Education and Social Epistemology

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TRUTH, TEACHING, AND EXPERTISE

At a recent conference I was described as a defender of epistemological "family values." This took me a bit by surprise, since I once was considered, and in many quarters am still considered, a radical epistemologist. However, times are changing. In any case, I *am* a defender of the tradition insofar as I remain unmoved by the tides of postmodernism and social constructivism that are trying to wash away all vestiges of truth and objectivity. I believe in truth -- "absolute" truth as it is sometimes called -- and I believe that a great variety of human endeavors are dedicated, quite properly and understandably, to the discovery and dissemination of truths.

Two motives drive truth seeking: simple curiosity and practical advantage. The first is illustrated by the popular fascination with dinosaurs and their extinction. People want to know why the dinosaurs became extinct, although this knowledge would serve no practical end in most cases. Moreover, they want to know the truth, that is, what really happened, not simply what is generally believed (so truth must not be equated with consensual belief.) The desire for truth also can have a prudential rationale. If a child has a nasty accident on a trip and needs immediate attention, the parents want a true answer to the question, "Where is the nearest emergency room?" Believing the truth is usually (though not invariably) a helpful means to achieving practical ends, such as prompt medical attention.

The interest in believing truths is amply demonstrated by the universal linguistic practice of asking questions. The standard aim of asking a question is to learn the true answer from the interlocutor. There are exceptions to this pattern. Teachers direct questions to students even when they (the teachers) already know the answers. Survey researchers ask questions of respondents simply to learn the latter's opinions, correct or incorrect. But the normal purpose of asking a question is to learn the true answer. This is why we direct questions, wherever possible, to people we regard as authoritative or knowledgeable, that is, people in possession of the truth. I don't ask a random person on the street whether my department has a meeting scheduled for Friday; I call the department secretary, who knows about such matters.

Interest in true belief -- or "knowledge," as I shall call it, using this term in a weak sense -- is not confined to individuals. Many social institutions also have an interest in knowledge. Science aims to discover new knowledge; the law seeks the truth about who violated certain statutes, or who committed a tort, so that justice may be done. Finally, the fundamental aim of education, that is, of schooling systems at all levels, is to provide students with knowledge and to develop intellectual skills that improve their knowledge-acquiring abilities. This, at any rate, is the traditional image, and I know of no good reason to abandon it. I do not claim that factual knowledge and knowledge-acquiring skills are the *sole* ends of education; but they comprise, on my view, its most pervasive and characteristic aims.

Perhaps many people would agree with my emphasis on truth for a small sector of education, for example, mathematics and science. Who would urge the teaching of false mathematics? But what about the rest of the curriculum? Well, even history should aim at teaching truths. *Which* historical

truths should be taught is a difficult matter, but I do not think we should teach historical falsehoods, nor *misleading* historical theses, where a misleading thesis is one that is itself true but invites inferences to further conclusions that are false.

Several objections can readily be anticipated here. First, some people deny the existence of objective truth altogether; or they deny that there is truth in certain subject matters, so my principles cannot apply there. Second, it may be observed that many truths are too complicated, or require too many qualifications, to inflict on young children. Surely it is permissible to simplify even at the cost of inaccuracy. Third, it may often be preferable to let students learn truths on their own rather than have teachers (or textbooks) present those truths. Fourth, who is to decide what is true and therefore what should be taught? How should schools and teachers proceed when there are divergent opinions in the local or professional community?

Starting with the first objection, I regret that I cannot here address a global skepticism or nihilism about truth. I plan to address this topic in a book I am currently writing,[1] but it cannot be satisfactorily treated in a short conference paper that has other issues on its agenda. Suffice it to say that I find global critiques of truth based on postmodernist, social constructivist, or relativist themes unpersuasive. Let me turn, then, to restricted skepticism about truth. I grant that there may be domains lacking in truth values, and my theses would have no direct application to those domains. But notice that in any domain we may distinguish *primary* judgments from *secondary* judgments. To illustrate, a primary judgment in the aesthetics of music might be: "Beethoven's *Eroica* is greater than Mozart's 40th Symphony." A secondary judgment in this area would be: "Some music lovers *think* (or *say*) that the *Eroica* is greater than Mozart's 40th for reasons A, B, and C." Even if primary judgments in this area lack truth values, secondary judgments clearly have them, and it is plausible to expect teachers to aim at teaching some of these true secondary judgments. A similar point might be made in ethics. Even if it is conceded that primary statements of an ethical sort lack truth values, there are truth-valuable secondary statements that may well be worth teaching; and the true ones are to be preferred to the false.

