doi:10.1017/S0003055412000263

Socratic Method and Political Science CHRISTOPHER MECKSTROTH Harvard University

This article advances a novel theoretical account of what a "method" is and what makes one "rigorous," and shows how it could advance contemporary debates in political theory and empirical methodology. Plato's Socrates invented the notion of method, and his characteristic practice of immanent refutation through questioning escapes key problems in more familiar views. Socratic method is (1) antifoundational, (2) non-algorithmic, and (3) indirect and relative to competing hypotheses, and it (4) develops its own standards of objectivity from the logic of asking questions. The article reconstructs Socrates' method from the Platonic texts and shows how it provides reasonable criteria for judgment while remaining critical, sensitive to difference, and open to innovation. Socratic method avoids a forced choice between universalism and particularism in political theory, and it provides a common language for evaluating both quantitative and qualitative methods by drawing out a critical logic of empirical inquiry shared by both.

Method, is what the Ancients, who carried on the God-manufacture with the greatest spirit, did not much trouble themselves about; so that there is neither God nor Goddess for method, though there are ten of them for verse.

-Jeremy Bentham, Preface to The White Bull

t was just over four decades ago, in December 1969, that Sheldon Wolin's influential article "Political Theory as a Vocation," was published in this journal. There Wolin defined and defended the "theorist" against what he called the "methodist": The former, on Wolin's account, trades in "tacit political knowledge" acquired with fluency in a distinctive intellectual tradition, whereas the latter mistakenly identifies the pursuit of knowledge with the skillful application of methods promising "rigor, precision, and quantifiability" in their results (1071). In this article I propose an account of "method" based on Socratic questioning that distinguishes itself sharply from Wolin's "methodism," and I suggest some ways that this account might help us reexamine the nature and status of method in political theory and in political science more broadly. Today this examination remains a pressing task, because however one views Wolin's own position, it is clear that the controversy he identified over the value and meaning of methodological rigor continues, more than 40 vears later, to drive major debates in the field. In the final sections of the article I briefly discuss two such debates. In the empirical subfields, important work continues to be done on the relative value of quantitative and qualitative methods (Brady and Collier 2010; George and Bennett 2005; King, Keohane, and Verba 1994; Lieberman 2005; Mahoney and Rueschemeyer 2003; Wedeen 2002; Yanow and Schwartz-Shea 2006). In contemporary political theory an important divide

remains between those who prize the justification of universal principles through analytic argument (e.g., Beitz 2009; Benhabib 2006; Habermas 1996; Rawls 1999) and proponents of agonistic and genealogical approaches concerned that such methods neglect other important questions about politics and power (Brown 2005; Butler 1995; Connolly 2002; Honig 2009; Wolin 2006).

My first aim in this article is to reconstruct the distinctive critical logic of Socratic method by analyzing Plato's dialogues. This requires some work because today Socrates' characteristic method of elenchus, or refutation through questioning, is little understood outside a specialized literature in ancient philosophy,¹ and even there its interpretation is controversial.² Yet it remains of great theoretical interest for discussions of method in the study of politics, because it demonstrates the possibility of a unique way of justifying positive judgments through strictly negative or critical means. Socratic method justifies its conclusions only indirectly, by showing that all major competing views fall into internal contradictions on their own terms. This unique sort of reasoning is reducible neither to induction nor to deduction, nor does it require one to take for granted any positive foundational premises whatsoever. The method is rigorous

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I thank Patchen Markell, John McCormick, Bill Sewell, Bob Gooding-Williams, Bonnie Talbert, and the reviewers and co-editors at the *APSR* for valuable comments on earlier versions of this article. Thanks also to Richard Tuck for pointing me to Bentham's revealing quip.

¹ Political theory focuses most often on Socrates' and Plato's political beliefs and their significance for democracy. Notable discussions of Socratic questioning include Arendt (1990; 2003), Euben (1997), Frank (2007), Strauss (1964), and Tarnopolsky (2010). My argument adds to these discussions because it works out more clearly Socratic criteria for distinguishing between good and bad answers, pursues the implications of these criteria for our understanding of "knowledge" more generally, and draws attention to key Socratic elements in the logic of empirical scientific methods.

² One venerable tradition sees Socrates' method as essentially debunking and negative (Benson 2000; Grote 1888). Many analytic philosophers hold a contrary, "constructivist" view (Irwin 1995; Vlastos 1991; 1994). Another strain insists on the importance of dramatic and dialogue form over "doctrine" (Blondell 2002; Gonzalez 1998; Kahn 1996). Scott (2002) provides an overview of recent debates. I draw from all these strands in inquiring into the relation among negative, positive, and formal elements in Socratic method. In this I am influenced by lines of thought running from Hegel (2006) and Schleiermacher (2001) through Cohen (1878) and Natorp ([1903] 2004) to Gadamer (1980; [1931] 1991) and Bubner (1973; 1992).

in its demand to subject every claim to searching and systematic critique, to ask always whether it can be defended more consistently as true than every relevant alternative. But this rigor is not derived from careful adherence to precise and well-defined procedural rules laid out in advance. To the contrary, what makes the method rigorous is the Socratic demand always to question one's own assumptions about what makes for a good reason, and to defend those assumptions anew in every case, not only on their own terms but always also by beginning instead from the competing assumptions of one's most sophisticated interlocutors.

After I lay out clearly how Socratic method works, the final sections discuss some of the ways in which such an understanding might contribute to ongoing debates in political science. In political theory, I suggest that both universalist and genealogical approaches can be interpreted in Socratic terms and that the two sorts of inquiry can be seen as complementary if (and only if) each accordingly acknowledges crucial limits to the sort of claims it purports to advance on its own. In empirical fields, I suggest a similar conclusion regarding the status of quantitative and qualitative methods. Although one ought not to conflate the internal logic of quantitative methods, in particular, with the logic of empirical inference as such, one can account for the local validity of such methods for addressing certain kinds of questions within a broader Socratic framework. One may then examine diverse qualitative methods in that same framework to see whether they also make good on their claims to do so for somewhat different questions. An understanding of Socratic method thus provides a common language for evaluating both kinds of methods, without presupposing the validity of either a priori. In both the theoretical and the empirical cases, then, the example of Socratic method challenges certain commonly accepted dichotomies and suggests a way for those on both sides of ongoing debates to avoid talking past each other.

The reader may well ask why we ought to care about Socratic method today, some twenty-four hundred years after Plato wrote. One might presume that science and philosophy have since advanced so far that nothing in Plato could still be relevant. Yet the only way to test that presumption is to first see what Plato has to say about method and then to compare this to the best available arguments in the contemporary literature. My own study of the history of philosophy and the contemporary philosophy of science has led me to agree with Max Weber, who in 1917 explained his view that the history of science has been shaped above all by two great revolutions: (1) the Socratic-Platonic invention of ideas and (2) the rise of experimental method as practiced by Galileo and theorized by Bacon (Weber 1948, 141–42).³ Today, I submit, it is the Socratic side of this double origin that is least familiar to nonclassicists, especially in the English-speaking world. There is thus good reason to consider Plato's Socrates in his

own right, because in many ways Plato's treatment of method remains one of the most insightful and influential in the Western tradition, and understanding it can shed helpful light on the interpretation of later figures and debates.

Finally, perhaps the most obvious reason to consider Plato in discussions of method is that he invented the thing; that is, as far as we can tell from surviving sources, both the term *methodos* and the general sense we still associate with it today first appear in Greek in Plato's reflective meditations on the logic of Socratic elenchus.⁴ The root of Plato's neologism is hodos, meaning "path" or "way;" the insight underlying it can be summed up in the proposition that the pursuit of knowledge necessarily concerns the validity not only of our beliefs but also of the "way" by which we arrive at them-indeed, that the former ultimately depends on the latter. In other words, in working out the internal logic of the Socratic elenchus, Plato invented the idea that knowledge is inherently method-dependent. This idea later received important elaboration at the hands of theorists like Bacon ([1620] 1994), who worked out the specifically experimental logic of empirical methods as opposed to the strictly a priori, and Kant ([1787] 1998), who showed why the two should nevertheless be seen as complementary rather than competing. Yet it is Plato's initial discovery of the problem of method as a problem that continues to underlie the critical traditions of both contemporary philosophy and the contemporary sciences. Although the fact that the concept of "method" has its historical origin in Plato does not make his views authoritative for us today, it is perhaps one good reason to think they merit consideration alongside other views. Indeed, it may be telling that Wolin's unsympathetic capsule history of "method" in "Political Theory as a Vocation" overlooks entirely the Socratic-Platonic provenance of the term. Wolin appears to misattribute its origins to Parmenides and Heraclitus (1065), where the term does not in fact appear, and he emphasizes as emblematic later attempts to codify method into a system of static rules to be learned by rote (1066).⁵ By contrast, I suggest that one might approach contemporary methodological disputes in a somewhat different spirit if one were to think of method less in these sorts of terms and more in Socratic ones.

The following discussion of Socratic method must sidestep three important and long-running exegetical

³ As we see later, the invention of method and that of ideas are two ways of describing the same event.

