Reply to an Analytic Philosopher

Paul Boghossian stages his commentary on "Cutting-Edge Equivocation" (CE) as an encounter between, on one side, himself as representative of analytic philosophy and defender of classical epistemology and, on the other side, Smith as representative of "vast numbers of scholars in the humanities and social sciences" and defender of a set of claims that "amount to some species of relativism, a view about knowledge that we [philosophers] believe to have been discredited some time ago." The outcome of the encounter, as Boghossian scripts it, is a vindication of what he acknowledges as the "deaf ear" that he and his colleagues turn to recent work in a number of fields concerned with cognition, knowledge, and science. Viewed from another perspective, however, his commentary could be seen as an exhibition of the remarkable array of techniques through which that self-immurement is perfected and secured.

Two general features of Boghossian's procedure may be noted at the outset. First, to make his commentary work to the ends just indicated, he must ignore the greater part of research and theory in the relevant fields of study and much

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of what is explicitly stated in CE while subjecting the rest—that is, what he is aware of in those fields and what he notices and cites in the essay — to a series of conflations and exceedingly strained readings. It would take many pages, more than is proper to claim here for the purpose, to document, correct, or disentangle every significant elision or inaccuracy in his commentary. I shall, however, have occasion to indicate a good number of them below.

The second general feature to be noted is that, throughout his commentary, Boghossian produces statements about belief, reasons, evidence, and truth as if the meanings of those terms were transparent and the concepts to which they refer either unproblematic or, if problematic (as in "simply to misunderstand the sort of state that belief is" or what can and cannot "be a reason for a belief"), then in his proprietary custody. What is significant here is not the intellectual complacency as such, but the circularity that it virtually guarantees. Boghossian, in what he would no doubt see as due conformity to intuitive, commonsense, traditional understandings, treats beliefs as discrete true/false mental propositions, evidence and reason(s) as inherently truth bearing or truth directed, and truth as, well, it's hard to know and he does not say, but presumably something clear and unitary. Since it is, however, just those terms and concepts in just those traditional conceptualizations—along with the extensive system of interconnected assumptions and mutually sustaining definitions, distinctions, and predications governing their standard usages and understandings—that are at issue in contemporary epistemological controversies, Boghossian's deployment of them in defense of traditional views of knowledge begs the question throughout and confines his arguments to self-affirmation.

The oversights and conflations here are substantial. Boghossian refers to what is shown by "even the most cursory acquaintance with the literature to which Smith is alluding." It appears, however, from his numerous mistaken attributions and skewed generalizations and also from the limited range of his relevant citations that Boghossian's own acquaintance with that literature is little better than cursory. Any minimally adequate survey of revisionist theories of knowledge and science in the twentieth century would have to take into account Ludwik Fleck's *Genesis* and *Development* of a *Scien*tific Fact, Thomas S. Kuhn's The Structure of Scientific Revolution, Paul Feyerabend's Against Method, Michel Foucault's Archaeology of Knowledge, and the more recent work of such practitioners of science and technology studies as Andrew Pickering and Bruno Latour.1 If it claimed to be a genuinely informed history of modern constructivist thought, it would also have to take into account the contributions of such theorists as experimental psychologist J. J. Gibson, philosopher Nelson Goodman, theoretical biologists Humberto Maturana and Francisco Varela, neuroscientists Gerald Edelman and Antonio Damasio, cognitive scientist Edwin Hutchins, and artificial intelligence/robotics specialist Rodney A. Brooks.² As is evident to anyone acquainted with the intellectual substance of this body of work, the set of ideas, theories, analyses, and accounts reasonably assembled under the label "constructivist views of knowledge" cannot be even roughly summarized as the simplistic negative thesis that "knowledge must not be thought of as detached from its social, cultural, and political context" or as a normative statement about reasons or justifications for belief. And as is evident to anyone acquainted with the range and substance of contemporary research and theory in the sociology of science, the assertion that the "bizarre" (as indeed it is) view that "we are only moved [to belief] by our political interests" is "practically orthodoxy among sociologists of science" is either seriously ignorant or seriously irresponsible. As an analytic philosopher, Boghossian need not also be an intellectual historian. As an analytic philosopher offering to justify the deaf ear turned by analytic philosophy to entire fields of study and to what are elsewhere regarded as major intellectual developments, however, he has an obligation to do more than exhibit the consequences of that deafness.