Moving to the second objection -- the need to simplify at the cost of inaccuracy -- I completely concede the point. Often it is simplifications or approximations of the truth that should be given to young children; let my proposals be modified accordingly. Turning to the third objection, it is of course sometimes preferable to let students learn things on their own rather than instruct them didactically. That is why education aims to teach skills, not just facts. But the desired skills or methods of self learning should be truth-conducive methods: techniques or skills that facilitate the identification of truth and the rejection of error. The most basic and universal skills that preoccupy education are the three R's, and these can best be viewed as means to knowledge acquisition. Arithmetic competence enables a child to correctly determine (or know) whether she is receiving proper credit or change in financial transactions. Reading and writing skills enhance communicative competence, promote the receipt and transmission of relevant information, and thereby advance the knowledge prospects of the learner and the wider community. Another important skill is the ability to participate constructively in discussion and debate, which also, I believe, can be rationalized in terms of collective discovery and mutual persuasion of truth.[2]

The fourth objection concerns the integrity and viability of expertise. Expertise is an important topic in social epistemology, which is the context in which I approach it.[3] Let us define an expert as someone who has true answers to questions in the domain of expertise, or who has the capacity to readily acquire true answers when questions are raised. Thus, an opera expert is someone who can correctly answer questions about opera (without consulting a reference book), and an expert on automobile engines or kidneys is someone who can correctly determine why a particular token of the type is malfunctioning and what treatment would correct the malfunction. Expertise can be understood either in a *comparative* or an *absolute* sense. Someone is comparatively expert if her question-answering power ranks high compared with others; absolutely expert if her power ranks high in absolute terms. The definition of expertise, then, is relatively unproblematic.

The tougher question about expertise is whether it can be recognized or identified. Many people *claim* to be experts, but how should a community decide whether they are? When, if ever, should a community defer to the expertise or authority of educators (or the writers of textbooks) in deciding what is true? How can a community decide who is an expert unless they know the relevant truths themselves, in which case there is no ground for deference? Finally, when does a teacher have an epistemic right to regard herself as sufficiently expert to present her opinions as truths? Mathematics instructors and texts often just present "truths," or teach certain techniques (e.g., long division, or square-root derivation) without typically proving their soundness; and this goes on in many other fields as well. What makes it epistemically appropriate, if and when it is? And can it be appropriate even when members of a local or professional community disagree?

I can only touch on this topic briefly, but the main point is this. It is sometimes possible for expertise to be demonstrated to novices, and when this happens deference to expertise is defensible and it is reasonable for an expert to deploy her expertise. Expertise can be demonstrated by what I call "truth-revealing situations." Weather forecasters predict the next day's weather, and novices can check on whether they get it right when the weather is "revealed" to all. Similarly for auto mechanics and medical diagnosticians. The diagnosis and treatment of a malfunctioning engine or kidney can often be checked by seeing whether the system or organ functions properly after treatment. Success or failure of the treatment can often be detected even by a novice, and can be used to calibrate the diagnostician's expertise. In this fashion, non-experts can assess expertise. When expertise is thereby established, it seems reasonable to defer to experts (unless they have ulterior reasons to deceive or misrepresent their knowledge, as repair persons often do). Not all domains admit of "truth-revealing" situations, and then the possibility of consensus is dim. In such cases, claims to expertise cannot be honored in quite the same way. That is when teachers should move in the direction of teaching "secondary" statements rather than their own personally accepted "primary" statements in the subject matter. For example, we would expect a high school teacher to teach primary truths about the formal structure of government where expertise can be established. But on issues of normative politics, for example, which side is right in a territorial dispute, one would expect teachers not to press their own views on the rights and wrongs of the matter ("primary" statements), but to emphasize "secondary" truths, that is, how each party to the dispute defends its territorial claim.

VERITISTIC EPISTEMOLOGY AND MULTICULTURALISM

The brand of epistemology I am advocating might be called *veritistic* epistemology because of its heavy emphasis on truth. This epistemology might initially seem committed to a certain position in the contemporary debate over the curriculum. It might seem to side necessarily with "essentialism" -- espousal of a core curriculum -- as opposed to "multiculturalism."[4] Am I not, after all, just espousing the "tyranny of Truth" (with a capital "T"), which is the heart of essentialism? Not at all. This association (between veritistic epistemology and essentialism) is by no means necessary, and the appearance of such a connection must be corrected.

