

Albert CASULLO: *A Priori Justification*. New York: Oxford University Press 2003. 249 pp. ISBN 0–19–511505–8.

In contemporary epistemology there has been a resurging interest in a priori knowledge. Over the past ten years or so innovative contributions to this topic have been put forth by philosophers like George Bealer, Paul Boghossian, Laurence Bonjour, Tyler Burge, Albert Casullo, Harry Field, Alvin Goldman, Christopher Peacocke, Alvin Plantinga, Ernest Sosa and others. In his excellent book, *A Priori Justification*, Albert Casullo provides a comprehensive treatment of the main issues concerning the a priori which is sensitive to the main recent contributions to the topic. Casullo's book is organized into three parts devoted to the following questions: (i) What is a priori knowledge? (ii) Is there a priori knowledge? (iii) What are the relationships between the a priori and semantic and metaphysical notions? In this review I want to focus on the first two parts of Casullo's book.

The first part of Casullo's study consists of three chapters and is (as already mentioned) concerned with the question how the notion of a priori knowledge is to be explicated. This question is of utmost importance, since the notion has often been conflated with unrevisability, certainty, necessity or analyticity. In the first chapter, Casullo provides a survey and critique of different analyses. Casullo begins his discussion with the question what the primary target of an analysis of the concept of a priori knowledge should be. He argues convincingly that the notion of a priori knowledge should be explicated "reductively" via the notion of a priori justification. The primary target of an analysis should accordingly be the notion of a priori justification, and not the notion of a priori knowledge. Casullo's first rationale for this order of explication is that a "non-reductive" analysis, which aims at analyzing the notion of a priori knowledge, would have to address the Gettier-problem. But the Gettier-problem has, as Casullo rightly contends, no obvious bearing on the question of what distinguishes empirical from

non-empirical knowledge. An analysis of a priori knowledge via the notion of a priori justification circumvents the question of how the Gettier-problem should be solved and should therefore be preferred. Furthermore, it is uncontroversial, as Casullo maintains, that knowledge entails truth, whereas it is controversial whether justification entails truth. Since this distinction can be easily overlooked when one pursues the "non-reductive" approach to analyzing the notion of a priori knowledge, Casullo pleads for the "reductive" approach. Next, Casullo presents an illuminating taxonomy of analyses and corresponding conditions. There are, according to Casullo, two main types of analyses, namely epistemic and non-epistemic ones. Epistemic analyses consist of epistemic conditions, like strength, source and defeasibility-conditions, whereas non-epistemic analyses contain semantic or metaphysical conditions, like analyticity or necessity. Since the notion of a priori justification is an epistemic notion, Casullo is convinced that it should be explicated via epistemic concepts and not semantic or metaphysical ones. The latter concepts do not highlight what is distinctive about this kind of justification. Although Casullo dismisses non-epistemic analyses, he discusses epistemic analyses that contain necessity as a necessary, though not sufficient condition for a priori knowledge. He considers the views of Bonjour and Plantinga who treat necessity as part of an epistemic condition, and of Chisholm, who thinks of necessity as an independent non-epistemic condition for a priori knowledge. Casullo rejects all of these analyses. He then examines strength and defeasibility conditions and finally source conditions. Casullo argues that strength and defeasibility-conditions are not essential for the a priori and that an analysis of a priori justification in terms of the sources by which a given belief is justified is the correct one. According to Casullo, a proposition is justified a priori if it is justified by some non-experiential source. I think that this analysis is correct, but Casullo fails to spell out what a source of justification exactly is. Furthermore, he doesn't point out how

sources of justification are related to reasons or grounds for a given belief. Although these questions are general questions of epistemology and are not confined to the domain of the a priori, I think that a defendant of an analysis of a priori knowledge in terms of its sources should be explicit on these points.

The second chapter is devoted to a defense of this "minimal" analysis, according to which a proposition is justified a priori if it is justified by some non-experiential source. Casullo presents several considerations that favor this minimal analysis over one that combines this source condition with a "weak" defeasibility condition. According to this richer analysis, a proposition that is justified by a non-experiential source cannot be defeated by experience. Casullo argues *inter alia* that this second analysis violates a plausible condition of adequacy of an analysis of a priori knowledge, namely that an a priori justified proposition should also be capable of empirical justification.

