

CHAPTER 10

*Plato's philosophical method in the Republic:
the Divided Line (510b–511d)**Hugh H. Benson*

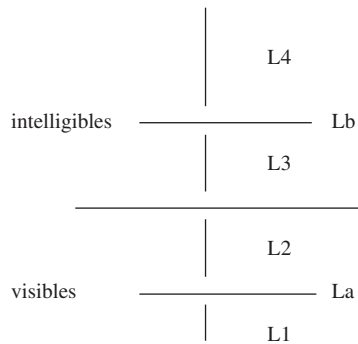
Plato's image of the Divided Line has captured the attention of his readers for centuries. Much of this attention has been focussed on the nature of the ontological divisions associated with the four sections of the Line, especially the third.¹ This is as it should be since a number of features of the Line point in the direction of ontology. The initial division of the Line into two parts suggests an ontological focus,² as does the subdivision of the first part. But when Plato turns to distinguishing the subsections of the second part, his focus becomes a contrast in methodologies.³ The method of the third section – which I will call the dianoetic method because it results in *dianoia* – is distinct from the method of the fourth section of the line – traditionally called the dialectical method which results in *epistēmē* or *noēsis*.

I will maintain that the Divided Line passage suggests that these two methods are distinguished less by their formal features than by the manner in which these two methods are carried out. Both methods employ the formal features of the more general method introduced as early as the *Meno* and traditionally called the method of hypothesis.⁴ When the method of hypothesis is employed incorrectly it can achieve only *dianoia* and so amounts to the dianoetic method. When the method of hypothesis is employed correctly, one can achieve *epistēmē* and is engaged in dialectic. It is with this feature of the Line – the contrast between the correct philosophical method, dialectic, or the road to the greatest *mathēma*,⁵ and its near relative, dianoetic – with which I will be primarily concerned.⁶ The former, I maintain, is the correct application of the method of hypothesis, the latter an incorrect application of this same method.

A BRIEF STATEMENT OF THE DIVIDED LINE

The image of the divided line is familiar to the readers of Plato. So I will only take a moment to present its basic features.

In response to Glaucon's request to continue his explanation of the similarity of the Form of the Good to the Sun, Socrates reminds Glaucon of the two kinds of things – the visibles and the intelligibles – with which he introduced the Sun analogy (507b9–11). He encourages Glaucon to think of these things like a line divided into two unequal parts – La and Lb – which in turn are to be divided into two subsections – L1 and L2 of La and L3 and L4 of Lb – according to the same ratio as the original division. So we get the following image.



Note: I here make at least the following assumptions in presenting the image in this way: [1] that the line should be displayed vertically rather than horizontally, [2] that the sections of the line increase in size from L1 to L4, and [3] the following ratios and equivalence hold: $L1 : L2 :: La : Lb$; $L3 : L4 :: La : Lb$; $L1 : L2 :: L3 : L4$; and $L2 = L3$. While there may be some significance in these assumptions for the overall interpretation of the line (see, e.g., Cross and Woozley 1964, p. 204, Fogelin 1971, p. 375, and esp. Smith 1996, pp. 27–28), no part of the argument of the present paper depends on these assumptions.

THE INITIAL STATEMENT OF THE DISTINCT BETWEEN L3 AND L4

After briefly⁷ instructing Glaucon to place images in L1 and the original of these images in L2, Socrates offers the following introductory descriptions of L3 and L4. First L3,

- [A] In one subsection, the soul, [1] using as images the things that were imitated before (*tois tote mimētheisin hōs eikōsin chrōmenē*), [2] is forced to investigate from hypotheses (*zētein anagkazetai ex hupotheseōn*), [3] proceeding not to a first principle but to a conclusion (*ouk ep' archēn poreuomenē all' epi teleutēn*). [510b4–6],⁸

and then L4

- [B] In the other subsection, however, it [1] makes its way to a first principle that is not a hypothesis (*to ep' archēn anupotheton*), [2] proceeding from a hypothesis (*ex hupotheseōs iousa*) [3] but without the images used in the previous subsection, using forms themselves and making its investigation through them (*kai aneu tōn peri ekeino eikonōn, autois eidesi di' autōn tēn methodon poioumenē*). [510b6–9]

This introductory description of the top two sections of the line does not focus on a distinction of objects. Rather the top two sections are distinguished in terms of a method or procedure of the soul. Moreover, while the point is perhaps not explicit in these lines, it is evident that according to Plato the first of these methods or procedures of the soul is in some way inferior to the second.⁹ The dianoetic method is in some way inferior to dialectic. Finally, three features are specified for each of the two methods distinguished in these passages.

