



3<sup>rd</sup>Edition

# CRITICAL THINKING A CONCISE GUIDE

Tracy Bowell and Gary Kemp

# critical thinking

● Attempts to persuade us — to believe something, to do something, to buy something — are everywhere. How can we learn to think critically about such attempts and to distinguish those that actually provide us with good reasons for being persuaded?

Critical Thinking: A Concise Guide is a much-needed guide to argument analysis and a clear introduction to thinking clearly and rationally for oneself. Through precise and accessible discussion, this book equips students with the essential skills required to tell a good argument from a bad one.

Key features of the book are:

- clear, jargon-free discussion of key concepts in argumentation
- how to avoid common confusions surrounding words such as 'truth', 'knowledge' and 'opinion'
- how to identify and evaluate the most common types of argument
- how to spot fallacies in arguments and tell good reasoning from bad
- topical examples from politics, sport, medicine and music; chapter summaries; glossary and exercises throughout.

This third edition has been revised and updated throughout, with new exercises and up-to-date topical examples, including: 'real-world' arguments; practical reasoning; understanding quantitative data, statistics, and the rhetoric used about them; scientific reasoning; and expanded discussion of conditionals, ambiguity, vagueness, slippery slope arguments, and arguments by analogy.

The Routledge *Critical Thinking* companion website features a wealth of further resources, including examples and case studies, sample questions, practice questions and answers, and student activities.

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### Reviews of earlier editions

'This concise guide offers relevant, rigorous and approachable methods . . . The authors focus on analysing and assessing arguments in a thoughtfully structured series of chapters, with clear definitions, a glossary, plenty of examples and some useful exercises.'

Will Ord, Times Educational Supplement

'In my view this book is the most useful textbook on the market for its stated audience. It provides exceptionally clear explanations, with sufficient technical detail, but without over-complication. It is my first-choice text for teaching critical thinking to first-year undergraduate students.'

Dawn Phillips, University of Southampton

"... written with actual undergraduates, and the standard mistakes and confusions that they tend to be subject to, clearly borne in mind . . ."

Helen Beebee.

'This is the best single text I have seen for addressing the level, presumptions, and interests of the non-specialist.'

Charles Ess, Drury University

TRACY BOWELL and GARY KEMP



**3RD EDITION** 



#### First published 2002

This edition published 2010 by Routledge 2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

Simultaneously published in the USA and Canada by Routledge 270 Madison Ave, New York, NY 10016

Routledge is an imprint of the Taylor & Francis Group, an informa business

This edition published in the Taylor & Francis e-Library, 2009.

To purchase your own copy of this or any of Taylor & Francis or Routledge's collection of thousands of eBooks please go to www.eBookstore.tandf.co.uk.

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British Library Cataloguing in Publication Data

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

Library of Congress Cataloging-in-Publication Data

Bowell, Tracy, 1965–

Critical thinking: a concise guide / Tracy Bowell and Gary Kemp. – 3rd ed. p. cm.

Includes bibliographical references and index.

1. Critical thinking. I. Kemp, Gary, 1960 Oct. 14- II. Title.

B809.2B69 2009-07-10

16-dc22

2009002265

ISBN 0-203-87413-7 Master e-book ISBN

ISBN10: 0-415-47182-6 (hbk) ISBN10: 0-415-47183-4 (pbk) ISBN10: 0-203-87413-7 (ebk)

ISBN13: 978-0-415-47182-4 (hbk)

ISBN13: 978-0-415-47183-1 (pbk)

ISBN13: 978-0-203-87413-4 (ebk)

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### PREFACE TO THE THIRD EDITION

Like all authors of texts on critical thinking or critical reasoning, we have tried to write a book that is genuinely useful. But our conception of what is useful differs somewhat from that of most of those authors.

On the one hand, we have avoided formal logical methods. Whereas the application of formal methods is justified primarily by its value in coping with complex logical structure, the logical structure of everyday argumentation is very seldom so complex that an argument's validity, or lack of it, cannot be revealed to ordinary intuition by a clear statement of the argument in English. Yet no formal means short of the first-order predicate calculus is sufficient to represent the logic of the majority of everyday arguments. Rather than compromise by presenting less comprehensive formal methods that are useful only in a narrow range of cases, we have avoided them entirely.

On the other hand, we have discussed and employed the concepts of logic more thoroughly than is customary in texts that avoid formal methods. We have defined them as accurately and in as much detail as we could, without superfluous refinement or inappropriate theoretical elaboration. We have done this for three reasons. First, it is only by grasping those concepts clearly that the student can achieve a stable and explicit understanding of the purposes of presenting and analysing arguments. Second, facility with those concepts enables the student to think and to talk about arguments in a systematically precise way; it provides a common currency in terms of which to generalise about arguments and to compare them. Third, experience, including our teaching experience, suggests that the concepts of logic themselves, when they explicitly appear in argumentative contexts, are amongst the most persistent sources of confusion. A symptom of this is the relativism that is so often encountered and so often lamented. At the root of this, we assume, are certain equivocations over the word 'truth'. We have tried to clear these up in a common-sense and non-dogmatic way, and thereby to clarify further concepts that depend on the concept of truth, such as validity, probability, inductive force, soundness, justification and knowledge. We hope that clarity about these concepts, and the ability to use them with confidence in analysing arguments, will be among the most valuable accomplishments to be acquired by studying this book.