

Albert Casullo. *Essays on A Priori Knowledge and Justification*. Oxford University Press 2012. 384 pp. \$78.00 USD (Hardcover ISBN 9780199777860); \$39.95 USD (Paperback ISBN 9780199395750).

Essays on A Priori Knowledge and Justification contains fourteen essays, an introduction, and an annotated bibliography. The first six essays provide background to Albert Casullo's monograph, *A Priori Justification* (Oxford 2003). The next four, published later, extend its themes. The final four are previously unpublished. Because Casullo's essays are so detailed, sometimes containing multiple degrees of distinctions operating at cross-purposes, writing a short review is difficult. In what follows I open with overall critiques. Because this is an anthology, I then summarize its component essays.

I have four positive critiques. First, *Essays on A Priori Knowledge and Justification* is the clearest, most detailed, most rigorous work on the a priori with which I am familiar. Casullo's distinctions within arguments, theses, and theories are astounding. Unfortunately I have not read Casullo's monograph. Perhaps it is as clear, detailed, and rigorous as this. I do not see how it could be more so.

Second, the anthology contains cutting-edge research, including much that is surprising. Besides discussing the usual suspects when dealing with the a priori—analyticity, belief, certainty, justification, knowledge, necessity, truth—Casullo appeals to Keith Donnellan's distinction between attributive and referential uses of definite descriptions, versions of reliabilism, epistemological overdetermination, and empiricist sensibilities generally. Casullo's arguments will not persuade everyone. Nonetheless they should be heeded by anyone working on the a priori.

Third, while Casullo's interlocutors include contemporary analytic philosophers, they also include Immanuel Kant, whose views on the a priori are foundational to the tradition, as well as John Stuart Mill and (if I may be allowed to classify him as non-contemporary) W.V. Quine—historically the a priori's most important critics. Though still relatively circumscribed, the list nevertheless reinforces recent trends in analytic philosophy to consider historical authors when relevant. Casullo shows that some clearly are.

And fourth, though offering dizzying degrees of distinctions, Casullo is a master sign poster. All essays begin by indicating of how they will proceed, and within and between each sections Casullo often reminds us where he has been and will go. Never is the reader without a map. Would that other philosophers were that perspicuous.

I also have four negative critiques. First, because Casullo's arguments are so focused, his conclusions have limited scope. Even if Casullo has shown that philosopher *X*'s version of a view is wrong, it does not follow that philosophy *Y*'s very slight modification of *X*'s view is wrong. This is unavoidable given the setup of these essays. But the reader should be warned. This is a series of short, overlapping explorations of a short list of views on a well-defined theme.

Second, the essays would have been more digestible had they been grouped thematically rather than simply appearing chronologically. Those centrally concerned with analyzing the a priori (essays 6, 9, 14) could have constituted one section; the relation between necessity and the a priori

(1 and 2), another; the relation between the a priori and reliabilism (3 and 4), a third; intuition, counterfactuality, and conceivability (11, 12, and 13), a fourth; and miscellany (5, 7, and 8), a fifth.

Third, redundancy exists between essays. To cite one example, Casullo distinguishes among a proposition's truth value (its truth or falsehood), general modal value (its necessity or contingency), and specific modal value (its necessary truth, necessary falsehood, contingent truth, and contingent falsehood) in essays 2, 6, 10, 11, 12, and 13. Minimally Casullo might have cross-referenced instances like these with notes. This would also have helped the reader track Casullo's distinctions generally.

And fourth, on the topic of notes, some essays employ footnotes; others, endnotes. Since the copyright holders of Casullo's previously published essays permitted reprinting them, I doubt that they would have prohibited Casullo's reworking their notes consistently.

Because the volume just is a collection of essays, let me all-too-quickly summarize each. In "Kripke on the A Priori and the Necessary" (essay 1), Casullo contends that Saul Kripke's argument that not all a priori statements are necessary is unsound. Appealing to Donnellan's distinction, Casullo argues that Kripke's example of an allegedly a priori contingent statement, 'the length of *S* at t_0 is one meter', said of the meter stick in Paris, is not a priori justified. Used attributively, 'the length of *S* at t_0 ' picks out one meter. Used referentially, it picks out whatever the length of the stick happens to be. If the description is used referentially, therefore, then the whole statement is empirical.

In "Necessity, Certainty, and the A Priori" (essay 2), Casullo considers three arguments allegedly showing that mathematical propositions are a priori. The *Irrefutability Argument* contends that no experiential evidence can refute mathematical propositions; *Argument from Certainty*, that mathematical propositions are known with certainty; and *Argument from Necessity* contends that mathematical propositions are necessary. Casullo disarms each in turn.