- [A1] Dianoetic uses as images the things that were imitated before
 [A2] Dianoetic is forced to investigate from hypotheses
 [A3] Dianoetic proceeds not to a first principle (*archē*), but to a conclusion (*teleutē*)
 [B1] Dialectic makes its way to an unhypothetical first principle (*archē*)
 [B2] Dialectic proceeds from hypotheses
 [B3] Dialectic does not use the images used in the previous section, but forms themselves

[A1] corresponds to [B3], [A3] to [B1], and [A2] to [B2]. We seem to be encouraged to recognize that both dianoetic and dialectic proceed from hypotheses (*ex hupotheseōs*).¹⁰ The surrounding features are meant to distinguish the ways in which the two methods proceed from hypotheses. Dianoetic proceeds from hypotheses not to an *archē*, but to a *teleutē*, while dialectic proceeds from hypotheses to an *archē* that is unhypothetical. In addition, dianoetic in proceeding from hypotheses uses in some way the ordinary objects of L2, while dialectic does not. Dialectic only uses forms in proceeding from hypotheses. These differences, then, must explain the inferiority of dianoetic to dialectic. They are what distinguish dianoetic from dialectic and so what explain its inferiority. The remainder of the Divided Line passage is devoted to explaining these two differences.

Before looking at the differences between these two methods, let us look at what they have in common. They both proceed from hypotheses. But what is it to proceed from hypotheses?

A BRIEF DESCRIPTION OF THE METHOD
OF HYPOTHESIS

At *Meno* 86d–e, Socrates famously yields to Meno's request to examine whether virtue is teachable before they have examined what virtue is on the condition that Socrates be permitted to proceed from a hypothesis (*ex hupotheseōs auto skopeisthai*; *Meno* 86e3) in the manner of the geometers. After a brief explanation of this method (*Meno* 86d3–87b1) Socrates proceeds to practice it in the remainder of the *Meno*.¹¹ Again, in the *Phaedo* Socrates apparently appeals to this method and uses it as part of his final argument for the immortality of the soul.¹² Indeed, in the run up to Socrates' account of the form of good of which the Divided Line image is a part, Socrates has been made to exemplify this method in response to the question whether Kallipolis is possible.¹³ What emerges from these passages is a method consisting of two stages each consisting of two procedures.

In the first, or proof, stage [1a] one seeks to identify a hypothesis from which an answer to the question whose answer one seeks to know can be derived, and then [1b] one shows how the hypothesis entails the answer to the question. In the second, or confirmation, stage one seeks to confirm the truth of the hypothesis, [2a] first by identifying a further hypothesis from which the original hypothesis can be derived and showing how this derivation goes until one reaches "something adequate,"¹⁴ and then¹⁵ [2b] by testing the consequences of the hypothesis to see whether they agree with one another.

Since Robinson, it has been common to describe the method of hypothesis as consisting of both an upward and a downward path,¹⁶ but this is potentially equivocal. Both stages of the method could be plausibly described as consisting of an upward and downward path. The upward paths of both stages would consist in identifying the relevant hypotheses ([1a] and [2a]) from which either the answer to the original question is to be derived ([1a]) or the original hypothesis is to be derived ([2a]). Both stages would also appear to have a downward path. In the case of the first stage the downward path would consist in something like the proof from the hypothesis (or, more plausibly, hypotheses) to the answer to the original question ([1b]), while in the second stage it would consist of testing the consequences of the hypothesis (again, more plausibly, hypotheses) by which one preliminarily confirmed the original hypothesis to see whether they agree with one another ([2b]). But notice that while the upward paths of the two stages are merely different tokens of the same type – both

consisting in identifying a higher hypothesis, the downward paths of the two stages are quite different. The downward path of the first stage amounts to providing or displaying a proof of the answer to the original question (the conclusion or *teleutē*),¹⁷ while the downward path of the second stage amounts to a second confirmation procedure of the hypothesis.