Boghossian's conflation of constructivism, the sociology of science, the tenets of the Strong Programme, and statements about the situatedness of knowledge requires some minimal disentangling. The Strong Programme is, or rather, was, a specific research program that undertook the investigation of scientific knowledge with aims, theoretical assumptions, and methodological commitments that diverged significantly from both classical epistemology and what was then mainstream (or "Mertonian") sociology of science.³ Constructivism is not properly equated with the original tenets of the Strong Programme or with the sociology of science more generally. Nor is it reducible to the idea of the situatedness of knowledge stressed by some feminist epistemologists. Conversely and most pertinently here, not all sociologists of science, proponents of the Strong Programme, or feminist epistemologists subscribe to a constructivist view of knowledge. These differences and disjunctions are important features of the intellectual situation I discuss in CE, and the last one is a focus of considerable attention there.

Constructivism, in most informed contemporary usage of the term, refers to a particular way of understanding the relation between what we call knowledge and what we experience as reality. In contrast to the understanding of that relation generally referred to as realism, constructivist accounts of cognition, science, truth, and related matters conceive of the specific features of what we experience, think of, and talk about as "the world" (objects, entity boundaries, properties, categories, and so forth) not as independent of our sensory, perceptual, manipulative, and conceptual/discursive practices but, rather, as emerging from —or as it is said, "constructed by"—those practices themselves. In contrast to the prevailing assumptions of classical epistemology, constructivist accounts of cognitive processes see beliefs not as discrete mental propositions about, or representations of, the way the world-in-itself is but, rather, as linked perceptual/behavioral dispositions, patterns, or routines that are continuously strengthened, weakened, and reconfigured throughout our lives by our ongoing interactions with our environments. In contrast to referentialist views of language and positivist views of scientific knowledge, constructivist accounts of truth conceive of it not as a matter of a match between, on one hand, statements or beliefs and, on the other, the autonomously determinate features of an altogether external world (Nature or Reality) but, rather, as a situation of relatively stable and effective mutual coordination among statements, beliefs, experiences, and practical activities. What we call specifically scientific truth or knowledge is seen as the especially stable and extendable product of an especially tight mutual shaping of perceptual, conceptual, and behavioral—including manipulative, discursive, and inscriptional – practices in conjunction with material/technological projects or problems that have especially wide cultural, economic, and/or political importance.

These ideas are not intuitively self-evident, and one would not expect an abbreviated statement of them such as that given above to be in itself persuasive. It should be clear from even this brief outline, however, that constructivist conceptions of cognition, knowledge, and science are substantive, relatively highly developed, extensive—or indeed comprehensive—in scope, and significantly different in kind and mode from those assumed in classical epistemology.

Boghossian does not appear to have a sense of the order of difference involved here. He does, at the end of his commentary, entertain the possibility of what he calls "an entirely global skeptical challenge to [our] norms of correct reasoning," but only in order to insist that such a challenge must either accept those norms "to get us to change our minds" and thus - in accord with a familiar logic—refute itself or perhaps ("a deep question," he writes, alluding probably to the issue of incommensurability) stand as fundamentally unanswerable.4 His immediately ensuing observation, that "the varieties of constructivism that we have been exploring are totally inadequate responses to the possibility of such skepticism," is curious but revealing, since constructivism—as distinct from classical epistemology—does not aim to respond to that possibility. Neither, however, does it refuse established "norms of correct reasoning" or, as Boghossian seems to think, seek to replace them with other (characteristically relativistic) norms. With respect to epistemic norms, what constructivist accounts of knowledge seek to do, rather, is offer new and arguably better ways to understand their emergence and operation. Indeed, the possibility that Boghossian does not and, I suspect, cannot entertain but which constructivism can be seen to embody is not a global skepticism about norms of correct reasoning but a global alternative to the entire system of traditional rationalist understandings of norms, arguments, correct reasoning, and the process of mind- (or belief-) changing that Boghossian simply assumes at every point here.