The spirit of essentialism is succinctly expressed in the following argument from Robert Maynard Hutchins: "Education implies teaching. Teaching implies knowledge. Knowledge is truth. The truth is everywhere the same. Hence education should be everywhere the same."[5] Now the first several premises of this argument, a few quibbles aside, strike me as true. I accept that education implies teaching, that teaching (at least in large part) is the conveying of knowledge, and that knowledge is truth (more precisely, knowledge *entails* truth). What about the fourth premise, that truth is everywhere the same? This raises some technical issues about propositions, but let us restrict discussion to propositions devoid of any indexical or demonstrative elements like "I," "you," "here," "now," etc. Then I would agree that for any specified proposition P, its truth value is the same at all times and places. (People's *beliefs* about a proposition's truth value, of course, may vary over time, but that does not entail that the truth itself varies over time.) Since I accept all four premises, am I committed to the conclusion, therefore, that education should be everywhere the same? No, because

the conclusion does not follow from the premises. The reason is simple. There are many truths; although each of these is *true* at all times and places, it does not follow that each should be *taught* at all times and places. Ignoring our earlier qualifications about simplification and approximation, we may say that being true is a *necessary* condition for being taught but not a *sufficient* condition. That leaves open the possibility of teaching different truths at different times and places.

Hutchins's conclusion might follow from the premises if the premises are taken to imply that there is a single truth, or a single totality of truths, that should be taught everywhere. Certainly one possible reading of the fourth premise, "*The truth* is everywhere the same," is that there is a single totality of truths. But even if we grant the premise, so understood, Hutchins would need a further premise to the effect that this totality should be taught everywhere, and that is dubious in the extreme. On a more plausible interpretation of the original premises, they do imply that *only* truths should be taught. But this is compatible with the idea that the particular subset of truths to be taught may be relativized to locale, culture, and context.

Some essentialists, no doubt, maintain that the truths of morality and human nature are found in certain classical works of the European tradition, and perhaps only in those works. If you hold that position, and you hold that the truths on those topics should be taught everywhere, then you get the doctrine that a certain canon should comprise the curriculum. But this doctrine does not follow from the objectivity of truth, or from objectivity conjoined with the view that education should teach truth. These are compatible with the idea that truths are found in works from many different traditions so that no particular tradition should monopolize the curriculum.

Furthermore, *even* if a particular tradition contains more truths than other traditions, it may be an important truth for students to learn that there are many traditions.[6] In a community as diverse as America, for example, it may be particularly important to teach about such diversity. But the existence of diverse races, genders, cultures, and ethnicities, and the range of distinctive values and perspectives that typically accompany these diverse identities, are themselves facts or truths. So educational multiculturalism need not stand in conflict with veritistic epistemology.

I just said that it may be particularly important to teach diversity. But what makes one truth more "important" to teach than another? Importance, I think, is a function of interests, but different types of interested parties and types of interests may be relevant. Let me start with the former. Two types of parties we can identify are individual believers (or learners), on the one hand, and the social systems or institutions of which they are a part, on the other. Although the interests of students are certainly relevant to the question of what should be taught, the interests of society as a whole should also be considered (certainly in the case of primary and secondary education). The situation is analogous to that of a criminal trial. Disinterested or unconscientious jurors may not care a whit whether they get the truth about the guilt of the defendant. But the judicial system as an institution certainly does have an interest in the rendering of a true verdict. Similarly, society may have an interest in its children learning certain truths, even if the children themselves are not terribly interested in those truths. Society's interest should not be ignored, just as the judicial system's interest should not be ignored.

Turning to the definition of "interest," let me focus on the learner's interests. There are three relevant senses or types of "interest." One measure of a question's interest is whether the learner finds it *interesting*, that is, has an aroused curiosity or concern about the question's answer. Such concern can arise from intrinsic fascination or from recognition of the potential practical value of knowing a correct answer. A second measure of interest is dispositional rather than occurrent. Many questions *would* be interesting to a person if he/she only considered them. A third sense is more broadly dispositional: what would interest the learner *if* she knew certain things she does not currently know. Certain types of knowledge might be objectively in a student's interest, however unappreciative the student may be of this at the moment.