The failure to distinguish between these different downward paths partially undermines the otherwise helpful comparison of the method of hypothesis to the geometrical methods of analysis and synthesis.¹⁸ The methods of analysis and synthesis are primarily restricted to the first or proof stage of the method of hypothesis. The method of analysis corresponds to the search for the hypothesis from which the answer to the question can be derived and the method of synthesis corresponds to the exposition of the derivation of the answer from the hypothesis.¹⁹ Nothing corresponding to the second confirmation procedure can be readily found. Consequently if one is to identify Plato's method of hypothesis with the geometrical method of analysis and synthesis one must either omit the second confirmation procedure as part of Plato's method of hypothesis or conflate it with synthesis ([1b]). But this second confirmation procedure should not be omitted from Plato's method of hypothesis. It is explicit in the *Phaedo* 101d3–6²⁰ and exemplified in both the *Meno* (89c5–96d4) and *Republic* (487a–502c). Consequently, insofar as we understand dianoetic and dialectic both to be employing the method of hypothesis – the former incorrectly, the latter correctly – we should expect to find the procedure represented by [2b], as distinct from [1b].

If this is what it is to proceed from hypotheses, let us look at how dianoetic differs from dialectic.

THE FULLER ACCOUNT

Being told that [L3] differs from [L4] in that the method of [L4] proceeds to an *archē* while the method of [L3] does not, and that the method of [L3] uses ordinary objects while the method of [L4] does not is apparently no less obscure to Glaucon than it is to us. For in response to Socrates' initial statement of the distinction between these two segments of the line, Glaucon announces that he does not yet understand (510b10). In an effort to aid Glaucon's understanding, Socrates offers a more detailed explanation of the dianoetic method ([L3]) from 510c1–511b2 and of the dialectical method ([L4]) from 511b3–c2. The explanation is apparently successful

given Glaucon's ability to summarize the distinction at 511c3–d5,²¹ which Socrates endorses in his concluding statement of the ratios at 511d6–e5.²²

The more detailed explanation of the dianoetic method consists of first an elaboration of the first difference – the movement to a *teleutē* vs. the movement to an *archē* – from 510c1–d4, and then an elaboration of the second difference – the use of ordinary objects vs. the use of only forms – from 510d5–511a2, followed by a concluding segment that recapitulates the original introductory description – from 511a3–b2.²³ The briefer follow up explanation of [L4] consists of a short redescription of the first difference at 511b3–8 and then a short redescription of the second difference at 511c1–2. Let us begin with Plato's elaboration of the first difference.

THE TREATMENT OF HYPOTHESES

According to Socrates, the practitioners of dianoetic (e.g., geometers, arithmeticians, and the like)²⁴ make hypotheses (e.g., the odd and the even, the various figures, and the like) as though they knew them (*hōs eidotes*), not thinking it necessary to give a *logos* of them, as though they were clear to all (*hōs panti phanerōn*). Under these conditions, the dianoeticians begin from such hypotheses, validly²⁵ going through the steps until they reach the *teleutē*, i.e., an answer to the question with which they began (510d2–3).

Plato contrasts the practice of dianoetic in this regard with dialectic at 511b3–8. According to Socrates, dialecticians make their hypotheses not as first principles, but as really hypotheses, like stepping stones, in order to reach the unhypothetical *archē*. Having grasped this *archē* dialectic comes down to a *teleutē* (511b7–8).

Plato does not contrast dianoetic with dialectic on the grounds that the former does while the latter does not proceed to a *teleutē*. On the contrary, both methods proceed to a *teleutē* from the hypothesis.²⁶ The contrast consists rather in how the two methods treat the hypotheses with which they begin their procedure to a *teleutē*. Dianoetic treats them as *archai*,²⁷ as already known, as not needing a *logos*, as already clear to all,²⁸ when they are not, while dialectic does not. Dialectic treats them as the genuine hypotheses that they are – as assumptions from which one can derive the *teleutē* but which in order to be known require confirmation up to the genuine *archē* of everything. That is, dianoetic does not treat its hypotheses as requiring confirmation as it should, while dialectic does.