The conflations, oversights, and other inaccuracies that recur in Boghossian's commentary on CE result partly from his limited knowledge of the specific ideas I discuss there but also reflect the techniques and determined confinements of much contemporary Anglo-American analytic philosophy more generally.5 Defining itself, on one side, against the wide-ranging speculative and discursive traditions of Continental philosophy and, on the other side, against such ("merely") empirical pursuits as the natural and behavioral sciences, analytic philosophy has taken as its field of concern what it calls the "logical structure" of concepts and ideas. Its major occupations are, accordingly, the "clarification" of concepts, the formal articulation and systematization of the logical relations among prevailing ideas, and the scrutiny of new ideas for their "coherence" and "intelligibility"—meaning, it usually turns out, their compatibility with traditional ideas.

This last-mentioned policing mission commonly involves in practice re-

ducing some set of more or less heterogeneous accounts, analyses, and arguments to some one-line "core idea" framed in the current idiom of academic philosophy; plucking away that idea not only from the texts in which it or, rather, its actual counterparts are articulated and elaborated but also from the historical and institutional contexts in relation to which those counterparts have their intellectual significance; assigning to that boiled-down, plucked-away, dubiously paraphrased core idea the name of some classic "ism," the "strong" and "weak" versions of which are duly distinguished; and subjecting the thoroughly processed product of these operations to a show of logical analysis that concludes, if the original accounts, analyses, and arguments are significantly heterodox, with a demonstration of its and thus presumptively their—counterintuitiveness, unintelligibility, incoherence, and/or decisive self-refutation. The techniques described here are designed to ensure the formal rigor, timelessness, and cultural transcendence of the analytic philosopher's analyses and arguments and their permanence in logical space—which they may well do. By the same token, however, they make likely the irrelevance of those analyses and arguments anywhere else.

"If this is even roughly what Smith has in mind—and if it is not, then I have no idea what she has in mind...." So it appears. Because Boghossian confuses significantly different views and enterprises, and also because he perceives contemporary intellectual events played out against a transhistorical, otherwise vacant logical landscape, he misses or mistakes most of what is going on in CE.

In setting up the central section of his commentary, Boghossian informs readers that there are "two possible replies" to the charge that constructivist views of knowledge "entail an unpalatable relativism": either that they do not entail relativism at all or that the relativism they entail is "unobjectionable." "It is hard to figure out," he continues, which of these replies "Smith favor[s]." This, he explains, is because one passage in CE suggests that I think "there is something relativistic about constructivism," while in another passage I "chastise" feminist philosopher Lorraine Code, who (he claims) favors the second answer, "for being overly concerned about . . . relativism." But my supposed inconsistency on the point is the product only of Boghossian's misreadings and textual gerrymandering.

To begin with, nothing in the first passage Boghossian cites says anything whatsoever about relativism. My point there, spelled out explicitly, is that an endorsement of a constructivist epistemology/ontology is incompatible with an endorsement of a realist epistemology/ontology and, therefore, that a simultaneous avowal of both, as in the statement by Brian Cantwell Smith that is the immediate referent of my observation, is an equivocation in the common sense of the term that I supply. (It is possible, of course, that when Boghossian sees the words "not . . . realist," he believes he is seeing the words "something relativistic." Perceptual illusions of that kind are recurrent among intellectual traditionalists confronted by unorthodox ideas: for example, the phrase "cannot be objectively determined" is read as "purely subjective"; the phrase "no simple opposition between" is heard as "just the same as"; or the phrase "not just a matter of transparent evidence" is transformed in midair into "only a matter of political interests.") Whatever my views, then, of the relation of constructivism to relativism, or of the number (or types) of replies one might offer to familiar charges regarding that relation, they cannot be inferred from the passage Boghossian cites.

