	1
2	Beyond Barbarism	3
3	Mother Machines	6
4	The 'Stranded Mountain Climber'	10
5	Spare Parts	13
6	The Convergence Argument	16
7	Life in the Petri Dish	19
8	Animal Research and Human Embryoids	22
9	Prematurity and the Placenta Problem	25
10	Preterm Survival and the Foetal Sheep	27
11	Size Matters	29
12	Candidates for Experimental Ectogestation	32
13	Trials and Treatments	35
14	Absolute (De)termination	39
15	The Experimental Child	42
16	Ambitions, Outcomes, and Non-identity	45
17	Conclusions	49
	References	60