Put in terms of the model of the method of hypothesis in the previous section, dianoetic confines itself to the proof stage, while dialectic embraces both the proof and the confirmation stages (replacing the “something

adequate” in the latter stage with the unhypothetical *archē*). Dialecticians recognize, as Plato puts it later, that no “mechanism could possibly turn any agreement (*homologian*) into knowledge when it begins (*archē*) with something unknown and puts together the conclusion (*teleutē*) and the steps in between from what is unknown” (*Republic* 7.533c3–5).²⁹ So the first difference between dianoetic and dialectic that partially accounts for its inferiority is dianoetic’s failure to confirm its hypotheses, as it should. It is an incomplete application of the method of hypothesis and consequently can hope to achieve at most *dianoia*, not *epistēmē*.

The incompleteness of the dianoetic method, however, need not lie in its failure to employ the confirmation procedure at all – although in some extreme cases it may. Rather the incompleteness of the dianoetic method lies in its failure to employ the confirmation process to the extent it should. Most geometers and mathematicians – indeed, especially those of the proto-Euclidean sort around the Academy at the time – propose to confirm their initial hypotheses by deriving them from higher hypotheses³⁰ concerning the nature of the odd and the even, for example.³¹ But insofar as they are practicing dianoetic, at some point in their reasoning they will take as known, as not needing confirmation, as an *archē* what is in fact still a hypothesis in need of confirmation and to this extent their inquiry will remain incomplete.

Plato’s point is that the goal of philosophical inquiry – dialectic as opposed to dianoetic – (whatever the objects at which it is directed) is to provide hypotheses from which the answer to the original question can be derived and which are themselves derivable from the unhypothetical *archē*. Moreover, Plato maintains that one cannot rightly claim to know the answer until this goal has been achieved. Short of confirmation from the unhypothetical *archē* one’s inquiry remains incomplete.³² Of course, Plato would concede that few – perhaps none – of us has successfully completed such an inquiry. Much work remains to be done. But the procedure to be followed remains the same. The difference between dianoetic and dialectic lies not in the procedure, but in how each treats its hypotheses. The former takes them to be known and confirmed when they are not; the latter does not.³³ Just so, we find Socrates employing dialectic in attempting to answer whether virtue is teachable in the *Meno*, whether the soul is immortal in the final argument of the *Phaedo*, and whether Kallipolis is possible in *Republic* 5 and 6. The procedure employed is indistinguishable from dianoetic – at least with respect to this first difference. What makes these dialectical inquiries³⁴ is Socrates’ explicit recognition that there is more work to be done.

THE USE OF ORDINARY OBJECTS

Thus far we have only addressed one of the ways that dianoetic differs from dialectic – the way in which the two methods treat their hypotheses. But there is a second difference between them. Dianoetic uses ordinary objects – the objects of *pistis* – in some way that dialectic does not. The issues here are more difficult (to my mind) both philosophically and textually, but the model we have been developing thus far will help. Let's look at what Socrates is made to say about this second difference.

In the more detailed explanation of L3 (510d5–511a2), Plato tells us that dianoetic uses ordinary objects as follows. The dianoetic geometers use and make *logoi* about (*peri*) visible shapes, but they do not think about them but rather about the things these shapes are like. That is, they make *logoi* for the sake of (*heneka*) the square itself and the diagonal itself, not for the sake of the squares and diagonals that they draw. Rather they use these squares and diagonals seeking to see the square itself and diagonal itself which cannot be seen except by thought (*tēi dianoiai*).