Second, Code does not in fact take the other-possible-answer position that Boghossian attributes to her, that is, "that while constructivism does entail some form of relativism, it is not of the objectionable variety." On the contrary, insofar as Code is concerned to distinguish the relativism of her own "subjectivist" view of knowledge from anything sounding like an objectionable relativism, it is from, precisely, constructivism, or at least from what she understands as such. As I note and discuss in CE, Code seems, by way of a common misreading of the symmetry postulate of the Strong Programme, to associate constructivist conceptions of belief with the notion of the equal validity of all beliefs—or, in her words, "that supreme tolerance in whose terms all possible constructions of reality are equally worthy." 6 Accordingly, both my correction of her erroneous understanding of constructivist views of knowledge as implying a fatuous egalitarianism and my citation of her essay as an example of misplaced anxiety over relativism thus understood are proper in themselves, and neither is inconsistent with anything I say in the first passage Boghossian cites or elsewhere in CE.

The centerpiece of Boghossian's defense of analytic philosophy's large yawn at much twentieth-century thought is his supposed refutation of a set of supposed constructivist/relativistic "options." Preliminary to that operation, he insists, correcting my alleged error, that the idea of the equal validity of all beliefs is not the relativism that most philosophers find objectionably implied by constructivism. Maybe not. But it certainly is the relativism that most of the philosophers discussed in CE—including Code, Cantwell Smith, John Dupré, Sandra Harding, and Alison Wylie—seem to think is objectionably implied by what they evidently *take* to be constructivism ("all possible constructions of reality . . . equally worthy," "all stories . . . equally good," "supreme tolerance," etc.) and from which, accordingly, they appear anxious to dissociate their own views. As I stress in the essay, these and other contemporary theorists draw that (mistaken) inference and exhibit that (misplaced) anxiety about constructivist reconceptions even while they appear eager to challenge aspects of classical epistemology and mainstream philosophy of science on political or other theoretical grounds, and even while they are willing to appropriate, for political or other theoretical purposes, challenges to the assumptions, methods, and goals of the latter (that is, classical epistemology and mainstream philosophy of science) raised by constructivist analyses and accounts of knowledge.7

Indeed, it is just that complex situation—its psychological and institutional dynamics and what I see as its intellectual costs—that concerns me in CE: that is, the simultaneous avowal/disavowal of constructivist or other radically innovative views of knowledge on the part of scholars who are themselves otherwise politically or theoretically radical ("cutting-edge"). Because Boghossian conflates constructivism with a host of other heterodox positions, ancient and current, he cannot grasp the structure of that situation or the angle of my perspective on it. Consequently his commentary engages neither the occasion nor the aim of the essay, much less its analyses or arguments. Nor does it, I think, engage anything else substantive.

It is not irrelevant that in contesting my analysis of what I call the Egalitarian Fallacy, Boghossian misunderstands my sotto voce and extensively glossed parenthesis, "equally valid (under all conditions, from all perspectives)," as a naive error about what philosophers think relativism is. For my point, made explicitly there (as elsewhere), is that a rejection of the classic idea of objectively valid belief will be seen to imply an absurd claim about the equal validity of all beliefs only when the idea of validity itself continues to be understood along classic objectivist lines. As I observed above, constructivist accounts of knowledge are radically and globally different from those of classical epistemology. This means, among other things, that constructivist understandings of even such fundamental concepts as validity, reasons, and

beliefs are significantly different from classical understandings of them and, no less important here, that the aims of constructivist accounts of knowledge and related matters such as cognition and science are significantly different from the normative, justificatory aims of classical epistemology. Accordingly, Boghossian's efforts to hold constructivist views accountable to the assumptions, definitions, distinctions, and projects of classical epistemology—and to dismiss them as incoherent or "totally inadequate" when so viewed—beg the question,8 earnestly but pointlessly mixing epistemological apples and anti-epistemological oranges.

As I note in CE, spectral relativistic horrors and absurdities are typically gen-

erated through the self-negation of orthodoxy. They are what issues, in other words, when orthodox thought, using only its own conceptual resources, tries to imagine the world without itself or itself turned upside down. The process and its products are illustrated at a number of points in Boghossian's commentary, but nowhere more vividly than in the set of three totally spurious "constructivist options" that he brings forth from the negation of three ideas said to "encapsulate the classical conception of knowledge." Thus, displaying the duly right-minded-sounding idea, "A group's political values do not bear on the truth of an arbitrary belief," Boghossian produces, as the corresponding constructivist option ("if constructivism is to dispute something that matters to classical epistemology"), the duly appalling-sounding idea, "Political values do bear on whether beliefs are true." Similarly, having framed the supposedly classical (but awkward and suspiciously modernsounding) idea, "Sometimes the correct causal explanation for why we believe something is that we have a reason for believing it," Boghossian delivers, as another constructivist option, the idea that to explain a belief fully, "political values must be appealed to as well." And so forth. Each of those alleged—and certainly, as Boghossian frames them, "bizarre," "astonishing,"