⁴ Liddell and Scott (1996). Vlastos (1994, 1) emphasizes Plato's neologism. A search in the *Thesaurus Linguae Grecae* confirms exactly zero appearances of forms of the word *methodos* in surviving Greek texts before Plato (three apparent hits are specious), whereas Plato proceeds to use it 26 times, always in those works generally considered middle or later. On standard chronology, it appears first in the key passages *Phaedo* 79e, 97b; *Phaedrus* 269d-270e; and *Republic* 435d, 510b, 531d, 533b-c, 596a; it is also found in *Theaetetus, Sophist, Politicus, Laws*, and the *Second Letter*.

⁵ Heraclitus and Parmenides use only the root term *hodos* (not *methodos* and not '*aporie*'). See the very fragments Wolin cites: nos. 203, 235, 342, and 344–47 in Kirk and Raven (1957). Although Parmenides' poetic image of a way to truth may well have influenced Plato, only the latter developed a concept and theory of method along with the corresponding term.

debates. I take no position on how to distinguish the historical Socrates from the historical Plato, because my interest here is in the logic of the methodological argument in the dialogues, to whomever it may be attributed. Similarly, my argument does not depend on whether or not one accepts the standard developmentalist chronology of Plato's dialogues.⁶ Finally, although I do contend that the following interpretation of Plato's methodological argument is correct (as against other interpretations of that argument), I am far from believing that this approach is the only valuable way of reading Plato. Approaches placing greater emphasis on historical context, dramatic form, and the protreptic or hortatory side of Socratic elenchus, for instance, also contribute important insights. But one cannot do everything at once, and focusing here on Plato's methodological argument can add something both to the wider field of Plato interpretation and to contemporary discussions of method.

THE SOCRATIC ELENCHUS

The Greek term "elenchus" means "cross-examination," "testing," or "refutation;" it was also "elenchus" used to mean "proof" or "examination" in a court of law.⁷ What is most distinctive about Socrates' refutations are that they proceed strictly by posing questions: When Socrates examines his interlocutors' claims to knowledge of virtue, he does not present some counterargument of his own that begins from a competing first principle. Instead, he asks a series of questions that push the interlocutor to clarify and draw out the implications of his own views.⁸ Ultimately, it becomes clear that some of these consequences contradict others, and this shows the interlocutor's position to be incoherent. That position is thus refuted not on Socrates' terms, nor according to any abstract and timeless rules of inference established ex ante, but always in a strictly immanent manner. Unlike direct deduction or induction, then, this method of argument allows us to arrive at determinate conclusions without presuming the truth of any positive foundational premises whatsoever.

The key difficulty is understanding how, if at all, such a strictly negative method could ever justify more than negative conclusions. The answer is not obvious, and it continues to be hotly debated in the literature—indeed, Vlastos called it *"the* problem of the Socratic elenchus" (1994, 3-4). I think Plato clearly believed there to be an answer, but that this answer is necessarily indirect. Plato's central methodological argument is best understood as having three steps. (In this article I do not consider Plato's later "method of division" or *diairesis*, which I think is logically separable from the invention of method itself and not directly relevant to the present discussion.⁹) In the first step, Socrates refutes an interlocutor as previously described. These refutations lead not directly to new positive knowledge, but to *aporia*, the radically negative realization that we in fact know nothing at all of what we thought we knew. In the second step, however, we are asked to reconsider this result from a different point of view: Rather than focusing narrowly on the doctrinal content of particular beliefs or propositions, we come to see that Socrates' systematic elenctic critique of everything existing poses a fundamental challenge to an entire traditional conception of knowledge. Socrates is not asking us, or his interlocutors, simply to trade one set of naïve moral doctrines for another; more profoundly, he is inviting us to recognize that the truth of a belief is inseparable from the method by which it can be tested, criticized, and defended. It is in this sense that Socratic method is not merely one method among others, but rather the very *invention of method as such*—or, equivalently, the discovery of method as a problem. Socrates is the first to demonstrate the general point that the validity of a belief cannot be judged simply by comparing it to some authoritative list of the "right" beliefs, but only through the process of subjecting it and its rivals to systematic critique.¹⁰ This epistemic claim is at the same time a hortatory or protreptic one, moreover, because such a conception of knowledge poses an invitation to both interlocutor and reader to join in an ongoing dialogical project of self-examination though which one becomes better by learning to think for oneself.¹¹

Socrates' unending elenctic practice thus overturns an entire world of traditional knowledge, but in doing so simultaneously establishes the possibility of a radically new conception of knowledge as that which best survives the ongoing challenge of systematic criticism. Yet one further step is required, because many of the early Socratic dialogues seem to suggest that *no* beliefs could ever survive such a demanding test, that every claim to positive knowledge must ultimately founder for being unable to justify its own foundations. Plato thus responds with a crucial third move, beginning with the introduction of the "method of hypothesis" in the *Meno*. His insight is that only certain *kinds* of beliefs could ever survive in elenchus, and therefore *if* any belief is to be justifiable, *then* it would have to meet

⁶ It is compatible with that chronology, but also with the competing view that differences across dialogues reflect only pedagogic or stylistic choices; see notably Annas and Rowe (2002). For convenience I sometimes use the language of the standard chronology, but my argument does not require it.

⁷ Liddell and Scott (1996), s.v. $ἐλεγχο_5$. I use the Latinized spelling throughout. Yet another related sense of elenchus is "shaming," emphasized to good effect by Tarnopolsky (2010).

⁸ E.g., *Meno* 75c-d: "The more dialectical [way] is perhaps to answer [charges] not simply with what is true, but also through things that the person questioned concedes he knows." Translations are mine where not otherwise noted, from the Oxford texts. I use the male pronoun throughout because, with the exception of Diotima's reported speech in *Symposium*, the interlocutors in the dialogues are male.

⁹ That is, division is a further refinement within the broader, methodconscious framework established in the early and middle works. For detailed treatments, see notably Sayre (1969) and Gadamer ([1931] 1991).

 $^{^{10}}$ See Kneale and Kneale (1962) for potential for erunners like Parmenides and Zeno.

¹¹ For more on the protrepic side, see Gonzalez (1998), Kahn (1996), and Tarnopolsky (2010).

certain conditions.¹² In particular, it would have to be justifiable on some universal, unchanging, and consistent principle (on some defensible interpretation of these terms) if it were to defend against elenctic objections from every competing point of view its claim to be more true than the alternatives. Otherwise it could only be one opinion among others, but never genuine knowledge that a doubter would have some non-question-begging reason to accept. This, I contend, is the best way of understanding the Platonic theory of ideas-as regulative assumptions in the Kantian sense, which are already built implicitly into the method of Socratic critique and which Plato draws out and further develops in middle dialogues like Republic. The key point is that these assumptions furnish a standard for distinguishing defensible from indefensible beliefs that is wholly immanent to the method, one that neither requires nor permits accepting any foundational certainty that cannot be justified through the systematic immanent refutation of alternatives. This approach inverts a familiar notion of method as a means to the ever closer approximation of a preexisting objective truth. Instead, objectivity here is a regulative construct that follows from the logic of method as a systematic interrogation of every claim to know: What it means for a belief to be "objective," then, is nothing more or less than that it may be *consistently* defended as objective in elenchus against all competing views.

If this claim is correct, it has important implications for our understanding of what makes a method a "method." On my account, Socratic method departs from the logic of raising questions, not from any "selfevident" foundational truths external to the method. It can never be reduced entirely to a set of formal rules or algorithms, because it proceeds by engaging a contingent set of interlocutors on their own terms, and those terms will vary from case to case. It always turns on a comparative judgment that one position is more consistently defensible than available alternatives, never on an absolute judgment that this position most closely approximates an objective reality to which we might have some direct, extra-methodological access. The conclusions it justifies are therefore positive only in a very specific sense: They represent what we can meaningfully say might be true about "the world," not what we have any reason to believe that world is actually like, independent of human thought and language. This is neither an ontological "realism" nor a "relativism" then, but a third alternative: a methodological view that (like Kant's) recognizes that questions of method are logically prior to questions of ontology. Finally, although all viable conclusions in Socratic method must be in some sense generally defensible, what it means to count as generally defensible varies across different kinds of questions. "Rigor" in Socratic method, then, is never reducible to the precise application of

¹² It is thus a form of what since Kant has been called a "transcendental argument" about the conditions of possibility of any justifiable claim. On parallels between Plato's and Kant's ways of thinking about these issues, see Cohen (1878) and Natorp ([1903] 2004). predetermined rules of inquiry, but always requires a creative engagement with contingently prevailing competing views and a cultivated aptitude for challenging one's own assumptions about what counts as a good reason. Although precision is often valuable, its value (and even its meaning) can be determined only against this larger background; to define precision without reference to that background would be a bit like piloting a vessel by steering always the straightest possible course, regardless of where one is actually trying to go and whatever obstacles might lie in between. The next two sections elaborate this argument on the basis of the Platonic texts.

