On Reasoning and Argument

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David Hitchcock

On Reasoning and Argument

Essays in Informal Logic and on Critical Thinking

Springer

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Foreword

David Hitchcock is a highly respected Canadian philosopher, prominent in the field of the theory of argument. As many did at the time, he travelled abroad for his graduate training, and like everyone else of his generation working in this field, he began his career with a different area of specialization. He received his Ph.D. from Claremont Graduate School in California with a dissertation in ancient Greek philosophy, a subject he continued to teach alongside courses in critical thinking and argument theory (among other subjects) throughout his academic career. He is both an alumnus of McMaster University in Hamilton, Ontario (B.A., Honours Philosophy), and a professor emeritus at that institution, where he has spent his professional life and continues to be an active scholar and publisher.

Although he has published a textbook for courses teaching critical thinking, *Critical thinking: A guide to evaluating information* (Methuen, 1983), and co-authored with Milos Jenicek a textbook on critical thinking in medicine, *Evidence-based practice: Logic and critical thinking in medicine* (AMA Press, 2005), Prof. Hitchcock has not published a monograph presenting his positions on the theory of argument, informal logic, or critical thinking. That he has views on these topics—carefully considered and closely argued views—is evident from the contents of this book. It is only with this book that we find them gathered conveniently in one place.

On Reasoning and Argument - Essays in Informal Logic and on Critical Thinking presents Hitchcock's selection of a representative sample of his best thinking on a range of topics falling within the scope of its title. It also gives us a good sense of the development of his thinking. The collection brings together in one place 25 of his papers published over the span of the last nearly four decades: four from 1980 to 1989, five from 1990 to 1999, eight from 2000 to 2009, and eight from 2010 to 2016. He has organized the papers into seven themes fitting under the broad umbrella of reasoning and argument. Following the papers in each of these seven groups, Prof. Hitchcock has added a postscript in which he spells out his present views on the topics covered therein. These postscripts, written in 2016, go into such detail as to

constitute seven brand new papers. It is thus more accurate to say that the book contains 32 papers.

A glance at the table of contents reveals a good deal about the breadth and depth of that thinking. It tells us that he approaches reasoning and argument as a philosopher and as a philosopher trained in modern logical theory. It tells us that he has been interested in a wide array of the theoretical questions raised by the so-called informal logic movement since its inception in the 1970s. It reveals an interest in the contribution to the theory of reasoning and argument by the late British American philosopher of science, Stephen Toulmin. And it shows us a theorist who was also a teacher, and we might guess just from some of the chapter titles what their contents reveal, namely that he has been a teacher keenly interested not only in developing the critical thinking skills of his students but also in giving his students as accurate and truthful a picture of reasoning and argument as he could muster.

To those of us who know Prof. Hitchcock as a professional colleague, the table of contents reminds us that he belongs to that subset of thinkers who make up the intellectual conscience of their disciplines. Most scholars aim for accuracy, precision, and insight, among other ideals. A significantly smaller number, however, also have the gift of recognizing dubious features of widely shared assumptions that only close and reflective analysis reveals. Hitchcock's challenges to such matters of faith as that "deductive" and "inductive" denote types of argument or that teaching the informal fallacies is a good way to teach critical thinking exhibit an iconoclastic turn of mind.

The papers grouped within each of the seven topics are presented in the order in which they were written. Thus, we have seven parallel windows into the development of Prof. Hitchcock's thinking. His mind moves from topic to topic over time and keeps circling back to earlier thinking, revising it, extending it, and deepening it.

The two papers in **Part I**, "**Deduction, Induction and Conduction**", share the theme that "distinctions usually taken to apply to arguments (inductive versus deductive, linked versus convergent) in fact apply primarily to supports" (Chap. 3). The first paper combines two of Professor Hitchcock's first forays into the field; the second is a return to those topics many years of reflection later.