Notice first that dianoeticians are described as making *logoi* (*tous logous poioumenoi*) contrary to the suggestion just a few lines earlier that they failed to think it necessary to give (*didonai*) *logoi*.³⁵ Now, of course, the notion of making or giving *logoi* is notoriously equivocal, and a careful reading of the Greek here may indicate that Plato is pointing to a subtle distinction between the things that *logoi* are about and the things they are for the sake of.³⁶ We will return to this distinction in a moment, but for now what Plato says here reinforces the earlier suggestion that Plato allows that some dianoeticians do engage in the confirmation process. While some dianoeticians simply propose a hypothesis from which an answer to the original question can be derived without seeing the need to provide any *logos* concerning that hypothesis, many (perhaps most) dianoeticians do not. Both dialecticians and dianoeticians (at least for the most part) provide *logoi* of their hypotheses. The difference lies in how they provide *logoi*. The first difference, as we have seen, indicates that dianoeticians fail to provide complete *logoi*, i.e., complete confirmation. But Plato's talk of *logoi* here indicates that the dianoeticians' confirmation process fails in yet another way connected to the use of ordinary objects. Their confirmation process is not only incomplete, but also in some way defective. It is in some way about ordinary sensible objects, while for the sake of the forms. Thus, the second difference between dianoetic and dialectic which accounts for the inferiority of the former also concerns the confirmation stage of the method of hypothesis.

Against this, however, in the more detailed explanation of L4 Plato writes that once dialecticians have confirmed their hypotheses up to the unhypothetical *archē* they turn around coming down to the *teleutē* (i.e., the answer to the original question) “without making use of anything visible at all, but only of forms themselves, moving on from forms to forms, and ending in forms” (*Republic* 6.511C1–2). The contrast with dianoetic here suggests that dianoeticians use ordinary objects not as part of the confirmation process, but in the downward path of the proof stage ([1b]). They are used in proceeding from the hypothesis to the *teleutē*, while dialectic does not make use of ordinary objects during this procedure. This suggests that the second difference which accounts for the inferiority of dianoetic lies not in the confirmation stage, but in some failure of the downward (or synthesis) portion of the proof stage. Thus, contrary to the conclusion of the previous paragraph, dianoetic somehow employs ordinary objects in the proof stage, while dialectic does not.

Plato has frequently been understood here as appealing to geometry’s use of diagrams in its proofs.³⁷ While something like this is almost surely right, there are at least two difficulties with this suggestion as it stands.

First, it is difficult to see why Plato should find the mere use of diagrams as indicating the inferiority of dianoetic. One might respond by appealing to Plato’s general disparagement of sense-perception as a method of knowledge acquisition and appeal to his repeated use of vision terms in the description of the way in which dianoetic makes use of the things that were initiated in the previous sub-section (*tois horōmenois eidesi, idein, idoi*).³⁸ The idea seems to be that dianoetic uses sense-perception to examine or study things which should be studied by thought or reason. Dianoetic uses sense-perception as a way of studying the forms. Dialectic does not. But this kind of response is a consequence of a simplistic understanding of Plato’s attitude with respect to sense-perception. Plato does to be sure disparage the mere use of sense-perception at the beginning of the *Phaedo*. Knowledge of the forms is best acquired by a disembodied soul’s direct apprehension. But for those of us with embodied souls Plato appears to recognize a useful role for ordinary sensible objects. In his account of the theory of recollection in the *Phaedo* he explains that sensible objects serve as a kind of necessary catalyst, while in his account of the education of the philosopher rulers in *Republic* 7, he distinguishes between the features of ordinary sensible objects which do not turn the soul toward truth and knowledge and those that do.³⁹ So it cannot be the mere use of diagrams as ordinary sensible objects that Plato is objecting to. Instead, he must be objecting to the way they are used in dianoetic.⁴⁰

Second, it is difficult to see how understanding the second difference between dianoetic and dialectic as finding fault with geometry's use of diagrams is sufficiently generalizable. Whatever else one thinks about the dianoetic method, it must be applicable to other disciplines besides geometry. It must at least be applicable to the other mathematical disciplines and one would imagine to the propaedeutic disciplines of Book 7.⁴¹ It is, however, not obvious how the use of diagrams is to be employed outside of geometry. Of course, this problem is even worse, if one permits, as the interpretation I am encouraging does, dianoetic inquiries concerning things like virtue, its teachability, the immortality of the soul, and the possibility of Kallipolis. How does one use diagrams in proving the teachability of virtue or the possibility of Kallipolis?