and not incidentally inflammatory — options consists of the gratuitous negation of some solemn platitude plus the substitution of political for local, historical, cultural, or whatever else does or does not appear in some supposedly constructivist source: for example, "political interests" as a "shorthand" for Sandra Harding's "local, historical interests, values, and agendas" (Harding, on her own strenuous emphasis, is no constructivist) or the alleged constructivist supplying of "something political" to close the gap between data and theory in Pierre Duhem's underdetermination thesis. This parturition of options, with their variously "subtle" or "extreme" but always "political" variants, finally yields the view that, Boghossian informs readers, "has traditionally gone by the name of relativism," to wit: "Nothing can be a reason for a belief . . . except relative to a particular background politics." Though he is tempted, he writes, "to be short" with this idea, it "needs to be addressed separately, if only because it has had such a long history." So, the old Platonic howitzer is rolled out and aimed directly at the author of CE.9 I will return to this arresting episode below.

"Can we really imagine," Boghossian asks, "a way of thinking about belief that will leave no room for [the] attitude" that "when we believe something, we believe it because we think there are reasons to think it is true?" A telling phrase here is "leave no room for," which evokes a key issue in and for contemporary academic philosophy. The issue is how to conceive of the relation between, on one hand, the rationalist ("reasons to"), mentalistic, insider-perspective (e.g., "when we believe something"), justificatory idiom shared by traditional philosophy of mind and much informal thinking about belief—or what is sometimes called "folk psychology"—and, on the other hand, the naturalistic, observer-perspective (e.g., "when members of a community find something credible"), explanatory ("causes of," "functions of," etc.) idiom of fields such as neuroscience and the sociology of knowledge. Are the two idioms parallel, intertranslatable, incommensurable, mutually transforming, or perhaps mutually exclusive? 10 And if the idiom of one (for example, neuroscience or sociology of knowledge) "leaves no room" for the idiom of the other (for example, analytic philosophy of mind or rationalist philosophy of science), which one should be, or is likely to be, left out in the cold? Such questions and related intellectual/disciplinary anxieties sharpen the stakes of contemporary epistemological controversy. They may also help account for the deaf ear turned by many (not all) analytic philosophers to work done in such fields. Of course, the burden of Boghossian's commentary here is that what accounts for that deaf ear are "reasons alone," independent of any such cognitive/psychological dynamics or institutional/disciplinary contexts—or, as he would put it, "background politics."

Boghossian's rhetorical question above ("Can we really imagine a way of

thinking" and so forth) depends for its force on the idiomatic familiarity of the conviction it affirms, namely, that "when we believe something, we believe it because we think there are reasons to think it is true." Given the evident undeniability of such convictions, is it possible even to imagine thinking (about knowledge, belief, reasons, truth, and so forth) otherwise? The answer to that question is, I think, yes, but not if one imagines the "otherwise" as Boghossian does here, as a mere refusal of such truisms. Informal ideas about knowing, asserting, and believing are shared widely and change slowly among the members of any community and, for those reasons, may appear fundamental, inevitable, uniform, and universal—built, as some philosophers say, into the very "architecture of the mind" and, as such, required if we are to "think of ourselves as believing and asserting at all." Nevertheless, ideas about such matters may vary significantly and have changed, for some of us, even over the course of our lifetimes, partly in response to research and theory in various empirical fields and partly through the influence of ideas developed in the more intellectually mobile regions of philosophy. Accordingly, some of us have no trouble at all thinking of ourselves as believing and asserting, even though our more formally articulated ideas of such matters are quite different from those first formulated one hundred, three hundred, or two thousand years ago and even though our related reconceptions of truth, reasons, and reasoning make more traditional conceptions of such ideas appear rather quaint to us and, for many conceptual purposes, irrelevant or exceedingly cumbersome.