We learn from the postscript to **Part II**, "**Material Consequence**", that the seven papers grouped in this part "address the main problem that has occupied [Hitchcock's] attention over the past 40 years". There is a sense, then, that Part II is the heart of the book. That preoccupying problem is "how to evaluate an inference that is neither formally valid nor an obvious non sequitur". What justifies us in asserting that a claim "follows from" or is a "consequence" of given premisses when it does follow even though the inference is not formally valid? In a nutshell, Prof. Hitchcock's solution is that:

> Generic conclusive consequence is constituted by a counterfactual-supporting covering generalization that holds for all its instances. Non-conclusive but possibly adequate support is constituted by such a generalization that holds either for most of its instances or for all instances ceteris paribus (i.e. wherever there is no undermining or overriding exception-making circumstance). (Chap. 10)

The Part II postscript also provides lucid summaries of the seven papers in the part, along with Prof. Hitchcock's latest reflections on the issues they address.

The papers in **Part III**, "**Patterns of Reasoning**", apply the generic conception of conclusive consequence developed in Part II to work out "more specific conceptions of non-conclusive support that in some contexts can be adequate for one's purposes". By working out how this approach applies to "apparently legitimate but usually non-conclusive patterns of reasoning (such as reasoning by analogy, inductive generalization and extrapolation, and means-end reasoning)", the papers in Part III both lend support to the criteria of good reasoning of these sorts and serve as a test for the generic conception of consequence Hitchcock has developed.

Most of the papers in this collection resist the contemporary vogue in argument theory of understanding the concept of argument in terms of the model of a conversation, in particular of a dialogue—a back-and-forth discussion between two people, or more generally such a discussion between two interlocutors who are the bearers of the roles of questioner and answerer or respondent, opponent and proponent, and audience and speaker. While he points out (and documents) that the history of argument theory going back to the Greeks highlights this view, and while he agrees that the study of arguments should take its dialectical features into account, nevertheless, Professor Hitchcock avers, "it goes too far to shoehorn all argument into a dialectical mode". The two papers in **Part IV**, "**Interpersonal Discussion**", are an exception. In Chap. 19, Hitchcock develops a set of principles on the basis of which to formulate rules for cooperative procedures that seem appropriate for what he calls mutual inquiry (the main purpose of which is to secure rational agreement by the participants on the answer to a specified question). His second thoughts about these principles are recorded in the postscript to Part IV. Chapter 20 is a critical review of Ralph Johnson's major theoretical book, *Manifest rationality*, which also gives dialectic pride of place in his theory of argument. The Postscript reveals that Hitchcock today has fewer second thoughts about his criticisms of Johnson's theory.

In two papers on the theme "**Evaluation of Reasoning**", (**Part V**), Hitchcock takes up, in turn, the slippery concept of relevance (for it is intuitive that good reasons must be relevant to the conclusion to which they lead) and the application to argument appraisal provided by Stephen Toulmin's model of argument. As to the first, in Chap. 22, "Relevance", he characterizes premiss relevance as "the ability of an argument's premiss to be ineliminably combined with other at least potentially accurate information to provide a set of premisses that is sufficient to justify the argument's conclusion". Subsequently, Hitchcock realized that there is a counterexample to this account: an example in which the conditions of this account are clearly met, yet the premisses are manifestly irrelevant. In the Postscript (Chap. 24), Hitchcock reviews some other more recent accounts of relevance and also revises his account so as to avoid this counterexample. As to the second, in Chap. 23, "Good reasoning on the Toulmin model", he proposes a method of evaluation for

single-inference reasoning or argument laid out according to Toulmin's data-warrant-qualifier-rebuttal-claim model. In the Postscript, Hitchcock shows how his account can be extended to apply to chains of reasoning.

Professor Hitchcock is sceptical about the notion of fallacy as a property of arguments—as what makes bad arguments bad. Moreover, he is sceptical about teaching students the skills and attitudes of critical thinkers by teaching them to recognize what might be justifiably labelled as fallacies. **Part VI**, "**Fallacies**", contains two papers that thoroughly make the case for his scepticism in these matters and that to my mind succeed in thereby shifting the burden of proof. Anyone who teaches informal logic or critical thinking by including a unit on fallacies needs not only to read these two chapters, but also to be able to meet Hitchcock's sceptical arguments.

