A Companion to Epistemology

Second Edition

edited by

JONATHAN DANCY,
ERNEST SOSA,

and

MATTHIAS STEUP

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A Companion to Epistemology

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Preface to the First Edition

JONATHAN DANCY

The present Companion, like the majority of the other volumes in the Blackwell Companions to Philosophy series, is organized as a standard reference book, with alphabetically arranged articles of varying length (anything from 250 to 3500 words) on leading theories, thinkers, ideas, distinctions and concepts in epistemology. It aims for a broad readership, while recognizing that the nature of contemporary epistemology inevitably imposes restrictions on this. In some other areas of philosophy it remains feasible to design a book which is largely accessible to the general reader; in epistemology, however, the main readership is likely to be students from undergraduate level upwards, as well as professional philosophers, and it is to them that the Companion is primarily addressed. A minority of topics resist treatment other than at an advanced level: they have not for that reason been excluded, lest coverage of the area become incomplete. But the vast majority are accessible to all levels of the intended readership.

Not all entries will be comprehensible on their own: at least, not to the inexperienced reader. This is where the cross-referencing system comes in. I have used two interrelated methods of guiding readers from one entry to another. Within the text itself terms or names occur in small capitals; this will often occur where reference is made to DESCARTES, or to REALISM, for example. This means that there is an entry on this person or topic, and that it would be worthwhile having a look at it for present purposes. The mere fact that there is an entry on this person or topic, however, is not sufficient for me to flag it. Not all references to Descartes or to realism are significant. What is more, a person or topic may not be flagged in this way on its first occurrence in an entry; I may wait for the best moment, as it were. And sometimes one and the same person or topic is flagged more than once in the same entry, where there has been a long gap or I think it particularly appropriate for some other reason.

Most of the flagging that is done within the body of the text is of this form; a word or phrase is highlighted in the sentence, as I highlighted DESCARTES above. In doing this, I have not insisted slavishly that the word highlighted be *exactly* the same one as the headword that the reader is effectively being referred to. For instance, I may direct the reader to an entry on realism by flagging the remark that Santayana was a REALIST. Sometimes, however, I was unable to work the cross-reference into the text in this way. On these occasions it is inserted at the end of the relevant sentence or paragraph.

There are also cross-references to be found at the end of most entries. These fulfil two functions. First, they enable me to point out areas to which the present entry is related, but which have not occurred significantly in the text. Second, they enable me to insist a bit that you should consider again looking at an entry that has already been flagged in the text. So if you see a person or topic flagged both within and at the end of an entry, you can take it that I think you really should have a look at it.

The Blackwell series of Companions is conceived as related primarily to Anglo-American philosophy. The topics the editors chose to cover were selected with this in mind. But this does not mean that other traditions are completely ignored. There is an entry on Indian epistemology and, as well as a general entry on Continental epistemology,

there are many entries on individual thinkers in that tradition. We do not pretend, however, to give that tradition as detailed coverage as we give to the one which is our main focus.

It might be thought that the jacket illustration is symptomatic of our general approach.[1] Here we have the solitary thinker working in private. Isn't he a wonderful example of the CARTESIAN approach to epistemology which is so characteristic of the Anglo-American analytic tradition, and which is so vehemently rejected on the Continent? There is some truth in this, which we will come to in a moment. There are two points to be made against it. First, the attempt to escape from the clutches of the Cartesian paradigm is as common within the analytic tradition as it is outside. Second, our solitary thinker is not as solitary as all that. He is reading a book, which could be taken to show that he is not relying entirely on his own resources, as the Cartesian mind is supposed to do (*see* REID; TESTIMONY). Against this, one could point out that the picture exemplifies a conception of knowledge as something to be gained by rational enquiry and perception rather than in practical life and action. This "logocentrism" may be a more insidious feature of the Cartesian approach, and certainly the emphasis on practice and action is distinctive of Continental epistemology (*see* for example HEIDEGGER), as is an emphasis on social considerations.

