suffering through world-destruction if one could do so? I suspect that commentators might still devise a plausible Schopenhauerian answer to these worries, but until one is given, I remain dubious about the 'tremendous practical and spiritual value' of Schopenhauer's view.

My reservations, however, do not mitigate what I see as the tremendous success and the usefulness of this guidebook. Wicks's text, like Jacquette's provides an engaging, well-argued and insightful interpretation and analysis of Schopenhauer's philosophy that presents a more consistent and compelling view of Schopenhauer than many Anglo-American philosophers would currently hold.

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doi:10.1093/mind/fzq048 Advance Access publication 6 October 2010

Grounding Concepts, by C. S. Jenkins. Oxford/New York: Oxford University Press, 2008. Pp. xiv + 290. H/b £39.00, $70.00.

The goal of C. S. Jenkins's *Grounding Concepts* is 'to locate, as an attractive option in philosophical space, a new kind of arithmetical epistemology: one which respects certain important intuitions, hitherto considered to be in tension and impossible to satisfy simultaneously … apriorism, realism, and empiricism' (p. 1). The members of the triad are initially characterized as follows. The arithmetical realist is 'someone who believes that how things are with arithmetic is independent of how things are with us and in particular our mental lives' (p. 2). The empiricist is 'someone who insists that all our knowledge of the world as it is independently of us must either be, or ultimately rest upon, knowledge obtained through the senses' (p. 2). A priori knowledge is 'knowledge secured without epistemic reliance on any empirical evidence' (p. 4). Jenkins, however, notes that it is often further assumed that 'a priori knowledge is knowledge which does not epistemically depend on the senses *at all*', and maintains, to the contrary, that 'there is a significant difference between epistemic independence of empirical evidence and epistemic independence of the senses altogether' (p. 4). This difference is the focus of Jenkins's investigation. More concretely, her idea is that 'experience grounds our concepts (which is not the same as supplying evidence for any proposition), and then mere conceptual examination enables us to learn arithmetical truths' (p. 4). An important consequence of the idea is that it 'makes it reasonable to describe our means of acquiring such knowledge as both a priori (in the sense of independent of empirical evidence) and empirical' (pp. 4–5).

Chapter One addresses mathematical realism, the view that 'mathematics is independent of our mental lives' (p. 13). Two senses of mind-independence are distinguished, essential and modal:

> (E) P's being the case is [essentially] independent of our mental lives iff it is no part of *what it is* for p to be the case that our mental lives be a certain way. (p. 17)
>
> (M) Something is modally independently the case iff, for all aspects *x* of our mental lives, there is a possible world where that thing is the case although our mental lives are different with respect to *x*. (p. 18)

Jenkins argues in favor of (E).

Chapter two sets the epistemological stage. Internalists about justification hold that 'in order to be justified in believing a proposition p, one must be aware (or at least capable of becoming aware) of what one's justification for p is' (p. 34). Internalists about knowledge hold that 'in order to know p, one must be aware (or at least be capable of becoming aware) of what one's grounds for p are' (p. 35). Externalists reject these conditions. For purposes of the book, Jenkins assumes that there is a sense of 'knowledge' and a sense of 'justification' on which externalism is correct. Her goal is to defend the view that we have a priori knowledge of arithmetic in the externalist sense. The issue of a priori knowledge is introduced through a survey of problems facing empiricist attempts to account for such knowledge. Following BonJour (*In Defense of Pure Reason*, Cambridge: Cambridge University Press, 1998), she distinguishes moderate rationalism, which holds that all a priori knowledge is of analytic truths, from radical empiricism, which denies that purported a priori knowledge has a distinctive epistemic status. Jenkins agrees with BonJour that the view that a priori knowledge is restricted to analytic truths does not make such knowledge defensible or unproblematic. Jenkins also agrees that radical empiricists have failed in their attempts to reject the a priori, but maintains that they need not do so. The remainder of the chapter rejects two alternatives to empiricism: Peacocke's and Bealer's versions of moderate rationalism and Field's evaluativism.

