

The Problem With Percy: Epistemology, Understanding and Critical Thinking

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Abstract: Most current conceptions of critical thinking conceive of critical thinking in terms of abilities and dispositions. In this paper I describe a common type of problem students experience with critical thinking and argue that conceptualizations in terms of abilities and dispositions do not provide a way to understand this problem. I argue, further, that a useful way to think about the problem is in terms of epistemological understanding, and that this way of thinking about the issue can provide both pedagogical and conceptual grounding to efforts to foster critical thinking.

Résumé: La pensée critique se conçoit typiquement en termes d'habiletés et de dispositions. Dans cet article je décris un problème courant qui éprouve les étudiant(e)s et j'avance que cette conceptualisation ne nous aide pas à comprendre ce problème. Je soutiens qu'une façon utile d'aborder ce problème est de le décrire en termes d'une compréhension épistémologique, et que cette approche peut apporter un fondement pédagogique et conceptuel à nos efforts de former la pensée critique de nos étudiant(e)s.

Keywords: critical thinking, epistemology, abilities, dispositions

I would like to begin by recounting to you the story of Percy. Percy was a student in a philosophy of education class I taught one year. He was, in fact, a graduate student and had thus managed to successfully negotiate the shoals of academe to that point. But Percy was having problems with his paper for the class. His first effort was a literature review, a complete compendium of anything anyone had ever said about the topic at issue (and thorough it was, too). Alas, Percy's own musings and reflections on the issue were nowhere in evidence. Much discussion ensued about the necessity of coming to his own conclusion on the issue. "Oh, so you want our opinion!" His next attempt involved a compendium of various theorists' views on the issue, largely done without benefit of quotation marks and references, and his own conclusion tacked on the end, dangling and disconnected. More discussion. The inappropriateness of using other people's words without referencing them came as quite a shock to him. "But they said it so much better than I could." But the idea that there ought to be some sort of connection between the points made in the body of the piece and the conclusion drawn at the end was gradually beginning to take hold. I could see the light bulb flashing in great, bright bursts. "OH! So you want us to base our conclusions on reasons and evi-

dence!!!” Yes, Percy, yes! I sat back and smiled, congratulating myself at my pedagogical prowess. But too soon. “OH! So in THIS class, YOU want us to base our conclusions on reasons and evidence.”

I had met Percy before, in various guises, and I have met Percy since. I’m sure that you have all met Percy. What is the problem with Percy?

Most current conceptions of critical thinking conceive of critical thinking in terms of abilities and dispositions. I believe that such conceptions do not provide a way to understand what the problem is with Percy. I shall argue that a useful way to think about the problem is in terms of epistemological understanding, and that this way of thinking about the issue can provide both pedagogical and conceptual grounding to efforts to foster critical thinking.

Conceptualizing Critical Thinking

Most contemporary philosophical conceptions of critical thinking have as a central concept the idea of good reasons. Robert Ennis, for example, highlights the assessment of reasons in his conception of critical thinking which has been highly influential in the field. In his 1962 paper, Ennis defined critical thinking as “the correct assessing of statements.”¹ Ennis subsequently broadened the scope of critical thinking and by 1985 he was defining critical thinking as “reasonable reflective thinking that is focused on deciding what to believe or do.”² Harvey Siegel also puts reason at the center of his account of critical thinking. For Siegel the critical thinker is one who is appropriately moved by reasons and one of the main aspects of critical thinking for Siegel involves the assessing of reasons.³