Returning to multiculturalism, an argument for it might be based on several of the foregoing factors. First, it may be in society's interest for students to have knowledge of the diversity of their world. Second, such knowledge may be in the students' interest (in the third sense of "interest"), whether they realize it now or not. Third, tailoring or adjusting curricula to the cultures of different student bodies may well be warranted by the obvious fact that material from one's own culture (or gender, or ethnicity, etc.) is more likely to be interesting (in the first sense of 'interest'). Better learning takes place when there is active interest, and good learning of one subject often has beneficial consequences for other learning. Thus, even a veritistic approach to education offers many possible rationales for multiculturalism.

SOCIAL EPISTEMOLOGY, PEDAGOGY, AND ARGUMENTATION

I have characterized my form of epistemology as "veritistic" epistemology, but the title of my paper makes reference to *social* epistemology, and I have not fully explained what that is. I think of individual and social epistemology as two sectors of the subject. Individual epistemology studies intellectual activities of single cognitive agents in abstraction from others in order to see how modes of belief formation promote or impede knowledge acquisition. Social epistemology studies the social or interactive practices of multiple agents in order to see how their interactions encourage or obstruct knowledge acquisition. Two categories of social practices may be highlighted here. First, there are practices of speech in which a speaker tries to inform or persuade an audience, often supporting his claims with reasons or argumentation. A second category of social practices are the inferential practices of hearers who try to decide how much to trust what speakers say, assessing their credibility on the topic in question and their competence compared with other speakers and possible knowledge sources. Educational theory is obviously concerned with an appraisal of activities of both sorts. Which speech practices should be expected of teachers, and which inferential and learning practices of students ought to be expected or encouraged?

A number of recent writers on the philosophy of education have stressed the role of *reasons* in teaching, including Israel Scheffler, Harvey Siegel, and Kenneth Strike. Here is a representative passage by Scheffler, quoted approvingly by Siegel:

> To teach…is at some points at least to submit oneself to the understanding and independent judgment of the pupil, to his demand for reasons, to his sense of what constitutes an adequate explanation. To teach someone that such and such is the case is not merely to try to get him to believe it: deception, for example, is not a method or mode of teaching. Teaching involves further that, if we try to get the student to believe that such and such is the case, we try also to get him to believe it for reasons that, within the limits of his capacity to grasp, are *our* reasons.[7]

Siegel endorses this idea and expands upon it in terms of an ideal of critical thinking.[8] He writes, for example:

> We want to get students to be able to think critically, and that means, in part, getting them to understand what the rules of assessment and criteria of evaluation of claims are. We want our students to learn, for example, the evidential criteria underlying our judgments that some piece of evidence supports claim X, but that another piece does not support claim Y.[9]

I am in broad sympathy with the position of Scheffler and Siegel, but I would like to base it on a deeper foundation, and also take some (limited) exception to their theses.

Reasons-giving, I suggest, should be viewed as argumentation. To give reasons for believing a certain proposition is to treat that proposition as a conclusion of an argument of which the reasons are premises. Now formal logic studies the deductive and/or inductive relations among propositions or sentences abstractly considered. But formal logic does not exhaust the subject of argumentation, where argumentation is construed as a complex speech act in which a speaker defends a thesis to an audience by appeal to reasons or premises. In a previous paper, I have claimed that there are tacitly accepted rules governing the practice of argumentation, rules that go beyond those of formal logic or

the theory of evidential relations.[10] For example, I suggest the following rules of good argumentation:

> (1) a speaker should assert a conclusion only if she believes it;
> (2) a speaker should assert a premise only if she believes it;
> (3) a speaker should assert a premise only if she is justified in believing it; and
> (4) a speaker should affirm a conclusion on the basis of stated premises only if (a) those premises strongly support the conclusion, (b) she believes that they strongly support it, and (c) she is justified in believing that they strongly support it.[11]