I return now to Boghossian's coup de théâtre à la Plato. By way of demonstrating the self-undermining of a supposed relativism-about-reasons option for constructivism ("Nothing can *be* a reason for a belief . . . except relative to a particular background politics"), he observes that such a relativism is "violated by the relativist's own stance toward his or her own view." "Surely," he explains, "the relativist does not think that relativism is justified only relative to his or her own perspective. If he or she did, why is he or she recommending it to us, who do not share his or her perspective?" Boghossian then quotes, as "the claim central to Smith's outlook," the sentence in CE that reads, "Work in all these fields has indicated the need to review and, to some degree, revise traditional ideas and conventional wisdom . . . about knowledge, science, and cognitive processes," and proceeds,

via an explication of "the intended force" of the sentence, to expose its selfcontradictory discrepancy from what, in his view, I, as a supposed relativist about reasons, should be prepared to say:

Clearly, this is not the assertion of someone who is prepared to say, "Relative to my political perspective, it is justified to say that recent work has indicated the need to review and revise traditional views about knowledge; however, if you happen not to share that perspective, you may ignore everything I say, for I am not claiming that it is justified relative to your perspective." On the contrary, the intended force of the assertion is, rather, this: Recent work has shown that conventional ideas about knowledge are flawed, so anyone, regardless of his or her prior commitments, who wants to believe what is true had better change his or her mind about the nature of knowledge. If this were not the intended force of the assertion, why the tone of rebuke?

Three observations may be offered in reply. First, the relativism that Boghossian makes a show here of refuting is totally spectral and cannot be an option for constructivism. It is not merely that no living, breathing constructivist happens to maintain that "nothing can be a reason for a belief . . . except relative to a particular background politics" but that the rationalist idiom, normative mode, and political idée fixe of that statement are, term for term, clause for clause, and notion for notion, fundamentally at odds with constructivism. Second, nothing in CE sustains Boghossian's imputation of that spectral view to me, and much of what is explicitly stated in the essay about the relations between intellectual judgments and political commitments indicates a very different view of these matters. Finally, Boghossian's shot from Plato's cannon, that is, his attempted demonstration of the purportedly self-undermining "intended force" and "tone of rebuke" of the sentence quoted, is, to say the least, off the mark. That force and tone would be more accurately rendered as follows:

Work in all these fields has indicated (not to everyone, of course, but to many people in the relevant intellectual communities) the need to review and, to some degree, revise traditional ideas and conventional wisdom about knowledge, science, and cognitive process. By the way, dear reader, if you happen not to share my theoretical tastes, intellectual history, or institutional and professional concerns and agendas, I would not be surprised to learn that you found the preceding observation—and much else in this essay—less than immediately obvious, compelling, or even interesting. If, for example, you were a practicing analytic philosopher, I, given my views of cognitive process (views you may see as "relativist"), would not be surprised to learn that you, given what I would surmise were your theoretical tastes, intellectual history, institutional and professional concerns, and perhaps disciplinary sensitivities, found it unpalatable, strange, highly objectionable, and, despite my very different intentions in that regard, sounding as if delivered in a tone of rebuke. I am nonetheless prepared to offer this and other such observations, along with their amplifications and elucidations, in the pages of SAQ. For, in accord with my views ("relativistic," by some definitions) of knowledge and related matters, I expect that readers with more or less varying tastes, histories, and concerns will find such observations in varying ways agreeable, interesting, or instructive enough, and that some of those readers will pursue further the lines of inquiry to which they point. Moreover, and in similarly good accord with my explicit and elaborated views (constructivist, certainly; "relativistic," perhaps) of cognitive process, knowledge, and related matters, I expect that a considerable (if not vast) number of those readers, as they begin to work with those ideas and accounts, will find them, from their own theoretical perspectives and in relation to their own practical for example, professional, disciplinary, or perhaps political—agendas, more conceptually fertile, empirically responsive, and pragmatically serviceable than the comparable (realist, rationalist, positivist, and so forth) ideas about knowledge associated with classical epistemology, preserved and formalized in much analytic philosophy of mind, and perpetuated by canonical philosophy of science. At the same time, dear reader, insofar as you and I, despite what may be the sharpness of our present intellectual and disciplinary differences, are members of a broader intellectual community and, as such, acknowledge certain norms of intellectual conduct and grant the significance of heeding those norms for the continued vitality of that community, I hope you will see the force of my concern over what I see as the currency, among us, of a range of seriously self-confining, communally stultifying modes of conceptual and rhetorical practice.