When actually detailing what precisely constitutes such critical thinking, both Siegel’s and Ennis’s analyses are framed in terms of an ability component and a dispositional component. Siegel terms these two dimensions the reason-assessment component and the critical spirit. For Siegel the reason-assessment component is central to critical thinking and involves the ability properly to assess reasons and their ability to warrant beliefs, claims and actions. The critical spirit, which Siegel views as being of equal importance with the reason assessment component, indicates that the thinker values good reasons and is disposed to assess reasons and to govern beliefs and actions on the basis of such assessment.⁴ Ennis elaborates on the reason-assessment dimension with a list of specific abilities which is categorized under the headings *elementary clarification*, *basic support*, *inference*, *advanced clarification*, and *strategies and tactics*, and includes the following: (1) focusing on a question; (2) analyzing arguments; (3) asking and answering questions of clarification and challenge; (4) judging the credibility of a source; (5) observing and judging observation reports; (6) deducing and judging deductions; (7) inducing and judging inductions; (8) making and judging value judgments; (9) defining terms and judging definitions; (10) identifying assumptions; (11) deciding on an actions; and (12) interacting with others.⁵ Ennis also includes a list of tendencies or dispositions in his conception of critical thinking

which includes: the disposition to seek a clear statement of the statement or question, to seek reasons, to try to be well-informed, to use credible sources and mention them, to take into account the total situation, to try to remain relevant to the main point, to keep in mind the original or basic concern, to look for alternatives, to be open-minded, to take a position when the evidence and reasons are sufficient, to seek as much precision as the subject permits, to deal in an orderly manner with the parts of a complex whole, and to be sensitive to the feelings, level of knowledge, and degree of sophistication of others.⁶

Both Siegel's and Ennis's accounts are prototypical in analyzing critical thinking in terms of abilities and dispositions. Can the problem with Percy be accounted for in terms of a deficit in such abilities or dispositions?

Abilities

Let us consider first the possibility that the problem with Percy lies in the areas of abilities. Are there specific abilities which Percy is lacking which account for his problem with critical thinking? We have no way of knowing whether Percy is able to deal with equivocation, judge the credibility of a source, or judge deductions, to draw from Ennis's list.⁷ It may be that he is able to accomplish these and similar tasks in particular contexts. Even if he cannot, it does not seem to be a lack of these particular kinds of abilities which would account for the type of problem which Percy exhibits.

Might his problem be that he is unable to analyse arguments, that he cannot identify premises and conclusions? Yet he might be able to make such an identification in particular contexts, for example in a textbook exercise. In fact, he may even in the end be successful, in his paper for MY class, at basing his conclusions on reasons and evidence. His problem with argument goes deeper than an inability to analyse and to identify the parts. He does not understand the role of premises and conclusions within an argument nor the conceptual connection between them. In fact, he does not really understand what an argument is.

Perhaps Percy's problem can be captured in terms of an inability to "integrate the other abilities and dispositions in making and defending a position"⁸ or, more broadly, as a failure in the reason-assessment component. Yet, as mentioned above, he may be able to pull it off in particular contexts. Moreover, this diagnosis of the problem would be so broad and general as to be unhelpful. It would not pinpoint the source of the problem. We would still want to know *why* he could not effect such an integration. It would have little explanatory power and provide little guidance in terms of pedagogical remedy.

Dispositions

Let us consider the possibility that the problem with Percy stems from a dispositional deficiency. Perhaps his problem is that he is not disposed to assess reasons and to

govern his beliefs and actions on the basis of such assessment. Now he might be disposed to apply the relevant criteria of reason-assessment in certain contexts. For example, if he comes across and recognizes a deductive argument, he might be inclined to evaluate it appropriately. If he encounters an observational report, he might be disposed to judge it according to relevant criteria. And if he discovers that another professor has a similar idiosyncrasy to mine and also wants students to base their conclusions on reasons and evidence, then he may well be inclined to do so. We don't know if, indeed, he would, but nothing we know about his story would preclude such possibilities. Nor do we know to what extent he applies relevant criteria in his daily life, e.g., when buying a stereo. What we do know, however, is that basing a conclusion on reasons and evidence is not, for Percy, a generalized disposition.

Is Percy's problem that he lacks such critical thinking dispositions as open-mindedness, fair-mindedness, or intellectual honesty? It is true that his work was not marked by a fair and open appraisal of opposing views. But this does not appear to be a failing in terms of openness, fairness or honesty. It seems, rather, to be a lack of understanding that such a weighing is what is called for. Percy did not get far enough into the practice for such dispositions to be at issue.

