

Cambridge Elements

Elements in Philosophy of Science

edited by
Jacob Stegenga
University of Cambridge

THE SOCIAL DIMENSIONS OF SCIENTIFIC KNOWLEDGE

*Consensus, Controversy,
and Coproduction*

Boaz Miller
*Zefat Academic College and ACEPS, University
of Johannesburg*



CAMBRIDGE
UNIVERSITY PRESS

Cambridge University Press & Assessment
978-1-009-50723-3 — The Social Dimensions of Scientific Knowledge
Boaz Miller
Frontmatter
[More Information](#)



CAMBRIDGE
UNIVERSITY PRESS

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/9781009507233

DOI: 10.1017/9781108588782

© Boaz Miller 2024

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 10.1017/9781108588782

First published 2024

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

ISBN 978-1-009-50723-3 Hardback
ISBN 978-1-108-70671-1 Paperback
ISSN 2517-7273 (online)
ISSN 2517-7265 (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.

The Social Dimensions of Scientific Knowledge

Consensus, Controversy, and Coproduction

Elements in Philosophy of Science

DOI: 10.1017/9781108588782
First published online: December 2024

Boaz Miller

Zefat Academic College and ACEPS, University of Johannesburg

Author for correspondence: Boaz Miller, boaz.m@zefat.ac.il

Abstract: This Element is about *the social dimensions of scientific knowledge*. The first section asks in what ways scientific knowledge is social. The second section develops a conception of scientific knowledge that accommodates the insights of the first section, and is consonant with mainstream thinking about knowledge in analytic epistemology. The third section asks under what conditions we can tell, in the real world, that a consensus in a scientific community amounts to shared scientific knowledge, as characterized in the second section, and how to deal with scientific dissent. The fourth section reviews the ways epistemic and social elements mutually interact to coproduce scientific knowledge. This Element engages with literature from philosophy of science and social epistemology, especially social epistemology of science, as well as Science, Technology, and Society (STS), and analytic epistemology. The Element focuses on themes and debates that date from the start of the second millennium.

This element also has a video abstract: www.cambridge.org/Miller

Keywords: science and values, trust in science, expert testimony, scientific consensus and dissent, collective knowledge

© Boaz Miller 2024

ISBNs: 9781009507233 (HB), 9781108706711 (PB), 9781108588782 (OC)
ISSNs: 2517-7273 (online), 2517-7265 (print)

Contents

1	Introduction	1
2	The Social Dimensions of Scientific Knowledge	1
3	A Conception of Individual and Collective Scientific Knowledge	10
4	Assessing a Scientific Consensus for Knowledge and Dealing with Dissent	32
5	The Interaction of Epistemic and Social Elements in the Coproduction of Knowledge	49
	References	72