Of course, one might think that the *Republic* itself provides an answer to this last question. The analogue of geometric diagrams in the proof of the nature of justice goes as follows: construct – as a thought-experiment – an ideal city and then examine what justice is. So understood, however, the use of diagrams and their analogues no longer looks plausibly restricted to the downward portion of the proof stage of the method of hypothesis – [1b].⁴² But in any case, we are still left with the question why dianoetic's use of ordinary objects, geometry's use of diagrams, or Socrates' use of thought-experiments is problematic. Why does dianoetic's use of ordinary objects make it inferior to dialectic?

Perhaps, the distinction in the more detailed description of L3 between making *logoi* about sensible objects and making *logoi* for the sake of forms will provide some help. This might suggest that Plato is emphasizing the indirect nature of dianoetic. Dianoetic seeks to know or think about the forms by in some way using or thinking about the things that are images of forms.⁴³ Unfortunately, Plato provides very little guidance on the nature of this indirection.

A common way to explain this indirection is by appealing to an incorrigibility or certainty requirement for dialectic.⁴⁴ The directness of dialectic as opposed to the indirection of dianoetic is Plato's way of indicating that the unhypothetical *archē* is directly known as a result of incorrigible or certain intuition – viewing, intuiting, believing (directly) the *archē* suffices to guarantee its truth. I can find nothing in the *Republic* – other than the evidence of indirection itself – that explicitly appeals to incorrigible direct intuition. The argument for understanding Plato's appeal to indirection in this way tends to be more philosophical than textual.⁴⁵ Nevertheless, the philosophical objections to understanding the appeal to direct intuition as an appeal to some sort of psychological certainty are too numerous to

rehearse. Understanding the appeal to direct intuition as an appeal to psychological incorrigibility, on the other hand, is philosophically more respectable, but the cost of restricting the sorts of propositions susceptible to a plausible incorrigibility requirement is rather high. The best candidates for such propositions are rather insubstantial claims like “I am in pain now” or more boldly “Nothing is both F and not-F in the same way at the same time relative to same thing.”⁴⁶ But neither of these look like plausible candidates for “the unhypothetical *archē* of everything” from which one can derive answers to such questions as whether virtue is teachable, the soul is immortal, or Kallipolis is possible. Consequently, while in the end an appeal to incorrigibility or certainty may be the best we can do in accounting for the second difference between dianoetic and dialectic, we would do well to look elsewhere for help in explaining the dianoetic’s use of ordinary objects.⁴⁷

DIALECTIC IN BOOK 7

We can get some help with this difference by looking outside the divided line passage to the parallel passage at *Republic* 531d–535a. At 533b6–c3, Plato distinguishes between dialectic and the propaedeutic disciplines in a familiar way. The propaedeutic disciplines leave untouched the hypotheses that they use and are unable to give an account of them. Dialectic, on the other hand, destroys its hypotheses and proceeds to the *archē* itself, so as to be secure. We have here the first of the two ways in which Plato distinguishes dianoetic from dialectic in the Divided Line passage – the difference in the way the two methods treat their hypotheses. The propaedeutic disciplines do not attempt to confirm their hypotheses (completely), but treat them as *archai* and proceed to *teleutai*. Dialectic attempts to confirm its hypotheses up to a genuine *archē* and then proceeds to the *teleutē*.

Unfortunately, the second difference is not mentioned explicitly, except perhaps in passing when describing the propaedeutic disciplines by means of the dream metaphor. Socrates explains to Glaucon that “we described [these disciplines] as to some extent grasping what is, for we saw that, while they do dream about what is, they are unable to command a waking view of it” (*Republic* 7.533b7–c1). Plato here suggests that like dianoetic in L3 the propaedeutic disciplines aim to view, grasp, or think about what is, but manage instead to only view, grasp, or think about it partially. Nevertheless, while the indirectness of the propaedeutic disciplines and dianoetic may be exhibited here, the appeal to the use of ordinary objects is not. Indeed, the indirectness is attributed to dianoetic’s incompleteness, i.e., its failure to

confirm its hypotheses up to the unhypothetical *archē* rather than to dianeotic's use of ordinary objects.