REFUTATION

The logic of Socratic refutation can usefully be compared to that of argument by *reductio ad impossibile*, also known as reductio ad absurdum.¹³ In a standard reductio, one deduces from a given proposition a consequence that contradicts that proposition itself. This shows that the initial proposition cannot be true or, if one prefers, that it cannot mean anything to say that it is true, because in doing so one commits oneself logically no less to the claim that it is false (Ryle 2009). Yet a *reductio* sometimes allows more than this negative conclusion; if one can show that one proposition leads necessarily to self-contradiction, whereas the contradictory proposition does not, and if the contradictory is properly framed so as to exclude the possibility of any third alternative, then one may fairly conclude not only that the initial proposition is false but also that the contradictory is true. Here, then, is a clear and wellunderstood example of how it is sometimes possible to arrive at positive conclusions by strictly negative means. Like the *reductio*, and unlike either induction or direct deduction, Socratic elenchus allows one to justify positive claims without presuming the truth of any foundational premise whatsoever. Neither induction nor direct deduction can get off the ground unless we already possess at least one solid truth from which to begin; the elenchus, by contrast, places no claim beyond criticism and depends on no epistemic authority external to the method itself. Because it is radically antifoundational in this specific sense, it is particularly well suited for addressing fundamental disagreements in which no common first principles may be taken as already firmly established.

Yet if Socratic method is like a *reductio* in this first respect, it is radically different in others. For one might imagine that the elenchus must at least presuppose the procedural rules of logic, the way that induction and direct deduction do. Yet as Gregory Vlastos correctly points out, Socrates never simply deduces the contradictions in his interlocutors' beliefs for them; instead, he only asks them questions and allows them to fall into self-contradiction through their own responses.

¹³ The terms are essentially equivalent, both deriving ultimately from the Greek $h\bar{e}$ eis to adunaton apag $\bar{o}g\bar{e}$ (Aristotle, *Prior Analytics* 41a21). For the history of argument by *reductio* see Kneale and Kneale (1962).

Every time that Socrates proposes to draw a logical conclusion in the dialogues he *requires the explicit assent of his interlocutor at every step along the way*. This is an obvious textual fact about the dialogues that has irritated many an undergraduate and puzzled many an interpreter. I take it to be making a very serious theoretical point, namely that Socrates' method does not presuppose any rules of logic whatsoever, if we understand by "rules" algorithmic procedures whose validity is secured ex ante and that need only be correctly applied to a given case.

To the contrary, rather than invoking the authority of a rule, Socrates at every step merely poses a question; if the interlocutor accepts Socrates' move, this shows that the interlocutor himself, on reflection, takes it to represent a valid logical consequence of his own views. Yet the interlocutor is always free to say no, and when he does sometimes want to change his answers or to argue in a new direction, Socrates invariably allows this, so long as it does not render the underlying matter of dispute a moving target (Gorgias 499b-c; Republic 340b-c, 345b; Protagoras 349c-d). The authority by which the interlocutor finds himself convicted of incoherence, then, is always in the final instance his own, never that of Socrates or of some impersonal set of logical rules that might confront him as an alien law. This does not mean that logic has no place in the method; rather, the sort of rules we have come to associate with "logic" can be understood as a compendium of certain moves shown to be generally and reliably successful in elenchus. Indeed, there is some reason to think that this may be their actual historical origin, insofar as Aristotle's Organon can be read in part as an extended systematizing reflection on argumentative practices learned in Plato's Academy. Yet Socratic questioning remains logically prior to any of these particular rules; if they are to count as necessary truths it is only because we have not (yet) found any coherent way of denying them, which is equivalent to saying they must continually prove themselves in elenchus.¹⁴ Even the most basic principle of noncontradiction is first justified by Aristotle, in the Metaphysics, not on grounds of self-evidence but because one who denies it can be refuted on his own terms.¹⁵ Such an "elenctic demonstration" (to elenktikos apodeiksai), he suggests, is the only sort it makes any sense to demand for such a basic principle.¹⁶ General logical and mathematical

truths, then, can be helpful *within* Socratic method by allowing us to build on the arguments of others, insofar as they are not in dispute; but because the question is always prior to the rule, even these general truths must always remain open to criticism whenever their status or applicability to the case at hand becomes controversial.

This point serves to highlight an essential characteristic of Socratic arguments that contrasts sharply with induction, direct deduction, and reductio: It need not be *impossible to doubt* their logical soundness for them to be good arguments. All that is necessary is for Socrates to show that, on his interlocutor's own as*sumptions*, there is good reason to find such arguments compelling. To refute a particular interlocutor's claim to knowledge, it is sufficient to show that he cannot make coherent sense out of his own position when pressed to do so. The relevant question, in the first instance, is thus not whether all of Socrates' conclusions follow necessarily or whether his own premises are incontrovertible, but rather whether it is reasonable to think that the particular interlocutor he is facing would accept them. This is what is signaled by the questionand-answer format of the dialogues and by Socrates' repeated criticisms of the more customary use of long, direct speeches as a means of pursuing knowledge (e.g., Gorgias 461e-462a, 466c, 471e-472c; Protagoras 334d-338e; *Republic* 348a-b). From this it follows, finally, that in Socratic refutation a "good argument" always means one good relative to a given position one is trying to refute, never (at this stage) one we need some reason to think must be good absolutely or true in any ultimate sense. Analytically minded interpreters often overlook this point, because appreciating it requires attention to the way the dialogue form inflects the logical status of particular arguments in context.¹⁷

The point is made even clearer by a second way in which elenchus differs from reductio. A single valid re*ductio* is enough to establish a proposition universally: If I show once that the proposition "some unmarried man is not a bachelor" entails its own negation, because every unmarried man is, ex definitio, a bachelor, then we may consider this proposition definitively refuted, and its contradictory established (unless I am later shown to have erred). The proof becomes no more or less certain if I copy it out an additional ten thousand times. This sort of universality is characteristic of formal logic and mathematics, which trade in general and necessary a priori propositions. Yet Socrates' refutations cannot be universal in this way, I suggest, because of their essentially immanent and dialogical character. Because they always begin from the contingent

¹⁴ Robinson (1953) contrasts Plato's view on this point with Descartes', who held to the contrary that "[b]y method... I understand certain and easy rules such that whoever has followed them exactly will never suppose anything false for true, and without uselessly wasting any mental effort, but always gradually increasing knowledge [scientiam], will arrive at the true understanding [cognitionem] of everything of which one will be capable" (1998, 85). Robinson rightly remarks that this "is far from the spirit of Plato" (1953, 73).

¹⁵ The principle was first formulated by Plato at *Republic* 436b.

¹⁶ Metaphysics 1006a: "But we have now posited that it is impossible for anything at the same time to be and not to be.... Some indeed demand that even this shall be demonstrated, but... it is impossible that there should be demonstration of absolutely everything; there would be an infinite regress, so that there would still be no demonstration... We can, however, demonstrate negatively [*esti d'apodeiksai elenktikōs*] even that this view is impossible, if our

opponent will only say something; and if he says nothing, it is absurd to attempt to reason with one who will not reason about anything.... Now negative demonstration [*elenktikōs apodeiksai*] I distinguish from demonstration proper, because in a demonstration one might be thought to be begging the question, but if another person is responsible for the assumption we shall have negative proof [*elenchos*], not demonstration" (Aristotle 1995; trans. Ross, in Barnes).

¹⁷ Here I agree with treatments stressing the importance of form to the interpretation of content from Gadamer (1980) and Strauss (1964) to Kahn (1996), Gonzalez (1998), and Zuckert (2009).

constellation of views that an interlocutor happens to hold, the conclusion of any single refutation must always remain *relative* to that particular position. That is, although Socrates' logic is sufficiently compelling to make it dramatically plausible for a given interlocutor to be reduced to silence (at least, I hope the reader will grant, much of the time), it is typically less than airtight, and one could often imagine another interlocutor arguing back in a different way. Indeed, sometimes Plato goes so far as to dramatize this explicitly, notably in *Gorgias, Protagoras*, and *Republic*, where Socrates refutes more than one interlocutor in the course of a single dialogue.

The point is that in Socratic elenchus, unlike an analytic *reductio*, the logical status of a single refutation is inferior to that of the ongoing and systematic refutation of all competing views. For even if every individual elenchus permits only relative conclusions, one could still establish general claims, provisionally, if one were systematically to eliminate every contending claim to knowledge but one. Consider by analogy a trial in which the defense manages, through crossexamination, to lead each and every witness for the prosecution to contradict his own testimony, while at least one witness for the defense is able to maintain his story against every attempt by the prosecution to poke holes in it.¹⁸ True, such a method could never lead to absolute certainty, because it is always possible that another argument (or another witness) might turn up that we had failed to consider. But if one accepts that we possess no self-evident starting point outside the method from which to begin (as is also the case in a trial), and if one therefore limits oneself strictly to the logic of asking questions and to taking nothing for granted that cannot be justified in argument, then this is a conclusion that one must also accept. One would be forced to conclude that human wisdom is by nature less certain than the divine (Apology 20d-e, 23a-b). If one were nevertheless not to give up on seeking knowledge, one would have to commit oneself to seeking out systematically and testing every available interlocutor's claim already to possess it, especially those of the most eminent experts (21e). One would also have to admit that such a search must be never ending (23b, 37e-38a), which, of course, is exactly how Socrates characterizes his elenctic mission.