One difficulty the editors faced in deciding which topics to cover derived from the interconnectedness of philosophical areas. Epistemology can be to some extent separated from adjacent areas, but only with a justified sense of artificiality. The nearest areas are metaphysics, philosophy of mind and philosophy of science. These gave us two problems, one theoretical and one practical. The practical one was that in considering whether to include an entry on a topic, we had to ask ourselves whether there would be an entry on it in one of the other Companions, and if so how our entry should be related to that one. At the limit, we have an entry on natural science, an area which will on its own occupy a large part of one Companion. But there are many other occasions where the shortness of our coverage here is caused by our sense that the major entry on this topic should not appear in a *Companion to Epistemology*. The theoretical one was that there are many occasions where views in epistemology are dependent on views in metaphysics or in the philosophy of mind, and we could not hope to cover everything equally well. Contributors were asked to concentrate on epistemology, and the entries have been written accordingly. When reading entries on individual thinkers, therefore, you should bear in mind that these entries do not pretend to be complete accounts of their subject's work in philosophy; they are concentrating on the epistemology as far as that is possible. The same applies to topics. The entry on natural science is concerned only with the epistemology of science, the entry on religious belief limits itself to epistemological considerations, and so on. The limitation to epistemology is normally implicit rather than explicit; otherwise every entry would have to be headed "X's epistemology" or "the epistemology of Y".

This Companion has two editors, divided by the Atlantic (and rejoined by electronic mail). Its general shape was conceived during a very pleasant weekend which I spent in Providence, RI, in Spring 1989. Thereafter, I relied on Ernest Sosa for a constant stream of suggestions about who in the US we might approach as potential contributors – a stream that was evidence of his enviable knowledge of the profession. UK contributors were my responsibility. Beyond that, the detailed editing of contributions has been my province, though I am very grateful to my co-editor for help and advice on the occasional knotty points that arose. I am, of course, equally grateful to our contributors for being willing to undertake what in many cases was a fairly thankless and far from easy task – and for the openness with which so many of them received my suggestions for changes to suit my own idea of how things should be. I have had many occasions to express my appreciation of the professionalism of the profession.

Finally, I want to thank my wife Sarah, who helped me with various aspects of the editing process, and my son Hugh, who spent

two weeks last autumn turning entries into computer-readable form. For a while this Companion was a family affair.

Keele, February 1992

NOTE

1 This paragraph refers to the cover illustration from the first edition, Georg Friedrich Kersting's *Lesender bei Lampenlicht*.

Preface to the Second Edition

The second edition of the *Companion to Epistemology* differs from the first edition in being divided into three parts. Part I consists of ten new review essays that analyze and discuss recent developments in the main areas of epistemology. Part II presents the reader with a novel approach to portraying a philosophical discipline: twenty epistemological self-profiles. The purpose of these self-profiles is to let their authors give succinct, authoritative accounts of their views and chief arguments in support of them. Reading through all twenty of them will give students and practitioners of epistemology an excellent view of the range of theories and the high level of sophistication characteristic of the current state of the art in the field. Deciding whom to invite to contribute a self-profile obviously raised some difficult issues. The editors' choices were guided by the thought that authors of self-profiles should have produced a stream of significant publications spanning the past two decades, publications addressing the main issues of epistemology and advancing the state of play in the discipline. This approach slanted our choices in favor of seniority, excluding several more junior epistemologists who, using different criteria, would have deserved inclusion.

The first edition of the *Companion* makes up most of Part III, Epistemology from A–Z. The following new or significantly revised entries have been added to this part: a priori (Albert Casullo), Alston, William (Robert Audi), belief (John Heil), defeasibility (Bruce Hunter), empiricism (Bruce Hunter), conversational implicature (Duncan Pritchard), doxastic voluntarism (Sharon Ryan), epistemic deontology (Sharon Ryan), epistemic luck (Mylan Engel), epistemic supervenience (John Turri), epistemic virtue (Guy Axtell), ethics and epistemology (Jonathan Dancy), evolutionary argument (Omar Mirza), fallibilism (Adam Leite), feminist epistemology (Lorraine Code), the given (Alan Goldman), intuition in epistemology (Bruce Russell), lottery paradox (Jonathan Vogel), memory (Tom Senor), Robert Nozick (Sherilyn Roush), moral epistemology (Jonathan Dancy), naturalized epistemology (Hilary Kornblith), relativism (Harvey Siegel), reliabilism (Alvin Goldman), religious belief – recent developments (Michael Bergmann), sensitivity (Duncan Pritchard), testimony (Jennifer Lackey), zebras and cleverly disguised mules (Mylan Engel).