Fortunately, Plato expands upon the dream metaphor when he describes the knowledge of the good after the second statement of the ratios at 533e4–534b2. Plato writes:

Unless someone can distinguish in an account the Form of the Good from everything else, can survive all refutation (*dia pantōn elegchōn diexiōn*), as if in a battle, striving to judge things not in accordance with opinion but in accordance with being (*mē kata doxan alla kat' ousian prothumoumenos elegchein*), and can come through all this with his account still intact, you'll say that he doesn't know the good itself or any other good. And if he gets hold of some image of it, you'll say that it's through opinion, not knowledge, for he is dreaming and asleep throughout his present life, and, before he wakes up here, he will arrive in Hades and go to sleep forever. (*Republic* 7.534b8–d1)

We should recall that the divided line image was explicitly introduced to further explain the similarity between the Sun and the form of the good. But if the form of the good is to be found anywhere in the image of the Divided Line it appears to be identified with the unhypothetical *archē*.⁴⁸ Consequently, Plato here indicates that the unhypothetical *archē*, the form of the good, is subject to an account (*tōi logōi*), that it must be subjected to refutation (*elegchōn*) and tested (*elegchein*), not according to opinion (*kata doxan*) but according to being (*kat' ousian*), and that one who fails to treat the unhypothetical *archē* this way views it partially or indirectly (grasping an image of it) as though in a dream. Here, then, we have a more detailed description of what it is according to Plato to fail to view or grasp the unhypothetical *archē* directly.

Two things immediately stand out from this description. First, viewing the unhypothetical *archē* does not guarantee its truth, but requires confirmation by avoiding refutation. To know the form of the good it is not enough simply to view it, and somehow thereby know it. One must be able to respond in some way successfully to all attempts to refute it. One must test it and give an account of it. Second, the confirmation process and the kind of account that is referred to here is not the confirmation process consisting of looking for higher hypotheses from which the original hypothesis can be derived. By hypothesis, there is no higher hypothesis from which the unhypothetical *archē* can be derived. Rather the confirmation process referred to here looks more like the process of in some way testing the consequences of the unhypothetical *archē*.

We should recall that the method of hypothesis introduced earlier consists of two confirmation processes, only one of which consists in looking for

a higher hypothesis from which the original hypothesis can be derived. According to that model, one must not only confirm the hypothesis by deriving it from a higher hypothesis, but one must also examine the consequences of the hypothesis to see whether they cohere with one another. Each hypothesis must be confirmed by being derived from a higher hypothesis *and* by being tested for coherent consequences until one reaches a hypothesis that cannot be derived from a higher hypothesis and cannot be refuted in virtue of incoherent consequences.

Even so, the nature of this second confirmatory process is notoriously obscure. Not the least of its obscurities is that it appears merely to be testing the higher hypothesis for self-consistency.⁴⁹ Self-consistency is of course a laudatory goal for a hypothesis, but the odds of postulating a self-contradictory hypothesis from which one derived lower hypotheses or the *teleutē* are rather low.⁵⁰ Reading the current passage as a description of this second confirmation process, however, may provide some clarity. For the process described here is reminiscent of the *elenchus* (Kahn 1996, p. 296).

We know from Socrates' use of the *elenchus* in the early definitional dialogues that the *elenchus* too is essentially a test for consistency. But Socrates' use of this method in these dialogues is essentially *ad hominem* (Benson 2000, chs. 2–4). Socrates is concerned to test the interlocutor's knowledge of the definition (or hypothesis), not the definition (or hypothesis) itself. Consequently, what Socrates tests in these dialogues is the consistency of the interlocutor's beliefs. The method of hypothesis, however, is precisely not *ad hominem*. That is why it is introduced when it is in the dialogues. Plato makes Socrates introduce this method in the *Meno* precisely at the point in the dialogue when the object of inquiry is no longer Meno's knowledge but the nature (and/or teachability) of virtue (Benson 2003). Consequently, what must be tested for consistency must be different. The *Phaedo* suggests that Plato describes what is tested for consistency as the consequences of the hypothesis. This is the second confirmation process of the method of hypothesis. But how is this supposed to work?