Socratic method, then, is doubly indirect. Like a *reductio*, every refutation proceeds from the proposition to be falsified, not from a certain first principle (Aristotle's *archē*). Yet unlike a *reductio*, in elenchus it is not a single refutation that establishes a general proposition; rather, this requires an ongoing process of elimination that demonstrates internal inconsistencies in every position but one. From this it follows that the force of a given refutation is only relative to its place within this larger process of elimination

and that every conclusion will be only as strong as the systematicity with which one has so far eliminated its rivals. Because in practice one can never eliminate every possible alternative view (or, at least, one could never know for certain that one had already accomplished this task), there can be no end to the critical search for new alternatives to challenge. Propositions that have been "demonstrated" in the past should never be considered to have been proven absolutely, only to have been shown *more defensible* than all other available positions that have actually been refuted.

The "objectivity" and "rigor" in Socratic method, then, can never come fully from the precision of a single analytic argument. Although imprecision may be a real problem, even this will depend on whether the specific imprecision plays a pivotal role in the refutation of competing views. Past a certain threshold of precision, rigor will benefit more by expanding the range of competing views one explicitly refutes and by increasing the sensitivity and imagination with which one enters into each of those views' internal logics in order to be as certain as possible that one's supposed proofs do not rely on any tendentious assumptions one's interlocutors could coherently reject. As Hannah Arendt argued, "impartiality is obtained by taking the viewpoints of others into account," not always or necessarily by the imposition of general rules (1992, 42). In Socratic method, then, objectivity derives primarily from the systematicity of one's unceasing critical search for alternatives that challenge one's own views, and only secondarily from the analytic validity of any given argument one deploys to refute them.

APORIA AND IDEAS

The account of Socratic method presented thus far remains, however, vulnerable to two crucial objections. Understanding Plato's responses to them will help clarify exactly what is at stake in accepting or rejecting his radical redefinition of all knowledge as methoddependent. The first objection available to defenders of a more traditional, realist view of knowledge is to deny that the results of elenctic method really meet the standard of "knowledge" at all; in contemporary terms, perhaps Socrates gives up too readily on the sort of objectivity demanded by science. The second is that it might seem that, without access to a methodindependent reality against which to check our results, there can be no basis for deciding among multiple, fundamentally competing points of view, any number of which might be internally coherent.

It is important to see that Plato himself is wrestling with these problems in the dialogues. In those dialogues generally considered most Socratic, Socrates' interlocutors are typically led not to new positive knowledge but to *aporia*, the radical realization that they know nothing at all of what they had been certain that they knew. Moreover, Socrates himself avowedly shares in this perplexity, repeatedly disclaiming any knowledge of his own (Vlastos 1994, 39–66). This seems on face

¹⁸ One might think here of Socrates' cross-examination of Meletus at *Apology* 24c-27e or his challenge to Polus at *Gorgias* 471e-472c. In the latter case Socrates claims to know "how to produce one witness for what I say, the very man I am debating, but the many I dismiss" (474a, cf. 475e-476a, 482b).

to opt for the first horn of the dilemma. However, in the middle dialogues, Plato introduces the notion of ideas and, in Republic, finally allows Socrates to provide a positive account of justice. Many commentators understand the ideas as providing direct access to a sort of absolute and universal truth contrasted to the unreliable flux of common opinion; indeed, this is often taken for the soul of Platonism (e.g., Wolin 2006, 36–40). This seems to opt for the dilemma's second horn, but it also poses an acute textual puzzle: Why should Plato's dialogues contain both the Western tradition's foundational statement of dogmatic realist universalism and also its most influential statement of radical skepticism toward any and every claim to knowledge? Indeed, this puzzle is serious enough that it gave rise in the ancient world to competing schools of Platonic interpretation. Whereas Neoplatonists, among others, defended dogmatic versions of Platonic idealism from the classical period to the 20th century, Plato's own Academy became the leading seat of ancient skepticism under the leadership of Arcesilaus and Carneades, who saw themselves as carrying forward the true spirit of Platonic philosophy (Annas 1992; Sedley 1996; Woodruff 1986).

Mainstream contemporary answers take one of two tacks.¹⁹ Vlastos influentially argues that elenchus is already a sufficient route to positive knowledge. On this view, the introduction of the ideas and the associated "method of hypothesis" in the middle dialogues reflects Plato's rejection of the elenctic method he had learned from Socrates, in favor of a competing approach drawn from the example of geometers and Pythagoreans (1991, 45–80, 107–31). By contrast, Benson insists that elenchus serves only to remove the false conceit that one already knows, whereas it is the method of hypothesis that first makes possible the attainment of positive knowledge (1990, 129-30). For Vlastos and his followers, then, hypothesis replaces elenchus, whereas for Benson it takes up where elenchus leaves off. Both, however, agree that the so-called method of hypothesis introduced in Meno, Phaedo, and Republic is a freestanding positive method separate from elenchus, and both accordingly accept the standard, dogmatic interpretation of Plato's "mature" idealism.

My claim, by contrast, is that the doctrine of ideas represents a further working out of the immanent logic of elenchus itself—the logic of asking questions about when, if ever, we have reason to prefer any one belief to another. I do not deny that the introduction of hypothesis and ideas represents a major step in Plato's argument or that his thinking was influenced by the example of geometry. But the question is why and how Plato sees the analogy to geometers' hypotheses as responding to the problem posed in the aporetic dialogues, where every appeal to certainty without justification was shown up as hopelessly self-defeating. Unless one ignores this central lesson, which Plato reemphasizes in *Meno*, Theaetetus, and Republic I, the ideas cannot simply represent a return to the sort of self-evident certainties that Socrates had everywhere demolished. On my view, by contrast, the ideas' pretense to objectivity depends logically on the demonstration, through aporia, that the very notion of extra-methodological knowledge is incoherent and unsustainable. Only once we have accepted the point that knowledge can be attained only by a thoroughly critical method can we then go on to recognize that therefore any assumption without which such a method cannot proceed must hold "objectively" for every possible claim to knowledge. These assumptions place limits and constraints on the range of beliefs that might ever be coherently defended, simply because one cannot hope to justify a belief whose own content contravenes the assumptions of the only method by which it could ever possibly be justified. And as I show later, these assumptions turn out to be equivalent to Plato's doctrine of ideas. The reality of the ideas, then, is best understood as a regulative assumption in the Kantian sense, as a logical presupposition built into the very possibility of questioning the truth of our beliefs.²⁰

When Plato asks us to reason to and from ideas, then, he is really asking us to think through the logical relations implicit in any claim we make to know that something either is or is not true. He comes to recognize that every such claim tacitly commits us to two further propositions. First, we must be able to provide some sort of explanatory account that justifies our belief over others; in the language of Meno 98a, we must be able to tie that belief down with reasons (desei aitias logismoi). Second, in doing so we must be able to show that the entire web of logical implications in that account is *internally consistent*. If this were not so, then our reasons could not really count as reasons for our belief in the way we need them to, because they would equally be reasons for other beliefs that in turn give us reasons to reject it. Plato describes such a coherence test at *Phaedo* 101d, where he explains that "if anyone attacked your hypothesis, you would be happy to let him alone and you would not answer until you had examined the results of that hypothesis, to see if, to you, they mutually harmonize or are discordant."²¹ The two conditions, however, must go together; what is required is not merely coherence but a *coherent explanation* that provides a reason for favoring one belief over another. Thus in Republic VI, Plato argues that, in examining a given hypothesis, we ought first to trace the logical assumptions of our beliefs back, step by step, to some general principle that would need no further justification (to ep archēn anhupotheton), and then to

¹⁹ Others, including Lear (2006), have emphasized Socratic elements even in *Republic*, but have done so by downplaying the role of methodological arguments and the ideas, whereas I argue that even these central elements of high Platonism should be understood as further developments of Socrates' critical method.

²⁰ Kant, as we will see later, distinguishes in a way Plato did not among a number of different types of regulative assumptions appropriate to different ways of explaining or interacting with the world. Despite the important differences, however, the underlying continuity is illustrated by the fact that Kant describes certain necessary assumptions of reason as "regulative ideas" ([1887] 1998, A642/B670-A645/B673) and traces his use of the term "ideas" explicitly to that of Plato (A313/B369-A320/B377).

 $^{^{21}}$ See Gentzler (1991). My translation here and of *Phaedo* 100a-b later draws on hers.

reason back "down" from this assumption to check the coherence of its consequences (510b, 511b, cf. *Phaedo* 101d-e). Only if this reasoning up and down through ideas is successful can we demonstrate that our belief is justified by reasons that are themselves coherent. And it is only this sort of belief that could ever be defended in elenchus.

This interpretation builds on important work by Gail Fine (2003) and Jyl Gentzler (2005), both of whom argue for a "coherentist" rather than a "foundationalist" understanding of Plato's ideas. Yet it differs in a crucial respect: I think Plato cannot simply be what contemporary analytic philosophers call a "coherentist" because he recognizes that coherence alone is no warrant for truth, whereas the coherence of a justification uniquely favoring a given belief over the alternatives is. In other words, Plato is concerned with the coherence not only of our beliefs but also of all these beliefs and the further proposition that this belief set, and not any other, is ultimately the true one. To test this we need *not* have some way to prove that it is "in fact" the true one; we need only show that it can be defended in elenchus as compatible with the regulative assumption that there is some such standard of truth and that it favors this particular view, whereas the alternatives cannot. What Fine's and Gentzler's coherentist readings leave out is the claim to "objective" status as a regulative as-sumption that I emphasize.²² That omission effectively reduces Socratic method to a hierarchical systematization of our preexisting beliefs (much like Rawls's "reflective equilibrium"), whereas Plato is quite ready to countenance the possibility that our initial beliefs might turn out to be of a sort that is entirely indefensible, like the shadows on the wall in the allegory of the cave.