Now the theory of reasons and critical thinking advanced by Scheffler and Siegel makes little reference to the aims of true belief and error avoidance. But I suggest that the rationale for the rules of good argumentation is that they promote (or are thought to promote) these veritistic goals. For example, the first two rules instruct a speaker not to assert things that are false by her lights, because what is false by her lights may well *be* false; and assertion of such utterances is apt to induce false beliefs in the audience. The justification requirement in rules (3) and (4c) may be rationalized in similar terms. In particular, on a *reliabilist* approach to epistemic justification of the sort I have defended, justified beliefs are ones produced by belief-forming processes with high truth-ratios.[12] So justified beliefs are likely to be true; and confining oneself to premises and support relations that one is justified in believing will conduce to the assertion of true conclusions, and hence to the production of true beliefs on the part of hearers who accept those conclusions. The aim of reasons-giving in the sense of proper argumentation, then, has its foundation in the aim of producing true belief and error avoidance. To the extent that teachers comply with the principles of good argumentation, they can also be expected to serve the educational goal of advancing their students' knowledge. So reasons-giving, as thus far considered, is not a *distinct* goal from truth, but a means to that end. There is also a special reason for teachers to display the qualities of good argumentation, namely, that teachers are models and exemplars of speaking and thinking.[13] By displaying good argumentative practice under the rules I have sketched, teachers show what counts as good evidence and good argumentative speech, and through this exposure students may come to internalize the criteria of good evidence and the skills of good (internal) inference and good (public) argumentation. The latter are among the truth-promoting skills that an educational system should hope to instill in students.

Until now, the rules of good argumentation we have considered pertain only to the speaker and her state of mind. Shouldn't there also be rules that bring the audience into the picture? Shouldn't the content of a good argument be sensitive to the intended audience, and isn't this particularly relevant to teachers as arguers or reasons givers? This point is at least partly appreciated by Kenneth Strike who writes:

> Propositions that are objective evidence for some claim must be subjectively seen as evidence by the student….A proposition or a phenomenon is only evidence for a claim in relation to a set of concepts that interpret it….The suggestion that evidence is relative to the student's current concepts indicates a need on the part of the teacher to know what the student's current concepts are.[14]

I would say that a proposition is evidentially relevant for a hearer not only in relation to the hearer's *concepts* (as Strike says) but also in relation to the hearer's prior *beliefs* and *capacities for appreciating (deductive and inductive) support relations*. I would formulate this in terms of an additional rule of good argumentation:

> (5) A speaker addressing a particular audience should restrict her premises to statements that the audience is (or would be) justified in believing, and should restrict herself to a support relationship between premises and conclusion that the audience is capable of recognizing or appreciating.[15]

Although this rule applies to all speakers and audiences, we are interested in its application to teachers and students. The rule implies that a teacher must always take into account what students

already believe or don't believe, since this determines whether the students would be justified in believing certain possible premises. In other words, the permissibility of using certain statements as premises depends on the students' prior informational states. As rule (5) implies, a good pedagogue should also take into account what inferential relations the students are capable of appreciating. It isn't enough that the support relation is in fact strong; the audience, in our case the students, should be capable of appreciating the strength of the relation.

AUTONOMY, TRUST, AND TESTIMONY-BASED BELIEF

An unrestricted form of the "reasons" thesis says that everything a teacher asserts must be backed up by reasons. But that is obviously too strong; a speaker's reasons must come to an end somewhere, namely, wherever her assertions are otherwise undefended premises. Rule (5), however, says that the premises of a good specimen of argumentation must be statements that the audience is, or would be, justified in believing. If this is right, justification for believing undefended premises must have a different source, not the current argument of the speaker. One possibility is that the hearer has prior independent information that justifies him in accepting the speaker's premises. But isn't there another possibility? Can't a hearer be justified in believing what a speaker asserts *simply because she asserts it*? Here we should refocus our discussion away from speech practices of speakers to belief practices of hearers, but the issue also bears on speech practices and educational practices generally, because it raises the issue of what students should be expected or encouraged to believe on the basis of teachers' assertions. Many writers on education stress the need to respect the student's *autonomy*. Students, like all people, have a prima facie right and responsibility to be self-governing, and in the epistemic sphere this seems to mean that they have the right and responsibility to make belief decisions for themselves. Now in a sense, this is trivial. There is clearly a sense in which everyone *necessarily* makes their own belief decisions. How can one person literally make a belief decision for another? What is presumably meant by a thesis of autonomy, then, has something to do with the rejection of trust. Strong autonomy would say that nobody should ever trust another in the sense of accepting what they say *simply because they say so*. If a hearer is justified in believing P because some speaker asserts P, it must be because the hearer has reasons to trust the speaker. Such trust has to be earned; it cannot come automatically. So teachers are not entitled to expect students to accept what they say simply because they say it.