It does seem correct to say that Percy lacks a critical spirit. One could not describe him as committed to critical thinking, as valuing good reasons, as caring to get it right. Yet such a diagnosis is only marginally helpful. It still does not get at the heart of Percy's problem. It does not tell us why he does not value critical thinking. Indeed, Percy's case seems to be quite different from some others which might be similarly diagnosed, e.g., individuals who fail to think critically out of self-interest, or individuals whose biases blind them from being open-minded. It is not so much that Percy does not care about good reasons. Rather, it is that Percy does not appreciate the role of reasons in inquiry and knowledge.

Epistemological Understanding

I would argue that the problem with Percy is essentially an epistemological one. He does not understand the enterprise of knowledge creation and evaluation, an enterprise which is constituted by the offering and assessing of reasons. He may have some basic grasp of concepts such as reason, evidence, argument and conclusion, but he does not fully understand their meaning, grasp the conceptual connection between them, nor appreciate the role they play in the larger process of inquiry. Thus, for example, he does not fully understand what constitutes a conclusion, failing to appreciate that it is not just a statement which comes at the end of an argument, but that it is conceptually tied to notions such as reasons and evidence. He cannot distinguish between opinion and reasoned argument because he does not have a developed concept of justification and its relationship to knowledge. He does not know how to use sources because he does not understand the epistemological status of the claims made by others. Without some appreciation

of the nature of inquiry, without a larger epistemological picture in which to situate these practices, what I ask of him must seem like an arcane game with arbitrary rules.

It might be objected that Percy must, in fact, have some understanding of concepts such as conclusion, argument, and justification. He doubtless engages in arguments in many aspects of his life, for example arguments regarding the merits of various stereo systems or the strengths and weaknesses of various hockey players. And he doubtless offers reasons justifying his preferences and evaluates conflicting reasons in the process. The problem with Percy, it might be argued, is simply that he does not apply critical thinking in the context of schooling.

Now this is certainly to some extent the case. It would be going too far to claim that Percy has no concept of argument or justification. He would be unable to function in his daily life without such concepts. Nonetheless, his understanding of these concepts appears very limited. He seems to have only a superficial grasp of what it means to justify a claim and his understanding does not generalize to a wide variety of contexts.

Moreover, the problem does not reside simply in a failure to grasp some particular concept, such as justification. Rather, the enterprise of critical thinking is constituted by an entire web of interconnected concepts (e.g., reasons, evidence, argument, justification, warrant, premise, conclusion, opinion). These concepts are connected, in turn, to certain principles and procedures, and all the preceding are connected to certain purposes. It is this whole interconnected network of concepts, principles, procedures and purposes which has eluded Percy's grasp.

Let us return, however, to the objection cited earlier, that the problem with Percy is not so much an epistemological one having to do with his conceptual understanding, but rather has to do with his failure to apply critical thinking in an academic context. On this interpretation, Percy is able to engage, at least to some extent, in the practice of critical thinking in his daily life, but has failed to see the academic context as an appropriate venue for critical thinking. It is likely that his previous schooling experience did not promote or expect much critical thinking nor engage him to any extent in rational inquiry. Thus Percy has not been properly initiated into the practice of thinking critically in an academic setting. One might wonder, however, to what extent he actually engages in sustained reason-giving, evaluation and challenge even in his daily decisions (e.g., in voting). The kind of evaluation of competing claims and opposing arguments which is required in academic writing is not all that different from the kind of evaluation required in assessing complex issues in daily life. Thus one might be justified in suspecting that Percy has a problem with critical thinking even in these contexts. Percy has likely not been properly inducted into the practice of critical thinking even in everyday contexts.

On this reading, then, critical thinking is viewed primarily as a practice which one learns through being inducted into the practice.⁹ The kind of failure to under-

stand which seems to characterize Percy's performance would be viewed as a failure to see the point of the practice. Moreover, on this view, the practice can only be appreciated from within. Thus the problem with Percy would be seen not so much as a lack of prior epistemological understanding, but rather as a failure to get on the inside of the practice of critical thinking in order to appreciate the goods internal to it.¹⁰

I believe that it is very plausible to view critical thinking as a practice, and as such it is a practice constituted by the network of concepts, principles, procedures, and purposes described earlier. And Percy has clearly failed to get the point of the practice. Yet it is important to recognize that the practice is essentially epistemological in nature, involving as it does the evaluation of claims to knowledge. Thus getting the point of the practice means understanding something about epistemology.