The notion of a "non-hypothetical first principle" (archē anhupothetos) invites confusion, because it may seem natural to read Plato here as saying that we need to trace our beliefs back to some certain foundation outside the method. But the anhupothetos can alternately be understood as a regulative assumption: Unless we presume some such principle, the chain of hypotheses implicit in any given belief would stretch back without end (because dialecticians cannot follow geometers in simply accepting certain substantive premises as axiomatic; Republic 511a-b). Nor could one determine which among several incompatible beliefs were true, so long as each followed consistently from its own arbitrary assumptions. On my view, then, the archē anhupothetos simply fills this gap by insisting to the contrary that we must operate on the assumption of a single and coherent "objective" truth that justifies, in every case, only one of two or more competing beliefs over all the rest. This is not because we have any sort of direct access, outside the method, to that

truth—we do not. Rather, it is because every claim to knowledge qua knowledge itself depends on this assumption that we may fairly reject any such claim incompatible with it as ultimately self-contradictory, purely on elenctic grounds. This most basic assumption is thus "unhypothetical" because it does not depend, like the hypotheses, on supposing (even provisionally) the truth of the "thesis" "under" which it falls. And it is "first" in that neither does it entail any further, more basic assumptions that would depend in turn on other assumptions even further back.

The archē anhupothetos, then, turns out to be equivalent to the doctrine of ideas itself, namely, the assumption that it must be possible to justify our particular beliefs as consequences of some general definitions that do not change with opinion, personal interest, or the vantage point of the observer but "always remain the same in all respects" (Republic 479a, 479e). These conceptual standards must be "perfect" and "essential" in the sense that they provide *final and unique criteria*; a claim to knowledge incompatible with such criteria can only be incoherent, because it must sooner or later beg the question and thus collapses into mere belief (which is the point Fine and Gentzler seem to overlook).²³ Within the system of ideas, finally, the idea of the good plays a special role in representing the ultimate logical coherence of all other ideas under its umbrella and the uniqueness of this entire system's claim to truth.²⁴ In this way, then, we can see how tracing out the internal logic of Socrates' demand for general definitions allows us to arrive at and justify "positing" the doctrine of ideas.²⁵ The methodological discussion in Republic lays bare the underlying logical structure to which we already commit ourselves in questioning the truth of our beliefs; this is the same structure that elenchus reveals in practice and that makes the elenchus work. Even in *Republic*, then, Plato's method is thoroughly

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²² Although both Gentzler and Fine recognize that Plato is concerned with the coherence *of explanations*, Gentzler thinks this is so because explanatory claims are instrumental to "maximizing the coherence of one's belief set" (485, 487), and Fine takes coherence to be sufficient if it is "sufficiently rich" in that it integrates all branches of knowledge and (purports to) explain a satisfying number of "results" (114–15).

 $^{^{23}}$ I take it that this is the point of Plato's insistence that "an imperfect measure cannot be the measure of anything" (504c) and also of the claim that knowledge can only be of what perfectly (or entirely) *is*, whereas mere opinion is of what both *is and is not* (i.e., that which *is* on some contingent view, but unlike an idea does not "always remain the same in all respects" when considered from all possible sides; 476e-479e).

²⁴ Natorp describes this as "the law that objects are to be grounded in law," viz. the logical demand for coherence and uniqueness at the most general level, encompassing all more particular truths ([1903] 2004, 189–201). Specific ideas such as that of a chair or of temperance are regulative in that for each one must presume the existence of some general and explanatory definition that holds across particular cases and uses. That all specific ideas are subordinate to that of the good entails that every such definition must also meet the additional requirement that it can be included with all others, without contradiction, in what we might call a single "world." These formal requirements do not, however, allow us to deduce which ideas there are or how many; doing so will require the late-period method of division or *diairesis*, in which candidate ideas are sorted through and challenged in dialogue on this premise of systematicity.

²⁵ That Plato himself understood at least some continuity here is strongly suggested by the fact that his middle-period terms for ideas, *eidos* and *idea*, were used by Socrates as early as the elenctic-aporetic dialogue *Euthyphro* to designate the sort of general, explanatory definitions that he was seeking (6d-e, and note a similar usage of *eidos* at *Meno* 72c). Competing interpretations of ideas would be hard-pressed to account for this terminological choice.

antifoundational in this specific sense: It does not depend on accepting as true any positive claim that cannot be justified strictly in and through elenchus. Even the *archē anhupothetos* is not a positive foundation we know is true, but only a methodological postulate we cannot do without in interrogating claims to truth.

There are several textual reasons for preferring this understanding of the ideas to the standard, foundationalist one. Tellingly, Plato insists in *Republic* on the need to reason not only from but also to the anhupothetos. Now if this principle were a self-certifying foundation, then it would make sense to deduce consequences from it, but it would add nothing to show that it was also logically presupposed by our initial belief (especially because we have no reason to think that that belief itself is true). If instead one thought the point was to ascend to ever greater truth by tracing back the logical conditions of our beliefs as far as they will go (assuming for some reason that these initial beliefs themselves can be trusted), then there would be no need to reason also back *down*. The movement in both directions makes perfect sense, however, if it is understood instead as a strictly immanent test of the coherence of the explanatory assumptions to which our initial belief tacitly commits us. Then we would indeed need to reason back to even the deepest assumptions our belief requires us to accept and to show that other consequences that follow from these assumptions do not in fact contradict our initial belief.

Moreover, Plato consistently describes the reality of the ideas not as self-evident, but to the contrary as something that must be *posited*; for instance, in this crucial passage from *Phaedo*:

This is how I proceeded: every time hypothesizing the account which I judge strongest, and then whatever seems to me to accord [sumphōnein] with it—with regard to causes or to anything else—I posit [tithēmi] to be true, and whatever does not as not true.... I propose to go back to those familiar notions of ours and to begin from these, hypothesizing the existence of beauty in itself and goodness and magnitude and all the rest of them. If you grant this and agree that they exist, I hope with their help to explain causation to you, and to find a proof that soul is immortal. (100a-b, emphases mine)

Similarly at *Republic 507b-509a*, Socrates says we "posit" (*etithēmi*) intelligible ideas such as that of "the beautiful" and "the good" as conceptual unities to make sense of our everyday beliefs that particular things are beautiful or good, and that this is why the idea of the good "must certainly [be understood] as being the cause of knowledge and truth." Why are we justified in this positing? It is not because we have direct insight into the truth of the ideas, but rather because the alternative leads to incoherence: "[I]f anyone does not allow that ideas of things exist, or does not distinguish an idea for each one of these, he will have nowhere toward which to turn his thought but, denying that the idea of each thing is always the same, in this way he will completely destroy the capacity for all dialogue"

(*Parmenides* 135b-c). It would be exceptionally strange for Plato to offer this roundabout justification if he thought we also had direct evidence of any sort for the reality of the ideas.

Finally, if there remains any doubt that ideas are best understood as immanent to elenchus, rather than as a freestanding alternative to it, Plato explains in *Republic VII* that dialectical method must be "placed at the top of [all] the studies like a coping stone" because

[u]nless one can distinguish the idea of the good and separate it out from everything else in argument, and *make it through all elenctic refutations* [*pantōn elenchōn dieksiōn*] as if in battle, being eager to *argue in elenchus* [*elenchein*] *not in terms of opinion but of being* [i.e., on the regulative assumption of some "objective" criterion uniquely favoring one view over others—C.M.], and comes through all this with the argument still standing; you will say that he does not know either the good itself, or any other good?²⁶ (534b-d, emphases mine)

"Yes," we are assured, "by Zeus."27

So what does all this mean for our understanding of method? Socratic method makes possible a certain kind of knowledge, even objective knowledge, but it does this by radically redefining what it means to call knowledge objective. A belief can be justified in elenchus only if it can be shown to follow from a general, principled account of why we ought to believe it (instead of something else), and this account must be universal in the narrow sense that it cannot merely express my opinion but must be put forward as a reason even a doubter ought to accept. To say that a certain belief is objectively true, then, turns out to mean nothing more or less than to say that it *can be* defended coherently as objective in elenchus. The test of objectivity, at the most general level, is simply whether or not a reason can be given for favoring one view over another that holds up as a good general reason

²⁶ The passage goes on to contrast this methodological view directly with one grounded in the self-evidence of the ideas: "but if he somehow lays hold of some phantom-image $[eid\bar{o}lou]$ of [the idea of the good in some other way], he lays hold of it by opinion $[dox\bar{e}i]$ and not by knowledge $[epist\bar{e}m\bar{e}i]$, and dreaming and dozing through his present life, before awakening here he will arrive in Hades and fall completely asleep?" (534c-d). I do not consider "distinguishing the idea of the good... in argument" in this quotation to be a step separate from elenchus, because elenchus always proceeds, even in the early Socratic dialogues, by demanding an explanatory definition that holds up under questioning.