In chapter three, Jenkins articulates the externalist sense of knowledge as follows: A knows that p just in case 'K: p is a *good explanation* of BAp [A's belief that p] for someone not acquainted with the particular details of A's situation (an "outsider")' (p. 77). She offers three points of clarification. First, only true propositions make good explanations and can be explained. Second, K does not require that p be the best or only explanation for an outsider of A's belief that p. Finally, an outsider, O, is someone who meets the following conditions:

(1) O is rational, and can understand the content of A's belief that p.
(2) O is aware of *commonplace* facts about people and their mental lives.
(3) O is not aware of any *special* facts about A or A's situation. (p. 77)

The primary support for the account of knowledge derives from its ability to handle Gettier cases:

> Gettier cases are cases where there is *some* explanatory connection between p and BAp, but where that connection is unusual in a way that must be mentioned when giving an explanation of BAp to an outsider. This means that to explain BAp to an outsider by citing p alone will be inadequate in such cases, because it will be misleading. (p. 84)

Jenkins acknowledges that she is merely developing the idea that knowledge is true belief acquired in the 'usual kind of way' and has not provided an analysis of that concept.

Chapter four is the central chapter of the book. The argument proceeds in two stages. First, Jenkins maintains that it is undisputed that there are mathematical explanations of mathematical facts and, furthermore, once that is granted, there is no reason to deny that there can be mathematical explanations of non-necessary non-mathematical facts, such as facts about what we believe. Second, she provides an account of the explanatory link between arithmetical facts and arithmetical beliefs that accounts for mathematical knowledge. According to Jenkins, arithmetical truths are conceptual truths — i.e., 'we can know about arithmetic by examining our concepts' (p. 123). The distinctive epistemological feature of the view is the claim that:

> [I]f it is to be possible for us to come to know essentially independently true propositions by examining our concepts, then the concepts in question must be what I call 'grounded'. That is, they must accurately represent aspects of the independent world, and this accuracy must be due to a certain kind of sensitivity to that world. (p. 126)

A concept is grounded just in case 'it is relevantly accurate and there is nothing lucky or accidental about its being so' (p. 128). Moreover, a concept must be justified in order to be grounded. A concept is justified just in case 'it is rationally respectable for us to rely on it as a relevantly accurate guide to the world' (p. 129). Hence, according to Jenkins:

> Concept accuracy, justification, and grounding are important because, while we have no reason to suppose that examining just *any old* concepts will help us learn about the independent world, examining *accurate* concepts can help us acquire true beliefs about the world, examining *justified* concepts can help us acquire justified beliefs about the independent world, and examining *grounded* concepts can help us acquire knowledge of it. (p. 131)

Examining grounded concepts can help us acquire knowledge about the world because grounding ensures a non-accidental relationship between our concepts and the world which, in turn, ensures that they are a source of information about the world.

The final question is: How do we determine which concepts are grounded? Jenkins responds that the best that we can do is to determine which concepts are justified and assume that most, if not all, of those are grounded. We have evidence that certain of our concepts are justified:

> I think that the structure of our sensory input is our best guide to the structure of the independent world. I furthermore suggest that concepts which are indispensably useful for categorizing, understanding, explaining, and predicting our sensory input are likely to be ones which map the structure of the input well. (p. 144)

Our best evidence for which concepts are indispensable for understanding our sensory input are those which are indispensable for our best scientific theories. Applying the account to arithmetic, we now have:

> I take it that our concepts of *7*, *5*, +, =, and *12* are indispensable, and therefore I take it that they are justified. Assuming things are going well in this case, they are also grounded. This means we can come to know 7 + 5 = 12 just by examining them. (p. 147)

This way of knowing that 7 + 5 = 12 is empirical since experience plays a role in grounding the relevant concepts, but it is not a priori since the role of experience is not evidential.

Chapter five completes the account of arithmetical knowledge by showing how it fits with the explanationist account of knowledge articulated in chapter three:

> [T]here is a three-stage explanatory link between the arithmetical facts and our corresponding arithmetical beliefs. First, facts about the arithmetical structure of the world explain the nature of our (unconceptualized) sensory input. Second, the fact that our sensory input is the way it is explains our possession of arithmetical concepts; … Third, our possession of those arithmetical concepts explains why we come to believe arithmetical truths: … (p. 167)

This three-stage explanation is collapsible only if leaving out the intermediary stages will not mislead an outsider. Since the explanation appeals only to processes which are 'utterly normal and indeed central to our mental lives', it is collapsible (p. 168).

In chapter six, Jenkins distinguishes her approach to arithmetical knowledge from others in the literature and highlights some of its advantages. Chapters seven through nine address objections and sources of resistance to her view.

Jenkins's project raises a number of interesting questions that merit further investigation. First, one might question whether Jenkins's account of arithmetical knowledge supports her contention that such knowledge is a priori. She is sensitive to this concern and maintains that:

> [T]here is a deep instability in the classic collection of platitudes about a priori knowledge, since they include all of the following:
>
> (A) All a posteriori knowledge is knowledge that depends on empirical evidence.
>
> (B) Only knowledge which is independent of experience is a priori.