It might be objected that framing the issue in terms of epistemology is too narrow. It can be argued that critical thinking takes place in a variety of contexts, e.g., morality, science, law, and that what is required is initiation into this variety of practices and understanding the point of each, not simply understanding epistemology. Now it is certainly the case that the practices which instantiate critical thinking are many and varied and involve a diversity of concepts, principles, procedures and purposes which students must come to understand and appreciate. But what these practices have in common is that they are all critical practices. Whatever else they may involve, they also importantly involve the evaluating of reasons, the justifying of claims, and the making of judgments. And to the extent that they do so, they all have a major epistemological dimension.

It is important to be clear at this point that I am not arguing that what is required in order to think critically is some prior understanding of epistemology. I am not claiming that one needs a course in epistemology before ever engaging in the activity of critical thinking or that simply teaching students about epistemology will enable them to understand the nature of the enterprise. Certainly an immersion in the practice is fundamental to the acquisition of the kind of understanding which is at issue. However that immersion must consist in more than an acquisition of abilities. It must focus, as well, on the development of this understanding. One might fruitfully draw a parallel here with Aristotle's contention that one becomes just by performing just actions, but that one must perform them in the way in which the just person would, that is, with an understanding of their justification.¹¹ Analogously, it may be the case that one becomes a critical thinker by engaging in the practice of thinking critically, but one must do this in the way in which the critical thinker would, that is, with an understanding of the nature of and justification for the practice, and this would entail some sort of explicit awareness of its epistemological underpinnings.

It may be relevant, at this juncture, to highlight how the view which I am developing differs from some of the standard views of critical thinking. It differs

substantially from that of Ennis in that the notion of epistemological understanding is not explicitly present in his account. Siegel, however, does argue for the importance of epistemology, and our views are thus compatible in spirit. Nonetheless, there is a fundamental difference in focus which is of consequence both conceptually and pedagogically. Siegel's analysis is framed in terms of a reason-assessment component and a dispositional component. Knowing about epistemology, conceived of in terms of "a theoretical grasp of the nature of reasons, warrant, and justification"¹² is part of the reason-assessment component. In my analysis, epistemological understanding is not simply a sub-component. Rather it is the central concept through which critical thinking is conceptualized. It is that which underpins, justifies, and makes sense of the activities and dispositions related to reason-assessment. These activities and dispositions are grounded in the understanding. Thus the critical thinker is one who understands about the evolution and evaluation of knowledge and who believes and acts according to this understanding. The latter involves possessing certain kinds of knowledge and being able and disposed to do certain sorts of things, but it is understanding, rather than skill, which is the central explanatory concept.¹³

Such a difference in conceptualization may also have educational consequences. Siegel states that "education aimed at the development of critical thinking . . . must seek to foster a host of attitudes, emotions, dispositions, habits and character traits as well as a wide variety of reasoning skills."¹⁴ I believe, however, that a pedagogical focus on these as the constitutive components might serve to obscure some important aspects of critical thinking. It could result in a failure to give sufficient attention to the conceptual network which underpins critical thinking, a failure to connect the activities and abilities of critical thinking to the purposes of the endeavour, and, more generally, a failure to situate these activities and abilities within the context of the wider enterprise of knowledge creation and evaluation. Thus students may fail to gain an understanding of the sort of larger epistemological picture in which to situate the particular practices, and this is precisely the problem which Percy exhibits.

To say this is to acknowledge that there is an epistemological picture (or range of pictures) in which the activities of critical thinking are situated, a number of epistemological assumptions which are implicit in the practice. These include a belief in reason, a belief in the possibility of rational justification in terms of the criteria and standards inherent in our critical practices, a belief in the desirability of acting on the basis of rationally justified beliefs, and a belief that any of our particular beliefs or criteria could be mistaken or inappropriate.