²⁷ Certainly, this interpretation presumes that Plato's myths and allegories should not be taken literally. In particular, I agree with Fine (2003, 44–65) that *anamnēsis* is a metaphor and elenctic critique the only genuine route to knowledge. There is a good deal of textual evidence for this claim, including the fact that the examples of recollection provided in *Meno* are actually of elenctic questioning; in addition, Plato insists throughout *Republic* that "the power of dialectic alone" can reveal truth, access to which is "in no other way possible" (533a). I also agree with Lear (2006) that key allegories including the divided line and the cave are best understood as immanent critiques of the supposition that visual perception and received opinion are reliable measures of truth, presented in the very form of figurative myth itself. As such they are at least compatible with my argument, although I cannot interpret them in detail here.

under withering scrutiny from every competing point of view.

SOCRATIC METHOD AND POLITICAL THEORY

The possibility of antifoundational justification afforded by elenchus should be of clear interest to political theorists. Several of the most important debates of the past several decades have turned on the status and value of purportedly universal principles. Critics such as MacIntyre (1981), Sandel (1982), and Taylor (1989) have argued that every value judgment must depend on some ultimate foundation that cannot itself be justified or called into question. Although this objection may gain some traction against approaches like Rawls's, it appears to overlook the possibility of just the sort of strictly immanent and comparative critique that we have found in Socratic method. This antifoundational approach responds equally well to the concerns of Nietzscheans and other epistemological radicals (such as Butler 1995). Even the Socratic demand that our claims be generally defensible is not, we have seen, derived from any substantive view of metaphysics, rationality, or human nature, but simply from the need for interlocutors to make sense of their own positions and why they ought to be believed.

Another concern of Nietzscheans, multiculturalists, "difference" feminists, and critics of cosmopolitan internationalism is that purportedly universal principles always risk "normalizing" and creating "remainders" that do violence to certain disadvantaged or excluded groups (e.g., Honig 2009). This concern is serious, but Socratic method responds by insisting that principles are always embedded in a never-ending dialogical process of interpretation and critique. Because Socratic method is radically antifoundational, and because it insists on engaging interlocutors always on *their own* terms and never only on those terms presently dominant, it contributes actively to exposing rather than to occluding the ever-present possibility of any such remainders-at least, when it is done well. It does not and need not deny that any discourse of knowledge may always also be understood as a technique of power, but it invites interlocutors also to provide generally defensible arguments about when and how this point ought to bear on particular decisions about what sorts of political action to take or to abstain from. At the same time, it takes seriously the idea that raising questions, even when those questions lead to aporia rather than to any positive conclusion, is an essential component of method in its own right. Critique is not merely instrumental to justification; it is fairer to say that the sort of relative and indirect justification Socratic method can provide depends for its legitimacy on the incessant pursuit of critique for its own sake, which works everywhere to demolish the notion that any comfortable truth might be so self-evident as to require no justification at all.

I take this position to be equally compatible with a sympathetic reading of agonists like Honig, on the one hand, and of deliberativists like Habermas, on the other, despite the fact that the two are commonly considered competing.²⁸ Although I think it is possible to interpret the principles of Habermas's discourse ethics on analogy to the regulative assumptions of elenctic questioning described earlier, making this comparison explicit has several advantages. It obviates the need for recourse to speech-act theory or sociological analyses of communicative action (whose epistemic and normative authority may itself be open to question.) By emphasizing that contradictions are immanent to an interlocutor's own *views*, it suggests that one ought to raise potential inconsistencies always for one's inter*locutor as questions* in an invitation to further dialogue, rather than diagnosing "performative contradictions" authoritatively from outside. Above all it means that judgment must always take place indirectly, across multiple competing points of view considered on their own *terms*, which means it cannot be enough to specify in advance a general principle or set of procedural standards that may then be subject to subsequent reflexive criticism only on *its own* terms (cf. Habermas 2001).

The immanent and comparative logic of Socratic elenchus shows exactly how it is possible to justify positive judgments through strictly negative means, without presupposing any foundational certainties insulated from critique. It also shows why making such judgments need not commit one to erecting new foundations or to ruling out the validity of asking other sorts of questions about politics. Because elenchus departs from the logic of asking particular sorts of questions and builds its arguments only through immanent dialogical engagement with every particular interlocutor, even its justifications of "universal" principles are never absolute. Rather, "universal" means nothing more or less than more defensible as universal in a given context of particularity, which is all we need for practical judgment but which also entrains an invitation to perpetual criticism rather than the pursuit of ultimate answers. Socrates' elenctic practice thus affords a powerful illustration of how critique and justification may mutually support each other rather than compete, and it is hoped that proponents of both normative theory and agonistic critique may be able to see their own concerns reflected in this image.

SOCRATIC METHOD AND EMPIRICAL POLITICAL SCIENCE

It is not only political theory, however, that might benefit by reconsidering method in Socratic terms. In this final section I advance three theses about how an understanding of Socratic elenchus might contribute to ongoing debates over empirical methods. First I argue that even the methods of the *natural* sciences may be understood as a particular development within, rather than an alternative to, an overarching logic of elenctic justification. I then argue that mainstream quantitative methods in political science are best understood,

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 $^{^{28}}$ But see Markell (1997). I argued a related point in greater detail in Meckstroth (2009).

on their own assumptions, as also participating in this logic. This is important because it allows us to identify a common logic of empirical inquiry underlying both quantitative and qualitative methods, which enables us to distinguish in a principled way assumptions specific to one or the other from those that ought to apply equally to each. Finally, I argue that this understanding of a common logic helps clarify the relation between mainstream quantitative and qualitative methods in several important ways.

(1) There is no consensus in the philosophy of science on the logic of "scientific method."²⁹ Without trying to resolve such a prodigious question here, I mean to show both that a Socratic understanding of this method is perfectly *possible* and that versions of such an understanding have been defended by leading philosophers of natural science from Bacon to Popper and after. This matters first because it shows exactly what is required to adapt Socratic elechus to empirical questions; second because it illustrates some of the historical continuities that led Plato's term "method" eventually to take on such central significance for natural scientists; and third because if leading mainstream philosophers of science like Popper and Lakatos argue that even the methods of *physics* are best understood on a quasi-elenctic model of refutation,³⁰ then a similar understanding should be acceptable even to those who believe strongly that political science ought to emulate the physical sciences.

What distinguishes empirical methods from normative or strictly conceptual ones is that the former concern claims about the world of sense experience. In addition to the two general criteria of Socratic method, then, empirical arguments must clear an additional hurdle: Because they are claims about the world of experience, they must not contradict our best interpretation of the relevant observable evidence. Every empirical claim must therefore be "falsifiable by observation" in Popper's sense ([1935] 2002, 58), just because any claim inconsistent with (appropriately interpreted) observation is incoherent in its own pretense to describe the empirical world. Popper, moreover, rightly insists against positivists like Carnap and Hempel that the fact that observed data "fit" a given empirical theory provides no reason whatsoever for supposing it true, because any number of alternative explanations are always compatible with any given set of observations.³¹ The strength of every positive empirical claim, therefore, depends entirely on the systematicity with which

³¹ The full and decisive argument turns on the Humean problem of induction (Popper[1935] 2002, 3–20).

rival explanations have been excluded. It is because this exclusion can never be definitively completed that science never ends and every judgment remains open to subsequent revision.³² That there is some objective and unified "empirical world" to interpret in the first place is not itself an empirical proposition but a necessary methodological assumption of empirical inquiry as such, just as the possibility of general grounds for preferring one belief to another is a regulative assumption of questioning any belief in general.

Empirical inquiry may thus be understood as a subset of Socratic inquiry, rather than as an alternative to it. On this view, the development of experimental method from the 16th and 17th centuries improved on Plato by drawing a crucial distinction within the elenctic method of the sciences. This had the revolutionary effect of freeing up each kind of critical reasoning for further development on its own terms and making possible the sorting out of confusions among logical, moral, and empirical arguments by distinguishing among the more specific regulative assumptions appropriate to each, notably in Kant's three Critiques. However, it is incorrect to describe the rise of experimental method as a turn away from the critical approach characteristic of Socratic elenchus to the direct authority of the senses. One sees this for instance in Bacon, one of experimental method's most important pioneering theorists. When Bacon called for "induction" in the natural sciences, he carefully distinguished it from "simple enumeration," or direct generalization from observed instances, because for Bacon, "the foundations of true induction lie in exclusion, which however is not completed until it comes to rest in an affirmative" ([1620] 1994, 173).³³ As he explains in a central and strikingly Socratic passage of the Great Instauration,

the first task of true *induction* (as far as discovering forms is concerned) is the *rejection* or *exclusion* of all the singular natures [that do not invariably accompany a given nature in experience]. Then indeed, after the *rejection* and *exclusion* has been duly made, in the second place (at the bottom, as it were), there will remain (all volatile opinions vanishing into smoke) the affirmative form, solid, true, and well-defined. (169, emphases in original)

²⁹ See for instance Cartwright (2007, 24–42) and Jackson (2011, 11). ³⁰ Popper opens the section on "Refutations" in his *Conjectures and Refutations* with a quote from Plato explaining elenctic method ([1963] 2002, 340). For more on dialectical elements in Popper's thought see Bubner (1973, 129–74). Lakatos particularly emphasizes the relative aspect I have stressed in Socratic elenchus: He insists that scientific judgments are not "two-cornered fights" between theory and experimental data but always at least "three-cornered fights between rival theories and experiment" (1978, 31). I differ from Popper, in particular, on a number of points, including his interpretation of Plato's idealism and many of his political conclusions ([1966] 2011).