This thesis has a nice liberal-sounding air to it; and it *may* be right. But recent discussions in the epistemology of testimony -- a branch of social epistemology, as I would categorize it -- create much room for doubt. Let us briefly review three historical positions on the epistemology of testimony, those of Locke, Hume, and Reid. Locke took the strictest position on intellectual self-reliance claiming that we should not trust the faculties of others. He expressed doubts about granting even derivative authority to the opinions of others, that is, authority based on prior determination of the speaker's reliability.[16] Unlike Locke, Hume emphasized the usefulness of derivative authority. He appreciated the extent to which we rely on the opinions of others, but also insisted that we should rely on these opinions only to the degree that we have observational, non-testimonial reasons for thinking that they are reliable. Thomas Reid took a rather different position. He held that the testimony of others, or at least their sincere testimony, is prima facie credible, even if we do not have an independent check on the testifier's reliability. Reid thought that if our natural attitudes of trust, both in ourselves and in others, were not reasonable, the inevitable result would be skepticism. He therefore placed testimonial justification on an equal footing with perception and memory as a "first principle." This first principle, Reid held, is founded in certain innate dispositions: veracity, which disposes us to tell the truth, and credulity, which disposes us to believe what is said. For Reid, then, the child's default tendency to believe what he/she is told is epistemically in order, not something to be purged by an acid bath of autonomy.[17]

A Reidian position has been endorsed by a number of recent writers on testimony, especially Tyler Burge, Richard Foley, and Alvin Plantinga.[18] I find Foley's formulation of this position particularly congenial. Foley distinguishes *epistemic egoism* and *non-egoism*. The epistemic egoist grants no

fundamental authority to others, just as the ethical egoist grants no fundamental value to the happiness of others. Epistemic egoists can grant derivative authority to others, but only on the basis of having personally established their reliability. Epistemic non-egoists, by analogy with ethical altruists, are prepared to grant others fundamental intellectual authority. In ethical theory, it has been debated whether egoism is a consistent position, the negative side holding that it is inconsistent to assign value to one's own happiness, but not to other people's happiness, despite their similarity to oneself. In a similar spirit, Foley argues that if I grant fundamental intellectual authority to myself, in order to be consistent, I must grant it to others, because it is reasonable for me to think that their intellectual faculties and environment are broadly similar to my own. Foley goes on to say that when my own opinions conflict with those of a testifier, the prima facie authority of his testimony may be defeated or overridden by my opinions (especially when I take myself to have expertise on the subject in question). Thus, it isn't *always* appropriate to place final trust in other people's say-so. Nonetheless, as a default position, trust in others is warranted even when one has no independent grounds for certifying their reliability.

Several other recent writers have pressed the impossibility of verifying the reliability of testimony by non-testimonial means. C. A. J. Coady argues that it is practically impossible for an individual to personally check on more than a tiny percentage of testimonial reports, so the basis for an induction is too slim to provide much justification.[19] John Hardwig has pointed out that trust is an essential part of science, where collaboration is often required among multiple scientists and no specialist knows enough about the other specialties.[20] To take a recent example reported in *Science*, mathematical group theory has an Enormous Theorem (as it is affectionately called), describing the taxonomy of simple groups, the proof of which runs an estimated 15,000 pages spread over upwards of a thousand separate papers written by hundreds of researchers. The proof of the Enormous Theorem has so many pieces that even the experts who produced it rely on one another for assurance that the pieces fit together.[21] If even expert mathematicians rely on trust, why shouldn't students, especially young students, be epistemically permitted to exercise trust in their teachers?

Can the practice of trust be rationalized on veritistic grounds? It might be. If Reid is right that people have innate dispositions toward veracity and credulity, and if they are sufficiently competent, then trust may be a truth-conducive practice. For young children to decline to trust their elders would consign them to massive ignorance. The situation may be compared to language learning. Cognitive studies of language in the Chomskyan tradition indicate that young children have innate tendencies to lean toward certain hypotheses about the language corpora they encounter. This may be a bias, if you wish, but it is a bias that enables them to learn correctly the grammars of languages they actually encounter. Innate credulity might have similar properties.