There are, similarly, certain epistemological beliefs which are incompatible with the enterprise of critical thinking. One of these is the belief that knowledge is certain and comes from authority.¹⁵ This belief leaves no room for a rational assessment of claims and thus precludes critical thinking. Another type of position which is incompatible with critical thinking is radical relativism, in its various

guises. The naïve relativist views all opinions as subjective expressions of preference which are equally valid. The enterprise of critical thinking makes no sense in this context. An interesting variation on the above is the view that there is a domain of certain knowledge which is ascertained through authority and that everything else is a matter of subjective opinion. This, in fact, seems to be the position implicit in Percy's faltering attempts at writing his philosophy of education paper. There are, of course, more sophisticated versions of the radical relativist position, for example the kind of postmodern view which totally rejects reason. Someone holding this position might well utter the same statement as Percy: "Oh! So in THIS class, YOU want us to base our conclusions on reasons and evidence." But this statement would not represent a lack of comprehension of the nature of the enterprise as it did for Percy, but rather a rejection of its legitimacy.

This connection between critical thinking and epistemological beliefs is supported by some of Kuhn's empirical investigations of argument skills.¹⁶ Kuhn discovered a correlation between what she terms an evaluative epistemology (one which "denies the possibility of certain knowledge"¹⁷ but which "reflects the understanding that viewpoints can be compared with one another and *evaluated* with respect to their adequacy or merit"¹⁸) and argumentative skill development. The explanation she suggests for this correlation parallels the argument offered above.

If knowledge is entirely objective, certain, and simply accumulates, as the absolutist believes, or if knowledge is entirely subjective and subject only to the tastes and wishes of the knower, as the multiplist believes, argument is superfluous. There is not need or place for the comparative weighing and evaluation of alternative claims that is at the heart of skilled argument. . . . Only if knowledge is seen as the product of a continuing process of examination, comparison, evaluation, and judgment of different, sometimes competing, explanations and perspectives does argument become the foundation upon which knowing rests.¹⁹

Justification

I would want to claim, then, that there are certain assumptions which underpin our practice of critical thinking and give coherence to the particular elements, and that discussion of this epistemological dimension has tended to be neglected in the way critical thinking has been thought about and taught. And I have outlined above some of the reasons why I believe it makes pedagogical sense to communicate these assumptions to our students. But I also believe that there is a moral reason for engaging these epistemological issues with our students. In teaching critical thinking, we are attempting to promote certain behaviours and attitudes. We are trying to get students to evaluate claims on the basis of certain criteria, and, more generally, to act from such an assessment rather than from various alternatives such as image, intuition or authority. We are also trying to get students to adopt certain values, for example to value open-mindedness, accuracy, truth, and reason. We further believe that we have good reasons for so doing, and these

reasons are connected with the way we view the nature of the enterprise and with the kinds of epistemological assumptions outlined above, for example a belief in reason and a belief in the desirability of acting on rationally justified beliefs. Now as Siegel has pointed out, one of the obligations incumbent upon us as teachers attempting to promote critical thinking is the obligation to provide students with our reasons for what we do in class and what we require of them.²⁰ This would imply that we have an obligation to provide students with our reasons for promoting critical thinking.

It has been argued by some, however, that critical thinking is not the kind of thing which requires a justification. Selman, for example, asks if anyone could seriously dispute the desirability of being able to reason well and further states that the value of critical thinking does not need to be justified to someone who is genuinely taking part in the practice.²¹ Yet the value of critical thinking does seem to be an issue of dispute in contemporary society. Indeed, a flight from reason is evident in many ways, from the spread of religious fundamentalism to the proliferation of new age philosophy. Moreover the kind of postmodernist view which rejects rationality seems to be precisely a case of those who have genuinely taken part in the practice of critical thinking then rejecting the practice. In any case, in recommending that we discuss with our students our reasons for promoting critical thinking, I do not necessarily mean offering a meta-level justification of rationality (although engaging in that discussion may be worthwhile as well); rather, I mean giving students a sense of why we want them to do particular sorts of things and how we see what we want them to do as related to the nature and purposes of the enterprise. This means, I think, engaging with the epistemological issues.