The third chapter is devoted to the question whether a priori justified beliefs are fallible. Casullo presents here different concepts of infallibility and (correspondingly) fallibility. He argues that there are two main senses of infallibility (and fallibility), namely Cartesian infallibility and Peircean infallibility. Cartesian infallibility concerns the relation between justification and truth, whereas Peircean infallibility concerns the relation between justification and defeasibility. He then distinguishes between different versions of each type of infallibility and investigates the relationships between them. Finally, he criticizes the views of Donna Summerfield and Bob Hale, who proposed analyses of a priori knowledge that are supposed to be fallible.

The second part of Casullo's book is centered on the question whether there exists a priori knowledge. This part of Casullo's study consists of two chapters in which positive and negative arguments for the existence of a priori knowledge are evaluated and a chapter in which Casullo's own approach is articulated. Casullo aims to establish the conclusion that neither the positive nor the negative arguments adequately support their conclusion. He discusses in the fourth chapter three types of arguments that purport to show that

there exists a priori knowledge. These arguments fall into three categories: (i) "conceptual" arguments, (ii) "criterial" arguments and (iii) "deficiency" arguments. The first type of argument consists of the idea that there are items of knowledge that satisfy the conditions that were laid down in the analysis of the concept of a priori knowledge. Casullo discusses two proposals along these lines. First, he examines Hilary Putnam's argument from his papers "There Is at Least One A Priori Truth" and "Analyticity and Necessity: Beyond Wittgenstein and Quine". Putnam maintains that there are propositions that can never be rationally given up, namely the minimal principle of contradiction (i. e. that not every statement is true and false). Since Putnam thinks that an a priori justified proposition is one that cannot be rationally given up, there are items of knowledge that are justified a priori. Casullo convincingly shows that Putnam's argument fails. He objects that the analysis of a priori knowledge that Putnam endorses does not entail that a proposition is justified a priori in the sense of Casullo's explication, i. e. justified independently of experience. Being rationally unrevisable does not preclude that a proposition is justified by empirical evidence. Hence, Putnam's argument is not sound. Harry Field puts forth the second conceptual argument that Casullo discusses. Field maintains that the principles of classical logic are "strongly" justified a priori, i. e. they are not revisable on empirical grounds. Field argues that the principles of classical logic are so deeply embedded in our evidential system that it makes no sense to revise them without giving up the evidential system itself. Casullo objects that Field's overall position leads to the consequence that the principles of classical logic cannot be justified nor defeated by any type of evidence. But this does not show, as Casullo observes, that these principles are justified a priori. Hence, both "conceptual" arguments fail.

Casullo then tries to show that "criterial" arguments fare no better than "conceptual" arguments. "Criterial" arguments proceed to identify certain features of propositions (e. g. necessity or certainty) that cannot be accounted for by empirical modes of justification. This in turn shows that these prop-

ositions must be justified *a priori*. Casullo argues convincingly that these arguments fail. The fourth chapter closes with a discussion of Bonjour's arguments against "radical" empiricism. Bonjour's "deficiency" arguments purport to make the case for the *a priori* by showing that radical empiricist accounts of justification lead to a certain form of skepticism. Bonjour maintains, for example, that certain empirical propositions that are general in their content cannot be justified by experience alone. These propositions can, according to Bonjour, only be justified inferentially by experience and certain principles of inference. Since the radical empiricist accepts only direct experience as a source of justification, he cannot account for the justification of these principles of inference and hence these general kinds of propositions. Casullo rebuts Bonjour's arguments by showing that Bonjour's own position faces similar problems. Casullo insists first of all that there are propositions whose content goes beyond the content of what can be justified by rational insight and that accordingly, these propositions cannot be justified by rational insight alone. But what do these kinds of propositions look like? I think that this objection is not intelligible at all, since Casullo fails to provide an example of these kinds of propositions. Casullo further complains that Bonjour is not offering a convincing explanation of rational intuition. Bonjour advocates the view that a thinker who employs rational intuition must have some grasp of universals. But according to Casullo, Bonjour's explanation of this grasp is only metaphorical and cannot provide a basis for accepting rational intuition as a genuine source of justification. I think this objection is convincing but it seems that Bonjour could modify his position to circumvent it. Bonjour could, for instance, drop this kind of explanation of rational intuition and leave it at an intuitive level. Furthermore, there exist other versions of rationalism (e.g. Bealer's) in which claims like Bonjour's are not endorsed. Thus, Casullo's attack only hits Bonjour's position but not all rationalist conceptions of the *a priori*. If Bonjour's attack on radical empiricism were coupled with a different theory of *a priori* justification, Casullo's argument would not survive.