We learn in the postscript to **Part VII**, "**Informal Logic and Critical Thinking**", what might not have been evident, but for the subtitle of the book, that Prof. Hitchcock regards all but the three essays on critical thinking in this collection to belong to a branch of philosophy called informal logic. One exception is the chapter against using fallacies to teach critical thinking in Part VI; the other two are the closing chapters, "Critical Thinking as an Educational Ideal" and "The Effectiveness of Instruction in Critical Thinking". Hitchcock sees critical thinking as distinct from informal logic: "… informal logic and critical thinking belong to different genera; informal logic is a branch of study, and critical thinking is a type of thinking". Chapter 28 is an overview of themes taken up by informal logic that make it a branch of philosophy; Chap. 29, along with some modifications to it introduced in the Postscript (Chap. 32), contains Hitchcock's very latest analysis of the concept of argument. Together, Chaps. 28 and 29 "address thematically what informal logic is". Chap. 30 tackles head on the plethora of definitions of "critical thinking" and produces one of the finest accounts of the nature of critical thinking on record. Chapter 31 brings together Hitchcock's study of the effectiveness of computer-assisted instruction in critical thinking with the results of more recent meta-analyses of studies of the effectiveness of various approaches to critical thinking.

I have mentioned the part-closing postscripts more than once. Reading them will help the reader to navigate this big book. In reading them, after reading the articles in each part, one gets the pleasure of experiencing philosophical reflection, reassessment, and revision carried out by a careful analytical mind—the upshot of four decades of rumination. Most importantly, they represent the cutting edge of contemporary philosophy of informal logic.

This book is a trove of treasures. Professor Hitchcock uses his knowledge of ancient Greek and Roman philosophy to illuminate the early history of various concepts. He not only reports, but also conducts empirical studies to support claims about language usage. He positions his views in relation to the recent and current literature on reasoning and argument, be it in philosophy, psychology, speech communication, or education and be it Canadian, American, British, or Continental

European. He offers close, meticulous analyses and broad, comprehensive overviews. This book embodies scholarship at its finest. And it constitutes a compelling argument for the philosophical respectability of informal logic.

October 2016

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Preface

"Why don't you write a book?" So asked my friend and colleague Tony Blair, as we chatted one morning at an academic conference.

The thought percolated in my mind for some months. It occurred to me that there might be some interest in a collection of some of my papers on reasoning and argument published over the last 37 years. I could take the opportunity of assembling them to update my thinking on the issues they addressed, with reference to more recent scholarship.

When I broached this idea to Tony, he gave it his immediate and enthusiastic support. I thank him for planting the initial idea, for his advice on the prospectus, for his support for my proposal to the publisher, and for writing the foreword.

For the collection, I selected the most substantial single-authored papers on reasoning and argument that I have published to date, assigned them to parts by topic, and ordered the papers in each part chronologically. I have ordered the parts chronologically, according to the date of initial publication of the first chapter of each part. At the end of each part, I have written a chapter entitled "Postscript" in which I bring up to date my thinking on the issues addressed in that part. The most substantial new work in those postscripts is my revised account of the concept of argument in the second section of Chap. 32. However, all seven postscripts have new things to say. In particular, I have articulated comprehensive positions on topics about which I have previously written little, such as fallacies and argumentation schemes.

I have edited the previously published articles very lightly, correcting typographical errors, making spelling more uniform, updating references and putting them into the publisher's style, calling each article a chapter, incorporating acknowledgements in an opening bibliographical footnote in each chapter, inserting abstracts and subheadings where there were none, and updating links to resources on the Web where possible. Where I have made a substantive change in the text, I have described it in a footnote introduced by the italicized phrase "*Correction in the present republication*" or "*Change in the present republication*". Also, in response to reviewers' suggestions, I have added footnotes introduced by the

italicized phrase "*Added in the present republication*". Otherwise, the previously published articles are unchanged.