Notes

- I For the latter, see, e.g., Andrew Pickering, The Mangle of Practice: Time, Agency, and Science (Chicago: University of Chicago Press, 1995), and Bruno Latour, Aramis or the Love of Technology, trans. Catherine Porter (Cambridge: Harvard University Press, 1996).
- 2 J. J. Gibson, The Senses Considered As Perceptual Systems (Boston: Houghton Mifflin, 1966); Nelson Goodman, Ways of Worldmaking (Indianapolis, IN: Hackett, 1978); Humberto R.

Maturana and Francisco J. Varela, Autopoiesis and Cognition: The Realization of the Living (Boston: D. Reidel, 1980); Gerald Edelman, The Remembered Present: A Biological Theory of Consciousness (New York: Basic Books, 1989); Antonio R. Damasio, Descartes' Error: Emotion, Reason, and the Human Brain (New York: Avon, 1994); Edwin Hutchins, Cognition in the Wild (Cambridge: MIT Press, 1996); Rodney A. Brooks, "Intelligence without Representation," Artificial Intelligence 47 (1991): 139–59.

The Strong Programme has been superseded in important respects by later developments in the social study of scientific practices. For a discussion, see Andrew Pickering, "From Science As Knowledge to Science As Practice," in Science As Practice and Culture, ed. Pickering (Chicago: University of Chicago Press, 1992), 1–28.

The sociology of science was initiated as a field of study in the 1940s by Robert K. Merton (see the editor's introduction to Merton, *The Sociology of Science: Theoretical and Empirical Investigations*, ed. Norman W. Storer [Chicago: University of Chicago Press, 1973], xi–xxxi). For a good account of the later developments and differences, see Steven Shapin, "Here and Everywhere: Sociology of Scientific Knowledge," *Annual Review of Sociology* 21 (1995): 289–321.

- 4 For an extended discussion of the logic in question, see my Belief and Resistance: Dynamics of Contemporary Intellectual Controversy (Cambridge: Harvard University Press, 1998), 88–124.
- 5 A good number of philosophers who would identify themselves as "analytic" would, I believe, question the propriety of Boghossian's claim to represent the entire field here.
- 6 Lorraine Code, "Taking Subjectivity into Account," in *Feminist Epistemologies*, ed. Linda Alcoff and Elizabeth Potter (New York: Routledge, 1993), 40.
- Boghossian's impression that "one of the central themes of [Smith's] essay is that constructivist epistemology is characterized by 'equivocation'" can only be the result of his careless reading throughout. What I indicate there as characterized by equivocation is a good bit of contemporary theoretical work that *questions* various elements of classical epistemology but (as in the examples just cited) *resists* alternative constructivist formulations. His mistake here reflects his own persistent conflation, under the label "constructivism," of virtually all such questioning.
- 8 His reply to the possibility of such a charge—"But what do these arguments [that is, supposed demonstrations of the self-refutation of relativism] presuppose? . . . nothing more than the assumption that when we believe something, we believe it because we think there are reasons to think it is true"—is either disingenuous (surely he sees that quite a bit more is assumed than that) or underscores the enclosure of his thought by the traditional conceptual system in question.
- 9 Plato, Theaetetus (170a-172c, 177c-179b). I consider the passage and analyze its subsequent invocations and rehearsals in "Unloading the Self-Refutation Charge," Common Knowledge 2.2 (1993): 81-95, reprinted in Smith, Belief and Resistance, 73-87.
- The operative relation between the two idioms could also be seen as fundamentally contingent and thus as—under particular, more or less specifiable conditions—any one of these. For a related discussion, see Smith, *Belief and Resistance*, 141–44, 149–52.