(C) All knowledge is either a priori or a posteriori and none is both. (p. 255)

Jenkins acknowledges that her proposal to reject (B) may sound radical, but counters that the remaining options are also radical.

I (*A Priori Justification*. New York: Oxford University Press, 2003, pp. 33–55) have argued, however, that the traditional concept of a priori knowledge is best articulated as: S knows a priori that p iff S's belief that p is nonexperientially justified and the other conditions on knowledge are satisfied. Since Jenkins (p. 85) maintains that justification is necessary for knowledge, and also maintains (p. 129) that a concept must be justified in order to be grounded, my articulation of the concept of a priori knowledge in terms of justification, rather than evidence, seems to fit better with her overall theory of knowledge. (See my 'Analyzing A Priori Knowledge', *Philosophical Studies* 142 (2009), pp. 77–90, for a discussion of the issue of fit between one's overall theory of knowledge and one's articulation of the concept of a priori knowledge.) Second, once (A) and (B) are suitably amended — replacing 'that' with 'whose justification' and 'empirical evidence' with 'experience' in (A); and replacing 'which' with 'whose justification' in (B) — nothing needs to be dropped from the triad to accommodate Jenkins's account. Arithmetical knowledge is a posteriori since concept justification is a necessary condition of such knowledge and concept justification depends on experience.

Second, Jenkins maintains that arithmetical truths are known by a process of examining one's concepts but tells us very little about that process. Once again, she is sensitive to this concern and maintains that although her account requires 'some faculty which enables us to derive 7 + 5 = 12 by considering the concepts involved', the existence of such a faculty 'seems far less philosophically troubling once we realize that it is merely a processing faculty' (p. 152). Returning to this issue at a later stage, she tells us that she has not said much about this process 'because I take it to be common ground among a large number of philosophers that there is some such process as conceptual examination, … ' (p. 247). Finally, she maintains that:

> Attempting to describe the processing stages of concept examination in detail would be … not immediately relevant to the epistemological issues that we're focusing on, and not the sort of thing that should be done a priori by a philosopher without input from empirical psychology. (p. 248)

Three observations are in order here. First, the claim that the process involved in conceptual examination is merely a processing faculty is an empirical claim. Second, although it may be true that there is widespread agreement among philosophers that there exists such a process as conceptual examination, there is widespread disagreement about the nature of that process. In particular, rationalists maintain that conceptual examination involves a faculty of rational insight. Finally, although it is true that philosophers should not attempt to describe this process a priori, the nature of that process is directly relevant to the epistemological issues at hand. If that process involves rational insight or some other nonexperiential process, then the claim that the account in question meets empiricist standards is seriously compromised. Hence, there is an important role for empirical investigation in addressing issues relevant to the existence of a priori knowledge.

Finally, the explanationist account of knowledge may require further articulation in order to be evaluated in a convincing fashion. The account is designed with Gettier cases in mind. But it is not clear whether it can handle all of them. For example, consider a standard case in which I see Professor Craig driving a BMW that has been lent to him by Professor Heal, and conclude that one of the Cambridge philosophy professors has bought a BMW. According to Jenkins, the simple explanation of my belief — to wit, that one of the Cambridge philosophy professors has bought a BMW — would be misleading to an outsider because 'he would assume that the professor who bought the BMW was the same as the one I think bought it (at least, if I have any belief as to which of them that is)' (pp. 84–85). It is not clear, however, how the account handles the situation where I directly form the belief in question without any intervening belief as to which professor bought the car. Moreover, it seems that in cases like Henry, who forms the belief that there is a barn in front of him while driving in fake-barn country, the simple explanation — to wit, that there is a barn in front of him — is not a misleading explanation of his belief. He may have formed the belief in an unusual setting but the connection itself between his belief and the barn is the normal process of (accurate) visual perception.

Grounding Concepts offers an original treatment of the epistemology of arithmetic that is clearly articulated and carefully argued. It defends the novel view that the way in which arithmetical concepts are acquired is epistemically relevant to whether one knows arithmetical truths. The articulation and defense of the view includes a wide ranging discussion of the recent literature in general epistemology, a priori knowledge, the philosophy of mathematics, and perceptual experience. It is a book that should be read by anyone with an interest in any of these topics, and one that will repay careful study.

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doi:10.1093/mind/fzq049 Advance Access publication 6 October 2010