The fifth chapter examines arguments that purport to show that there is no *a priori* knowledge. These arguments fall also into three types: (i) "conceptual" arguments, (ii) "radical empiricist" accounts, and (iii) arguments from philosophical naturalism. Conceptual arguments against the existence of *a priori* knowledge purport to show that there are no items of knowledge that satisfy the putative conditions for *a priori* knowledge. Putnam and Philip Kitcher proposed arguments along these lines. Both philosophers allege that the concept of *a priori* knowledge includes an unrevisability condition, according to which an *a priori* justified proposition is one that cannot be revised on any type of evidence (Putnam) or on empirical evidence (Kitcher). Casullo has argued in the first part of his book that unrevisability-conditions are not constitutive for the concept of *a priori* knowledge, he now shows that *a priori* justified beliefs do not entail such conditions. He constructs several thought experiments that establish this conclusion. Hence, these kinds of arguments are not successful.

Next, he considers radical empiricist accounts that aim to show that propositions alleged to be known only *a priori* are known empirically. Casullo discusses the views of Mill, Kitcher and Quine who have put forth considerations of this sort (especially for the propositions of arithmetic). Mill tried to show, for instance, that the propositions of arithmetic or geometry can be justified by observation and the employment of the rule of enumerative induction. Casullo responds to this maneuver by arguing that the fact that these propositions can be justified empirically does not rule out the possibility that they can also be justified *a priori*. There exists the phenomenon of epistemic overdetermination, i. e. there can be evidence for a given proposition from different sources. Mill could rule out this response on grounds of simplicity. But to this Casullo replies, in my eyes convincingly, that the goal of an epistemological theory is not to offer the simplest account but an accurate one.

The final set of arguments that Casullo discusses against the existence of *a priori* knowledge purport to show that *a priori* knowledge is not compatible with philosoph-

ical naturalism. The general idea of these types of arguments is due to Paul Benacerraf. Benacerraf has argued in his influential paper "Mathematical Truth" that there exists a problem as of how to account for our knowledge of abstract entities like numbers, when knowledge requires some kind of causal contact with the entities a proposition is about. Since mathematical entities are causally inert, a thinker cannot stand in a causal relation to these entities and hence cannot have knowledge of them. Casullo discusses two main versions of naturalism in relation to the a priori. The first version of naturalism tries to accommodate knowledge of abstract entities within a naturalist framework. The second version of naturalism challenges the existence of the a priori by arguing for some kind of causal constraint on knowledge or justification. Casullo first discusses the view of Mark Steiner who advocates a modified version of a causal theory of knowledge that purports to be compatible with knowledge of abstract entities. On Steiner's theory, for a subject to know that a sentence  $s$  is true, the sentence  $s$  must be used in a causal explanation of why the subject knows that  $s$  is true. Since, on Steiner's view, no causal relations between a subject and abstract entities are needed, he can account for the knowledge of abstract entities without giving up a causal requirement. Casullo argues that Steiner's attempt to reconcile a causal theory of knowledge with Platonism fails, since Steiner's causal constraint on knowledge is too liberal to be of any epistemological significance. He objects that Steiner's proposal is subject to counterexamples, because any ascription of a belief in a mathematical statement  $s$  involves the statement  $s$  in some causal explanation of why the belief is held. He then discusses two versions of reliabilism that also aim to be compatible with knowledge of abstract entities, namely the thermometer model of knowledge put forth by David Armstrong and process reliabilism mainly advocated by Alvin Goldman. Casullo argues that both theories are plagued with difficulties. Armstrong's theory can for instance not accommodate knowledge of abstract entities. Process reliabilism is confronted with the problem of how to explain the reliability of psychological processes that justify

beliefs about abstract entities. This latter fact generates suspicion concerning the reliability of these processes and hence introduces potential defeaters. Casullo finally considers proposals that aim to provide support for a causal constraint on knowledge. He examines the view of Penelope Maddy who argues that a causal constraint is underwritten by the practice of mathematicians. Casullo dismisses her argument because she cannot provide adequate support for the thesis that the practice of mathematicians supports a causal constraint.