³² Popper is careful to emphasize, moreover, that every observation requires interpretation, which is always contestable too (74–94). As Popper puts it, "The empirical basis of objective science has thus nothing 'absolute' about it... The bold structure of its theories rises, as it were, above a swamp. It is like a building erected on piles. The piles are driven down from above into the swamp, but not down to any natural or 'given' base... We simply stop [driving the piles deeper] when we are satisfied that [they] are firm enough to carry the structure, at least for the time being" (94). Notice how this is not fatal for an elenctic theory of method that proceeds always indirectly and that never purports to uncover positive truths, except in the qualified sense that they are shown to be more consistently defensible as true than those alternatives presently available to a given community of inquirers.

³³ He thus argues *against* the standard sense of "induction" (then as now), on the grounds that it is "a bad induction to infer principles of science through simple enumeration, not making use, as it should, of exclusions and resolutions, or separations of Nature" (Bacon 1620] 1994, 78). All translations of Bacon are adapted from Urbach and Gibson's translation.

Bacon's advance over Plato is not therefore a rejection of elenctic justification through refutation, but rather the recognition that in the natural world such refutations must include structured observation designed to weed out explanations contradicted by experience. The identification of this additional regulative assumption is, arguably, the defining characteristic of modern natural science. Much more would be required to show that the foregoing interpretation of scientific method is best, but simply noting that it is possible and well established in mainstream philosophy of science is enough to show that a good deal of theoretical argument would be required to demonstrate why one ought to prefer a more familiar positivist interpretation as a model for political science.

(2) If we next consider mainstream statistical methods in political science, strictly on their own assumptions, it becomes clear that they too essentially depend, as does Socratic elenchus, on the systematic refutation of alternative explanations. Measures of statistical significance, in particular, do not represent the inverse probability of our preferred hypothesis being true, given the data, but the probability of that data obtaining if we assume to the contrary the truth of the null hypothesis that the data were generated strictly by chance. The underlying thought is that if we cannot even show that the data are sufficiently incompatible with reasonable expectations under the obvious alternative hypothesis that they are simply the result of chance, then our positive claim is very weak indeed. Yet significance tests alone provide no direct evidence that our preferred hypothesis is true; they merely contribute to excluding one obvious competing possibility, whereas other techniques are designed to exclude further possibilities such as "bias" introduced by case selection or "omitted variables" (King, Keohane, and Verba 1994). In principle, however, an infinite number of alternative hypotheses also compatible with the data always remain. As Gary King emphasizes, the popular R^2 statistic in multiple regression is only meaningful as a relative measure (1989, 35-6). Given a particular dataset and a discrete set of alternative hypotheses, one may fairly *compare* the degree to which each accounts for observed variation in that data, and this provides a reasonable ceteris paribus ground for rejecting those hypotheses that explain less and preferring to them that which explains more. Yet it is impossible to derive from this any absolute measure of the probability that even the most explanatory of considered hypotheses is true; indeed such a notion of inverse probability is both mathematically and philosophically undefinable (16-21). In practice, which alternative possibilities are considered important to rule out will be determined by considerations of theory judged against the background of the existing literature (35-66), which, as Popper ([1935] 2002, 74-94) and Lakatos (1978) emphasize, is also the case in the natural sciences. Recent work on potential confounders, omitted variable bias, endogeneity, model specification, and robustness further exemplifies the underlying elenctic logic of statistical inference, because all of these issues turn essentially on ruling out alternative causal explanations for some

part of observed variation.³⁴ This relative and indirect logic is, of course, only more explicit with maximum likelihood and Bayesian approaches (King 1989, 21).

The point is that no quantitative method is ever sufficient to justify causal inference directly; as in elenchus, positive inference here depends essentially on excluding rival hypotheses. Although mainstream quantitative researchers appreciate this point,³⁵ its implications for comparison across methods are not always consistently drawn; in particular, it means that King, Keohane, and Verba are imprecise in claiming contra Popper that the distinction between "verification and falsification" is "largely irrelevant" to theory testing (1994, 101) or that "the more observable implications which are found to be consistent with" a given theory, "the more certain the results" (25). Their suggestion that positive correlational evidence is sufficient for scientific inference seems to depend on a common but imprecise analogy between Holland's (1986) formal model of causal inference in randomized clinical trials and the logic of nonexperimental statistical methods (King, Keohane, and Verba 1994, 79).³⁶ What accounts for the unique power of the ideal randomized experiment, however, is that it describes just those formal conditions under which positive evidence is logically equivalent to the refutation of every possible alternative explanation, because by stipulation only the independent variable under consideration varies nonrandomly between treatment and control populations. Only in this case could the researcher exclude all alternative explanations without knowing in advance what they might be.³⁷ Even in true experiments, however, this logical equivalence holds only under idealized conditions; in the real world the art of experimental design consists precisely in constructing a situation under which all variables thought potentially relevant are in fact "controlled" (Cartwright 2007, 31). That this is so in the clinical trials Holland models is clear, for instance, from their standard use of placebos, which do not enter into his formal model but which can only be explained by the need to exclude a specific alternative explanation. If placebos reveal the indirect and refutation-oriented nature of even randomized experiments, however, then the point is only more clear for observational statistical methods, which cannot presume that nature has already isolated and controlled all the relevant independent variables for us.³⁸ Indeed, recent work on natural and quasi-experiments has shown that they too raise related questions of comparability, even when random or as-if random assignment may fairly be presumed (Sekhon and Titiunik 2012).

³⁴ See for instance Clarke (2005), Freedman (2010), Jackson (2008), and Ray (2005).

³⁵ Particularly acute discussions are found in Achen (1982, 16–30, 78) and Clarke (2007).

³⁶ I focus here on their model of "causal" as opposed to "descriptive inference" because I take the former to play a more central role in their criticisms of qualitative methods.

³⁷ I thank co-editor Arthur Stein for pushing me, in the review process, to clarify this point.

³⁸ This last point is well established; see, for instance, Collier, Brady, and Seawright (2010, 162–5) and Freedman (2005, 1–17).

Certainly, King, Keohane, and Verba recognize that considering rival hypotheses is central to good quantitative practice (1994, 32–3), but the issue is how they draw up the "rules of scientific inference" that they claim apply equally to quantitative and qualitative research but are "sometimes more clearly stated" in formal quantitative models (6). The specific rules of statistical analysis and unbiased data gathering could be tantamount to general rules of scientific method, however, only if they were themselves sufficient for positive causal inference, as on the idealized assumptions of the Neyman-Rubin-Holland model. If one accepts instead that observational statistical methods allow only the relative evaluation of hypotheses through the refutation of identified alternatives, as in Socratic elenchus, then it is this underlying logic of systematic refutation, and not necessarily the more specific assumptions of statistical approaches to refutation, that will define the criteria of valid empirical inference in both quantitative and qualitative methods. This latter view has two advantages: It makes better sense of the specific logic of mainstream quantitative methods in their difference from true experiments, and (as the previous section shows) it provides a generally defensible criterion of method that makes possible principled evaluation across instances, without presuming ex ante the general authority of any particular example (be it physics, randomized clinical trials, multiple regression, or in-depth case studies).

(3) This elenctic understanding also helps clarify the relation between quantitative and qualitative methods. It allows us to classify methods by distinguishing three levels of regulative assumptions: first, the *general logic of empirical elenchus* shared by all these methods; second, what I call diverse *standpoints of inquiry* that distinguish different kinds of questions one may ask of the empirical world; and third, the distinctive *logics of inference* that define specific methods such as multiple regression, process-tracing, or participant observation.

Standpoints of inquiry are sets of assumptions that follow logically from asking certain kinds of questions about the empirical world. One finds at least four standpoints in contemporary political science: the nomological, the idiographic, the interpretivist, and the conceptual. The first inquires into the possibility of predictive law-like generalizations. The second, still causal, asks how particular cases may be explained ex post by developing ideal-types, mechanisms, typologies, or models and then relating them to contingent historical data and/or working out their internal logics (Mahoney and Goertz 2006; Weber [1922] 2011).³⁹ The third investigates not causal relations but systems of meaning employed in political action (Schwartz-Shea and Yanow 2006). And the fourth begins from empirical evidence, but uses it to pose essentially theoretical questions (Wedeen 2009).⁴⁰ We saw earlier that Kant

https://doi.org/10.1017/S0003055412000263 Published online by Cambridge University Press

distinguished among different types of critical reason in ways that Plato had not, by drawing out the contrasting regulative assumptions implicit in empirical, moral, and aesthetic questions. The notion of standpoints of inquiry takes this logic one step further by drawing additional distinctions, in the same way, within the empirical sphere itself.⁴¹ These standpoints, like Kant's, do not compete. They describe not different ways the empirical world might actually "be," but assumptions we implicitly commit ourselves to in asking different sorts of questions of it.⁴² If one wants to know "what can I predict on average across a large number of instances?" then nomological assumptions make sense; if one asks instead "how can I explain the details of a particular historical case or the variety of configurations in a given set of cases?" then other assumptions follow, and still others if one asks "how do certain people make sense of a particular political phenomenon?" The idea of an empirical world is equally compatible with any of these questions; it does not dictate any single standpoint. Yet we must presume one or another such way of conceiving the empirical world if observational data are to allow us to falsify any particular empirical theory or hypothesis; which one we choose is up to us, but ought to follow from the substantive question or problem at hand.