Conclusion

What, then, is the problem with Percy? It is, essentially, that the nature of the enterprise of critical thinking has escaped him. He has not understood the practice in any deep or coherent way, and this despite the fact that he may be able to and even disposed to engage in reason-assessment in particular contexts. This seems to me to indicate that abilities and dispositions are not the appropriate units of focus when conceptualizing critical thinking.²² Although there is certainly merit in detailing particular elements or attributes which are involved in thinking critically,²³ more fundamental is an appreciation of the nature of the enterprise. Perhaps this should be the point of focus when attempting to conceptualize and to promote critical thinking.

Notes

¹ R. Ennis, "A Concept of Critical Thinking: A Proposed Basis for Research in the Teaching and Evaluation of Critical Thinking Ability," *Harvard Educational Review*, 32, 1962: 81-111.

² R. Ennis, "Goals for a Critical Thinking/Reasoning Curriculum," Illinois Critical Thinking Project (Champaign, IL: University of Illinois, 1985).

- ³ Harvey Siegel, *Educating Reason: Rationality, Critical Thinking and Education* (New York: Routledge, 1988).
- ⁴ *Ibid.*
- ⁵ Ennis, "Goals for a Critical Thinking/Reasoning Curriculum."
- ⁶ Robert Ennis, "Dispositions and Abilities of Ideal Critical Thinkers," July 1994, from Robert Ennis, *Critical Thinking*, Upper Saddle River, N.J.: Prentice-Hall, 1995.
- ⁷ *Ibid.*, p. 2.
- ⁸ *Ibid.*
- ⁹ As an example of this view, see Mark Selman, "Critical Thinking as a Social Practice." In John Portelli & Sharon Bailin (Eds.), *Reason and Values: New Essays in Philosophy of Education* (Calgary: Detselig, 1993).
- ¹⁰ For an elucidation of this notion, see Alisdair MacIntyre, *After Virtue* (Notre Dame: Notre Dame University Press, 1984).
- ¹¹ Aristotle, *Nichomachean Ethics*, Book II, Chaps 3, 4.
- ¹² Siegel, *Educating Reason*, p. 35.
- ¹³ For a critique of skills-focused conceptions of critical thinking, see S. Bailin, "Education, Knowledge, and Critical Thinking." In D. Carr (Ed.), *Education, Knowledge and Truth*. (London: Routledge, 1998).
- ¹⁴ Siegel, *Educating Reason*, p. 41.
- ¹⁵ I take Battersby's point that we do, in fact, rely on authority for much of our knowledge, but authority is here relied on as an intermediary source of knowledge when the means for rationally assessing the knowledge claims themselves is beyond our reach. The assumption is that the experts have themselves reached their conclusions based on reasoned assessment and that there are criteria for critically assessing their expertise and basis for judgment. M. Battersby, "Assessing Expert Claims: Critical Thinking and the Appeal to Authority," *Paideusis*, 6, 1993: 5-16.
- ¹⁶ Deanna Kuhn, *The Skills of Argument* (Cambridge: Cambridge University Press, 1991).
- ¹⁷ *Ibid.*, p. 187.
- ¹⁸ *Ibid.*, p. 188.
- ¹⁹ *Ibid.*, pp. 201-202.
- ²⁰ Siegel, *Educating Reason*, p. 45.
- ²¹ Selman, "Critical Thinking as a Social Practice." pp. 63-64.
- ²² For a further elaboration of some of the problems with "skills and dispositions" accounts, see Sharon Bailin, Roland Case, Jerrold Coombs and LeRoi Daniels, "Misconceptions of Critical Thinking," *Journal of Curriculum Studies*, forthcoming.
- ²³ For an alternative approach to detailing the aspect involved in critical thinking, see Sharon Bailin, Roland Case, Jerrold Coombs and LeRoi Daniels, "Conceptualizing Critical Thinking," *Journal of Curriculum Studies*, forthcoming.

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