I wish to thank David Coss and Tanya Hall (at the time, philosophy majors at St. Cloud State University) for proofreading the scanned first edition files, Erin Kealey at Purdue for correcting the entire set of page proofs for the second edition and preparing the index, and Nick Bellorini and Liz Cremona at Blackwell for their editorial help and guiding the second edition through the production process. I also wish to thank my co-editors, Jonathan Dancy and Ernest Sosa, for their expert advice on planning and putting together this volume.

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Part I
Ten Review Essays

Skepticism and Closure

1. PRELIMINARY FORMULATIONS OF CLOSURE

I know the conjunction of some axioms (say, those of Peano Arithmetic), and I prove a theorem T on their basis. My belief of T presumably amounts to knowledge. That is how knowledge is generated in the so-called deductive sciences. As a first shot, we might formulate a generalized *Closure Principle* for knowledge as follows:

CL1: Necessarily, for all S,φ,ψ: if S knows that φ, and φ entails ψ, then S knows that ψ.

Call this principle *closure of knowledge under entailment*. The meaning of the word "closure" here follows its mathematical usage, according to which a set α is closed under a function F defined on its members just in case F when applied to a member (or members) of α always yields a member of α as its value. So the set of even natural numbers is closed under addition, since the sum of even addends is always even. Similarly, CL1 says that, for any member φ of the set K of propositions known by some S, each entailed consequence ψ of φ will also be a member of K. But CL1 is obviously false. There are infinitely many entailed consequences of the conjunction of the Peano axioms of which I am unaware. Since I do not believe these propositions, I lack knowledge of them.

Suppose that we try to solve the problem by restricting CL1 to those entailed consequences of a known proposition that are *known to be such*:

CL2: Necessarily, for all S,φ,ψ: if S knows that φ, and S knows that φ entails ψ, then S knows that ψ.

Call this *closure of knowledge under known entailment*. There are two problems with CL2. First, suppose that I know the conjunction of the Peano axioms and also know that this conjunction entails T*. However, owing to a sort of cognitive disconnect, I fail to put these two pieces of knowledge together and thus fail to deduce T*. Suppose, then, that I fail to believe T*. Then I shall fail to know T*. Second, suppose, again, that I fail to put my two pieces of knowledge together but nevertheless believe T* because I think that the ghost of Elvis has testified to the truth of T*. Then I again fail to know T*.

In order to deal with these problems, we shall restrict CL2 to those entailed consequences of a known proposition that are (1) known to be such, and (2) believed on the basis of an appropriate inference:

CL3: Necessarily, for all S,φ,ψ: if S knows that φ, and S knows that φ entails α, and S believes that ψ on the basis of an inference from φ and (φ entails ψ), then S knows that ψ.[1,2]

2. THE CLOSURE-BASED CARTESIAN SKEPTICAL ARGUMENT

CL3 can be used in the construction of a Cartesian skeptical argument concerning knowledge of propositions about the external world. Let us choose a *target proposition* from the set of those propositions about the external world which I take myself to know. Let us choose H = *I have hands*. Let SK be the proposition that *I am a brain in a vat with experiences just like those I actually have, produced by a supercomputer's stimulation of my brain*. Let "K(S,φ)" stand for *S knows that φ*. Let "B(S,ψ,α,β)" stand for *S believes that ψ on the basis of an inference from α and β*. Let "ab" stand for *Anthony Brueckner*. Here is the skeptical argument:

(1) If K(ab,H), and K(ab,[H entails ~SK]), and B(ab,~SK,H,[H entails ~SK]), then K(ab,~SK).
(2) {K(ab,[H entails ~SK]) and B(ab,~SK,H,[H entails ~SK])}.
(3) ~K(ab,~SK).
So:
(4) ~{K(ab,H), and K(ab,[H entails ~SK]), and B(ab,~SK,H,[H entails ~SK])}.
So:
(5) ~K(ab,H).