Particular methods, finally, are distinguished by specific logics of inference that comprise those regulative assumptions on which the validity of their inferences depends. For instance, the validity of regression analysis requires assumptions of "unit homogeneity" and "conditional independence." Every particular logic of inference is a different way of instantiating the same general logic of empirical elenchus, and all require the presumption of some standpoint or another. Yet a single method may be used across several standpoints. For instance, comparative case studies can be used for predictive generalization, developing historically situated ideal-types, or cultural interpretation; formal models may be understood as predictive theories (Friedman 1953), ex-post ideal-typical reconstructions (North and Thomas 1973), or tests of conceptual consistency (Riker 1982); and ethnography may be used to investigate systems of meaning, to model social structure, or to raise conceptual claims (Kubik 2009). What changes with the standpoint are the

³⁹ The term "idiographic" has its own complex history tracing back to the neo-Kantian Windelband ([1894] 1980). I mean to reserve it for the use described here, as distinguished from interpretivism or what is sometimes called pure description.

⁴⁰ This last is empirical in a way in which pure "theory" is not, because it matters here that the conceptual claims are raised by

particular empirical entities or situations, and so a necessary piece of the argument continues to require reference to observation. Because this is a hybrid position, however, not everything that follows will apply to it at every step of the argument.

⁴¹ "Standpoints" is meant to echo Kant's "*Standpunkte*," as at *Groundwork* 119: "[T]he concept of an intelligible world is therefore only a *standpoint*, which reason sees itself impelled to take outside appearances *in order to think of itself as practical*" (trans. mine from the *Akademie* edition, emphases Kant's). "Of inquiry" stresses that these follow logically from asking certain types of questions, the way I have argued Plato's idealism follows from the general logic of elenchus.

⁴² Although I agree with much of Jackson's (2011) discussion of "ontological wagers" in international relations theory, it matters to my argument that standpoints are methodological rather than ontological and that they are not wagers because they neither compete nor can they be right or wrong.

background assumptions against which the strengths and weaknesses of a given logic of inference may fairly be assessed.

Distinguishing these three levels of assumptions provides a principled framework for debating the bounds of methodological pluralism. On elenctic grounds, the only valid reason for ruling out a standpoint is that its assumptions can be shown inconsistent with those of the overarching logic of empirical elenchus. Any standpoint that passes this test is thus equally valid and equally empirical. So neither theology nor alchemy nor moral philosophy counts, insofar as each rejects the arbitration of experience, but both interpretivism and explanation through covering laws do, and equally so. Or at least, to show otherwise would require demonstrating that one or the other of these latter standpoints uniquely captures the necessary logical conditions of every coherent empirical explanation, the kind of elenctic or transcendental argument we found in Plato, Kant, and Popper. And this argument has yet to be provided, either by social-science methodologists or by philosophers of science. One may thus take Laitin's (2005) point that methodological pluralism requires justification while maintaining that, in the absence of such an argument, a certain pluralism at the level of standpoints is the only justifiable position.

An elenctic view also brings clarity by distinguishing two kinds of methodological disputes. Some occur within a shared standpoint, for instance when proponents of process-tracing argue that "causal-process observations" may complement regression in testing predictive generalizations (Brady and Collier 2010). But when qualitative researchers argue for the value of typologies or historical explanations of particular cases, the disagreement with mainstream quantitative approaches reaches to the underlying standpoints themselves (Mahoney and Goertz 2006). In this second case, one cannot compare inferential logics directly, because they lack a common frame of reference; nor can one dissolve disagreements of this type through multiple methods designs. Yet this does not mean that criticism is impossible or that anything goes: Every method may be judged for how well it succeeds at systematically excluding rival empirical hypotheses, on the assumptions of a given standpoint of inquiry, and some methods may do better at this task than others. Here too, then, we should abandon the search for a single absolute standard to which all methods might directly be compared and focus instead on the immanent criticism of diverse methods on their own terms, in light of their common commitment to the general logic of empirical elenchus.

Within a given standpoint, diverse methods will complement each other whenever each helps eliminate different kinds of rival hypotheses. For instance, from the nomological standpoint statistical methods have obvious strengths. As compared to qualitative case studies, such methods are particularly useful (where applicable) in guarding against attributing causal significance to variation that might equally well be explained by chance and generalizing too quickly from a small number of cases, and also in forcing one to consider systematically negative as well as positive evidence. However, qualitative methods like process-tracing may better eliminate other types of rival hypotheses, notably in cases of potential endogeneity or multicollinearity (Bennett 2010; Hall 2003). They may also help with the necessary task of narrowing down the range of explanations fed into statistical models, or leveraging anomalies to discriminate among theories (so long as one *also* remains attentive to the possibility that anomalies are outliers; Rogowski 2010). Which types of hypotheses are most urgent to exclude will depend on the state of the literature and rival theories, and so not every study need combine methods or combine them in the same way. An elenctic understanding provides a common language for distinguishing among cases in which quantitative, qualitative, or some combination of these methods may most effectively exclude alternate hypotheses and thereby contribute to defending or refuting empirical claims. This logic, based in a division of refutative labor, contrasts with familiar views that describe the value-added of multiple methods instead in terms of increasing "plausibility" (Laitin 2005), linking (positive) micro- and macro-level explanations (Fearon and Laitin 2008), or providing empirical tests of formal models à la Friedman (Boix 2003).⁴³

Yet an elenctic view of method also affords critical leverage. Again, consider process-tracing. Bennett (2010), following Van Evera (1997), distinguishes among four types of tests to which a causal hypothesis may be subject: straw-in-the-wind, smoking-gun, hoop, and doubly-decisive. An elenctic view suggests, significantly, that a smoking gun test justifies no valid positive inference, just because it does nothing to rule out alternative explanations. (And here the point holds across standpoints.) Stronger arguments focus instead on ruling out alternatives by showing that they are inconsistent with observed evidence and thus fail hoop tests. What is here considered a smoking gun may alternately be understood as evidence contradicting rival explanations, but this means that interpreting it requires a systematic consideration of those rivals. This consideration is important because every smoking gun may turn out to be either coincidental or epiphenomenal to an actual cause (for the same reasons that any number of causal explanations may be compatible with a statistical correlation), and this risk can be addressed only by ruling out competing explanations.

Consider, for instance, the exchange between Collier, Brady, and Seawright (2010) and Beck (2010) over Tannenwald's (1999) study of the non-use of nuclear weapons by the United States since World War II. Tannenwald argues that materialist explanations, including rational deterrence, are insufficient to explain this nonuse and that an explanation including both materialist factors and the emergence of a normative "nuclear taboo" after 1945 does better. To show this, she argues

⁴³ My view does not necessarily object to the uses these authors make of multiple methods in their work, but it does suggest different criteria for evaluating their validity. I take my argument not only to support Lieberman's (2005) excellent brief for "nested" designs but also to articulate a more general logic that could also support other combinations of methods tailored to diverse research questions.

that materialist explanations fail to account both for shifting patterns of use and for documentary evidence of nonpublic "taboo talk" among decision makers. Collier, Brady, and Seawright (2010) describe the latter historiographic evidence as, in effect, a smoking gun test and present it as a paradigm of what process-tracing adds to quantitative methods (190). Beck (2010) raises valid logical objections to such direct inductive inference and concludes that process-tracing has little to offer. An elenctic view, by contrast, explains exactly why the real weaknesses of smoking gun tests identified by Beck do not apply to other uses of process-tracing aimed instead expressly at excluding rival explanations. On this view, Tannenwald's evidence of "taboo talk" can serve two valid ends. First, it may help exclude rival hypotheses according to which that evidence should not exist (which is how Tannenwald frames her argument at 440–1). Second, from within an ideal-typical standpoint, it may play an essential role in developing the explanation and in showing how it works and how it may be understood to apply in particular cases (which Tannenwald calls her "primary question" at 435). Only the first of these two uses, however, is a "test." By clarifying logical points like these, then, an elenctic view may sometimes help advance methods debates beyond a clash of incommensurable assumptions.

All of the foregoing, of course, can be argued. My claim is not that an understanding of method informed by Socratic elenchus should end all methodological debates. Rather, I have tried to argue, more modestly, that such an understanding might help reorient some of these debates in more productive ways, by providing a common language that could help us to sort through, in a more principled and less arbitrary way, what is and is not defensible or generalizable across diverse methodological traditions. My larger end in this article has been first to explain what a Socratic approach to method might be and then to show there is some reason to think it could be of interest to contemporary debates in political theory and empirical political science. I hope thereby to have leant some credence to the notion that the sort of dichotomy Wolin drew between "theory" and "methodism" need not exhaust our thinking about method in the study of politics. If I have perhaps raised more questions than I have been able to answer, I have argued that this too is not without its value from a Socratic point of view.

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