Of course, as one grows older, one can do better than exercise unqualified credulity. (And indeed it seems plausible that if there is a credulity "module" at all, it ossifies as one leaves childhood, just as the language learning module becomes dysfunctional in adolescence.) So I do not mean to downplay the value of critical thinking. On the other hand, radical autonomism may well go too far, epistemically speaking, in disparaging the propriety of trust. We should not erect an epistemic standard for education that is excessively high. This is one of many issues in which educational theory and social epistemology have overlapping interests.[22]

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1. The book in preparation is tentatively called *Knowledge in a Social World*.

2. My picture of intellectual discussion and debate diverges sharply from that of social constructivists, who view these processes as "negotiating," i.e., *creating*, the truth. I dispute the suggestion that truth, in general, is created by discussion or debate. No doubt, some discussions enact new social policies, and thereby create new policy facts. But intellectual (as opposed to practical) discussion is generally aimed at forming beliefs about antecedently existing truths or facts, not at creating new truths or facts.

3. I discuss it in similar terms in "Epistemic Paternalism: Communication Control in Law and Society," *The Journal of Philosophy* 88 (1991): 113-131, sect. viii.

4. The label "essentialism" is used by Amy Gutmann in her editorial introduction to Charles Taylor et al, *Multiculturalism and the "Politics of Recognition"* (Princeton, N.J.: Princeton University Press, 1992), 13.

5. Robert Maynard Hutchins, *The Higher Learning in America* (New Haven: Yale University Press, 1936), 66.

6. This point is emphasized, for example, by Susan Wolf in her comment on the essay by Charles Taylor, in *Multiculturalism and "The Politics of Recognition*."

7. Israel Scheffler, *The Language of Education* (Springfield, IL: Charles Thomas, 1960), 57.

8. Harvey Siegel, *Educating Reason: Rationality, Critical Thinking, and Education* (New York: Routledge, 1988).

9. Ibid., 44-45.

10. Alvin I. Goldman, "Argumentation and Social Epistemology," *The Journal of Philosophy* 91 (1994): 27-49.

11. Ibid., 34.

12. See my *Epistemology and Cognition* (Cambridge, Mass.: Harvard University Press, 1986), chaps. 4-5, and *Liaisons: Philosophy Meets the Cognitive and Social Sciences* (Cambridge, Mass.: MIT Press, 1992), esp. chaps. 6, 7, 9.

13. Compare Kenneth Strike, *Liberty and Learning* (St. Martin's Press, 1982), partly reprinted in *A Professor's Duties*, ed. Peter Markie (Lanham, Md.: Rowman and Littlefield, 1994), 106.

14. Ibid., 106.

15. This rule is suggested in my "Argumentation and Interpersonal Justification," in *Proceedings of the 3rd International ISSA Conference on Argumentation*, ed. Frans H. van Eemeren, Rob Grootendorst, J. Anthony Blair, and Charles A. Willard (Amsterdam, forthcoming). It was partly inspired by Richard Feldman's person-relative analysis of good argumentation, in "Good Arguments," in *Socializing Epistemology: The Social Dimensions of Knowledge*, ed. Frederick F. Schmitt (Lanham, Md.: Rowman and Littlefield, 1994).

16. "For, I think, we may as rationally hope to see with other Mens Eyes, as to know by other Mens Understandings. So much as we our selves consider and comprehend of Truth and Reason, so much we possess of real and true Knowledge. The floating of other Mens Opinions in our brains makes us not one jot the more knowing, though they happen to be true. What in them was science, is in us but Opiniatretry....Such borrowed Wealth, like Fairy-money, though it were Gold in the hand from he received it, will be but Leaves and Dust when it comes to use." *An Essay Concerning Human Understanding*,, ed. A. C. Fraser (New York: Dover, 1959), Book I, chap. iii, para. 23.

17. This is my formulation, not Reid's. Reid's discussion may be found in Thomas Reid, *Inquiry into the Human Mind*, ed. Timothy Duggan (Chicago: University of Chicago Press, 1970), chap. 6.

18. Tyler Burge, "Content Preservation," *The Philosophical Review* 102 (1993): 457-88; Richard Foley, "Egoism in Epistemology," in *Socializing Epistemology: The Social Dimensions of Knowledge*, ed. Frederick F. Schmitt (Lanham, Md.: Rowman and Littlefield, 1994); and Alvin Plantinga, *Warrant and Proper Function* (New York: Oxford University Press, 1993), chap. 4. For useful discussion, also see C. A. J. Coady, *Testimony: A Philosophical Study* (Oxford: Oxford University Press, 1992).

19. Coady, *Testimony*, chap. 4.

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