Premise 1 is just an instance of CL3. Premise 2 is in fact true of me: I know that the pertinent entailment holds, and I believe that ~SK on the basis of an inference from my beliefs that H and that the entailment holds. What of premise 3? My sensory evidence for believing ~SK does not favor ~SK over SK, since I would have that same evidence regardless of whether I am in a world in which ~SK is true (a normal world) or, instead, in a world in which SK is true (a vat world). In other words, my sensory evidence fails to discriminate between ~SK and SK. Thus, it seems to follow that my evidence fails to *justify* me in believing that ~SK. Hence I do not know that ~SK, supposing that justification is a necessary condition for knowledge. This reasoning in support of premise 3 can be seen as resting upon the following *Underdetermination Principle*:

(UP) If S's evidence for φ does not favor φ over an incompatible hypothesis ψ, then S is not justified in believing φ and rejecting ψ.[3]

The antecedent of UP says, in effect, that S's evidence *underdetermines* a choice between φ and ψ. As for the rest of the argument, 4 follows from 1 and 3 by Modus Tollens, and the conclusion 5 follows from 2 and 4 by propositional logic.

The foregoing argument would seem to generalize to all putative knowers and to just about all putatively known propositions about the external world.[4]

3. DENYING CLOSURE: NOZICK

One way to block the skeptical argument is to deny CL3. If CL3 is not an exceptionless general principle about knowledge, then the skeptic cannot appeal to this principle as the rationale underlying premise 1. In a famous discussion, Robert Nozick argues that, on his *Tracking Analysis of Knowledge*, CL3 fails.[5] Let "φ $\Box\!\!\rightarrow$ ψ" stand for the subjunctive conditional *If φ were the case, then ψ would be the case*. According to Nozick's Tracking Analysis, S knows that P if and only if:

(I) P is true.
(II) S believes that P.
(III) ~P $\Box\!\!\rightarrow$ ~(S believes that P).
(IV) P $\Box\!\!\rightarrow$ S believes that P.

Let us assume that the truth-conditions for φ $\Box\!\!\rightarrow$ ψ are these: the φ-worlds (possible worlds in which φ is true) *closest* to (most similar to) the actual world are ψ-worlds. According to Nozick's analysis, S knows that P just in case S *tracks P's truth-value* through the following range of possible worlds: the closest ~P-worlds, the actual world, and the closest (non-actual) P-worlds. Condition III has come to be known as *Sensitivity*. It explains failures to know in Gettier cases, cases of lucky guesses, and cases of wishful thinking.[6] Condition IV captures another dimension of the non-accidentality of knowledge. It explains failures to know in Harman's assassination case[7] and in cases in which a brain in a vat arrives at a rare true belief that P owing to a passing whim of his vat-keeper (who does not happen to give him that true belief in close P-worlds).

Sensitivity reveals that the skeptic is right about one thing: his premise 3. In order to know ~SK, S must satisfy this logical equivalent of the pertinent instance of condition

III: SK $\Box\!\!\rightarrow$ ~(S believes that ~SK).

But S does not satisfy this condition, because the closest SK-worlds are worlds where S *does* believe that ~SK (just as he actually believes). No one satisfies the condition in question for knowing ~SK, because everyone who is in a vat world mistakenly believes that he is *not* in a vat world.

I myself do not at present claim to know whether I am in a normal world or a vat world, given that I am in the middle of an evaluation of the skeptical argument and Closure's role in it.[8] However, I think that there are some subjects in some possible worlds who satisfy Nozick's conditions for knowing H (our "hands" proposition), in virtue of inhabiting normal, non-vat worlds. Call one such subject Ace. H is true in Ace's normal world; Ace correctly believes H; in the ~H-worlds close to Ace's world Ace