In "Revisability, Reliabilism, and A Priori Knowledge" (essay 3), taking the a priori to concern justification, Casullo maintains that reliabilism, which does not concern justification, might empirically support the existence of a priori beliefs. Relatedly, in "Causality, Reliabilism, and Mathematical Knowledge" (essay 4), Casullo considers the view that priori knowledge concerns abstracta that are themselves the source of our knowledge of them. Because, Casullo agrees with Paul Benacerraf, we cannot have causal contact with abstracta, we need a theory of knowledge that is not causal. Casullo turns to reliabilism, distinguishing *indicator reliabilism*, requiring lawlike connections between input and output, from *process reliabilism*, focusing on processes per se. Dismissing indicator reliabilism, Casullo maintains that whether process reliabilism is compatible with knowledge of abstracta depends on whether there are psychological processes generating beliefs about them.

In "The Coherence of Epistemology" (essay 5), Casullo considers Laurence Bonjour's argument that empiricism leads to skepticism. Contending that rationalism is similarly vulnerable, Casullo concludes that rationalism nevertheless might be supported by empirical evidence. Likewise, in "A Priori Knowledge" (essay 6), Casullo maintains that the most promising strategy supporting a priori knowledge is offering empirical grounds for non-empirical justificatory sources.

In “Epistemic Overdetermination and A Priori Justification” (essay 7), Casullo considers two strategies to defend radical empiricism, “the view that experience is the only source of knowledge” (p. 159). The first, Mill’s inductivism, maintains that allegedly a priori knowledge derives from induction based on empirical instances. The second, Quine’s holism, maintains that such alleged knowledge is empirically albeit indirectly confirmed with the rest of one’s empirical knowledge. Casullo contends that even if a priori knowledge is inductively or indirectly empirically confirmed, that does not show that it is not also non-empirically confirmed.

In “Testimony and A Priori Knowledge” (essay 8), Casullo considers Tyler Burge’s account of testimony. Because Burge takes testimony to be a possible source of a priori knowledge, if Burge is right there is more a priori knowledge than normally thought. Nevertheless Casullo contends that Burge’s arguments fail.

In “Analyzing A Priori Knowledge” (essay 9), Casullo focuses on Philip Kitcher’s argument that mathematical knowledge is not a priori. Casullo claims that it too fails. Likewise, in “Knowledge and Modality” (essay 10), Casullo returns to Kripke’s alleged examples of necessary a posteriori and contingent a priori truths. Casullo concludes that while the a priori is linked to necessity, further investigation is needed.

In “Intuition, Thought Experiments, and the A Priori” (essay 11), Casullo considers George Bealer’s attempt to defend a priori knowledge by identifying intuitions as non-empirical sources of evidence and justification. Nonetheless, Casullo maintains, to be compelling, an argument for rationalism must offer evidence acceptable to both rationalists and empiricists.

In “Counterfactuals and Modal Knowledge” (essay 12), Casullo notes that a priori knowledge has since Kant been thought to be knowledge of necessary truths. He then considers Timothy Williamson’s attempt to explain how we gain such knowledge, viz., via knowledge of counterfactuals. Williamson argues this to show that differences between philosophy and the natural sciences are not deep. Casullo concludes that Williamson’s argument fails. In “Conceivability and Modal Knowledge” (essay 13), Casullo again considers modality, now by turning to Christopher Hill’s tests for determining metaphysical modalities and whether conceivability provides epistemic access to metaphysical possibility. Casullo claims that Hill’s tests do not establish his desired link between modality and counterfactuality, and that Hill’s account of modal knowledge is inconsistent with conceivability’s providing any such access.

Finally, in “Articulating the A Priori–A Posteriori Distinction” (essay 14), Casullo considers four authors’ eponymous strategies: Kitcher’s, according to which the concept of the a priori is either incoherent or insignificant; John Hawthorne’s, according to which the a priori–a posteriori distinction is non-naturalistic; Carrie Jenkin’s, who focuses on mathematical knowledge; and Williamson’s, according to which the distinction is not deep. Casullo concludes that because justification need not originate in any source, the a priori–a posteriori distinction need not be exclusive.

Not only would I recommend *Essays on A Priori Knowledge and Justification* to anyone working on the a priori. I would require it.

Nathaniel Goldberg, Washington and Lee University