Inevitably, there is some repetition from one chapter to another, since the reprinted chapters were originally written as separate articles, not as components of a single book. The repetition will be especially obvious in the series of papers collected in Part II, in which I develop a conception of material consequence. I ask the reader's indulgence for this repetition, which is never word for word and for which the reader can compensate by skimming over paragraphs and sections that repeat previously read content. It would have been a massive and probably counterproductive task to have condensed, collapsed, and rewritten the chapters in such a way as to avoid repetition. Further, some "repetitions" have changes of detail that reflect a change in thinking.

Since the sequence of chapters is not chronological, but chronological within thematically grouped parts, I list the chapters here in chronological order of the year in which I did the major work of writing them, as a way of making it easier to trace my intellectual journey:

- 1980: Chap. 1 (Deduction, Induction, and Conduction)
- 1986: Chap. 4 (Enthymematic Arguments)
- 1989: Chap. 11 (Validity in Conductive Arguments)
- 1989: Chap. 12 (Reasoning by Analogy: A General Theory)
- 1990: Chap. 19 (Some Principles of Rational Mutual Inquiry)
- 1991: Chap. 22 (Relevance)
- 1993: Chap. 25 (Do the Fallacies have a Place in the Teaching of Reasoning Skills or Critical Thinking?)
- 1994: Chap. 5 (Does the Traditional Treatment of Enthymemes Rest on a Mistake?)
- 1998: Chap. 28 (The Significance of Informal Logic for Philosophy)
- 2001: Chap. 13 (Pollock on Practical Reasoning)
- 2001: Chap. 20 (The Practice of Argumentative Discussion)
- 2002: Chap. 6 (Toulmin's Warrants)
- 2003: Chap. 31 (The Effectiveness of Instruction in Critical Thinking, Parts 1 and 2)
- 2003: Chap. 30 (Critical Thinking as an Educational Ideal, Parts 1 and 2)
- 2005: Chap. 23 (Good Reasoning on the Toulmin Model)
- 2005: Chap. 29 (Informal Logic and the Concept of Argument)
- 2006: Chap. 26 (Is there an *Argumentum Ad Hominem* Fallacy?)
- 2008: Chap. 7 (Non-logical Consequence)
- 2010: Chap. 14 (The Generation of Argumentation Schemes)
- 2010: Chap. 15 (Instrumental Rationality)
- 2011: Chap. 30 (Critical Thinking as an Educational Ideal, Parts 3 and 4)
- 2011: Chap. 8 (Inference Claims)
- 2013: Chap. 16 (Appeals to Considerations)
- 2013: Chap. 9 (Material Consequence and Counterfactuals)
- 2014: Chap. 2 (The Linked-Convergent Distinction)

- 2014: Chap. 31 (The Effectiveness of Instruction in Critical Thinking, Parts 3 and 4)
- 2015: Chap. 17 ("All Things Considered")

A bibliographical footnote at the beginning of each republished chapter provides the data on its earlier publication and, where required, acknowledges permission by the copyright holder to republish the chapter.

It remains to thank colleagues whose criticism has saved me from error and helped me to sharpen my ideas. They are too many to name here; I acknowledge many of them in individual chapters, and their influence is obvious from the frequency with which I cite their work. But, in addition to Tony Blair, already acknowledged, one of them deserves explicit mention: Frans van Eemeren, who with his late colleague Rob Grootendorst first brought researchers investigating argumentation together as a global community. Frans, we are all in your debt. I am honoured by your decision as editor of Springer's Argumentation Library series to approve the present work for publication. Finally, I would like to thank the publisher's two reviewers, Derek Allen and James Freeman, for their careful scrutiny of the manuscript and many useful suggestions for its improvement.

Hamilton, Canada David Hitchcock
November 2016

The original version of the book was revised: Author corrections have been completely. The erratum to the book is available at http://dx.doi.org/10.1007/978-3-319-53562-3.

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