In chapter six Casullo aims to provide a solution to the dispute between those who embrace and those who reject the a priori. Since both arguments for and against the a priori fail, as Casullo has shown in the previous two chapters, Casullo argues that an alternative approach is needed. Before he lays down his positive proposal, he addresses a question that was postponed in the first part of his book, namely what experience is. He aims to show that the ordinary approach to analyzing the concept of experience fails. Among the proposals that he rebuts are Plantinga's, Chisholm's, McGinn's and Bonjour's. I think that Casullo's case against Bonjour's explication of the notion of experience is not convincing. Bonjour advocates an analysis of the notion of experience according to which it "should be understood to include any sort of process that is perceptual in the broad sense of (a) being a causally conditioned response to particular, contingent features of the world and (b) yielding doxastic states that have as their content putative information concerning such particular, contingent features of the actual world as contrasted with other possible worlds". Casullo objects to this analysis that it is vulnerable to counterexamples. He distinguishes between two readings of Bonjour's condition (a). On the first reading, the "contingent features" that are causally responsible for the belief in a certain proposition are meant to be any entities that are to be taken into account for explaining the belief in a certain proposition. But this has the consequence that an act of rational insight would be an instance of an experiential process, since the proposition itself and the act of considering it (which are essential for rational insight

to work) are also causally responsible for the belief-state. I think that this is a spurious objection to BonJour, since propositions are abstract entities and are not accessible via perception. Hence, in the case of rational insight, condition (a) is, contra Casullo, on this reading not fulfilled. On the second reading, the particular features of BonJour's condition (a) are meant to be the entities that are referred to in condition (b). But this also has, as Casullo claims, the consequence that a process of rational insight satisfies condition (a). According to BonJour, if I am to be justified, for instance, in the proposition that nothing can be red and green all over at the same time, the properties redness and greenness must be capable of influencing my state of mind. Since properties are abstract entities and are accordingly causally inert, the obvious alternative is that concrete objects which instantiate these properties must be involved in some causal chain of events that is responsible for the content of my state of mind. I think the fact that in BonJour's construal rational insight involves some kind of causal contact with "particular contingent features" does not show that rational insight satisfies the conditions laid down in the analysis of the concept of experience. Because on this reading, clause (b) is not satisfied, since the proposition that nothing can be red and green all over is not about these particular contingent features. The particular contingent features that are referred to in clause (a) of BonJour's explication, according to Casullo, are not identical to those referred to in clause (b). Additionally, the causal contact to these "contingent features" of the world has only the status of an enabling condition for rational insight (analogously to having experiences in order to acquire a language and being able to understand a proposition that is justified a priori). Causal contact to objects that instantiate certain universals does not play some justificatory role. Finally, even if on BonJour's construal of rational insight there would be some kind of causal contact with contingent "features" of the world involved, this would not go against BonJour's explication of the concept of experience, but rather against his explanation of rational insight. If one would adopt an alternative construal of

rational insight, then Casullo's counterexample would not stand. Although I do not think that Casullo's case against BonJour is convincing, Casullo takes the failure of these analyses as evidence that an alternative approach is needed. His approach to analyzing the notion of experience consists of the idea that "experience" is a term for a natural kind. The notion of experience is according to this view introduced by local paradigms, but the nature of experience that determines the reference of the term "experience" can only be discovered by empirical investigations. If such empirical investigations are successful then the question as to which processes are non-experiential, if there should be any, and why they are non-experiential can be answered. According to Casullo's novel proposal, empirical considerations are also salient in determining whether the sources of a priori knowledge are truth-conducive and whether their truth-conduciveness can be explained in some way. Finally, Casullo considers objections to his view, which he rebuts successfully.

In sum, Casullo's book is a must read for anyone who is interested in a priori knowledge. The first part contains the most comprehensive treatment of the present literature questioning how the notion of a priori knowledge is to be explicated. Casullo discusses all the major proposals and argues very thoroughly for his own position. It should therefore be carefully read by anyone who is seriously interested in the question what a priori knowledge is. The second part of his book, in which positive and negative arguments for the existence of a priori knowledge are evaluated and Casullo's own proposals are presented, is also a very important contribution to the present debate. Although Casullo discusses all the main proposals, he has unfortunately omitted a discussion of the views of Peacocke and Boghossian. Peacocke and Boghossian have tried to revive the idea that the phenomenon of a priori justification can be explained in terms of meanings or concepts. Boghossian has, for instance, tried to explain how a belief can be justified a priori via a rehabilitation of a Fregean conception of analyticity, whereas Peacocke has tried to give an account of a priori justification in terms of concepts. Despite this shortcoming, Casul-

lo's book is one of the most important contributions to this topic.

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