Our current passage from the *Republic* suggests that dianoetic and dialectic differ with respect to this second confirmation process. The former tests the consequences of its hypotheses *kata doxan*; that latter tests the consequences of its hypotheses *kata ousian* (see Fine 1990, p. 112 n. 49). This distinction parallels the distinction in the divided line between dianoetic's use of ordinary objects (the objects of *doxa*) and dialectic's restriction to the use of forms (*ousiai*). Suppose that Plato has in mind two different sorts of consequences – roughly contingent consequences and essential consequences, as some have thought is suggested by Glaucon's distinction among

three types of goods at the beginning of *Republic* 2.⁵¹ The idea is that dianoetic tests the consistency of what it takes to be genuine or essential consequences, but which are in fact only contingent or artificial consequences of its hypotheses – consequences of its hypotheses in virtue of contingent or artificial features of the world. For example, the consequences of the nature of justice are that it provides one with a good reputation and political power⁵² or the consequences of the nature of philosophy are that philosophers are vicious and useless,⁵³ or perhaps even the consequences of the nature of virtue are that it is not taught. Dialectic, on the other hand, tests for the consistency of the genuine or essential consequences of its hypotheses and can explain away the appearance of inconsistency by explaining how the apparently contrary evidence (the artificial consequences which are at odds with the essential consequences) is not really a consequence of the hypothesis.

If this or something like it is what Plato has in mind here, then the second difference between dianoetic and dialectic with which we struggled while examining the Divided Line can be understood as follows. Dianoetic, in virtue of studying the forms by means of their images (e.g., justice as instantiated, philosophy as instantiated, virtue as instantiated),⁵⁴ mistakes what are not in fact consequences of its hypotheses as genuine consequences. It takes features of the form that follow from the contingent nature of the world – so to speak – as genuine features of the form and tests them for consistency. It makes its *logoi* about the instances, rather than about the form for the sake of which its *logoi* are made. Dialectic, by contrast, does not mistake features of instances of forms for those features that follow from the form's being or nature. It tests those features for consistency and responds to the contrary evidence of the artificial or contingent consequences. If one can derive the answer to the original question from a hypothesis which itself is underivable and can confirm that hypothesis by checking its consequences for consistency and against contrary evidence, one can genuinely be said to know the answer to the original question.

Perhaps a brief example would help. At *Republic* 5.471c4–473b3, Socrates considers the question whether Kallipolis is possible. He reduces a positive answer to this question to the hypothesis that political power and philosophy coincide (473b4–e5). He confirms this hypothesis first by identifying a hypothesis concerning the nature of philosophy – roughly that it is the ability to grasp what is always the same in all respects (474c8–480a) – and deriving the hypothesis that political power and philosophy coincide from this higher hypothesis (484a1–487a8). But at 487b1–d5 Adeimantus objects to this confirmation of the hypothesis by maintaining that it follows from

the nature of philosophy that philosophers are useless and vicious (contrary presumably to the consequences of the hypothesis that political power and philosophy coincide that philosophers are beneficial and virtuous). Socrates is made to respond by pointing out that the consequence that philosophers are useless and vicious is in fact an artificial consequence – a consequence of instantiations of philosophy given the contingent nature of Athens in the fifth century BCE. (487d6–497a9–502c8).⁵⁵ By means of the ship of state analogy Socrates explains that genuine instantiations of philosophy are useless in the current climate because they go unrecognized (owing to the blindness of the Demos and the obfuscation of the demagogues). On the other hand, those philosophers alleged to be vicious are in fact not genuine instantiations of philosophy, but rather they have a genuine potential or nature to become a genuine instance but have been corrupted by their education and upbringing. The nature or being (*ousia*) of philosophy is not the cause of these consequences.⁵⁶ Even so, Socrates does not take his hypotheses to be other than the hypotheses they are, falling short of being confirmed by the unhypothetical *archē* – the Form of the Good which Socrates fails to know (506a–d). Here then we have dialectic as opposed to dianoetic at work in the dialogues.⁵⁷

CONCLUSION

If something like this is right, then according to Plato the work of philosophy (and one might speculate much of Socrates' practice in the dialogues) goes as follows. When faced with a question whose answer they do not know, philosophers look for a hypothesis from which an answer can be derived and show how that answer is derived. But philosophers (unlike dianoeticians) realize that their work has only just begun. Philosophers recognize that the hypothesis from which the answer was derived is in need of confirmation. They will search for higher hypotheses from which this original hypothesis can be derived and they will test its consequences for consistency and against contrary evidence. Philosophers will take care to examine the consequences of the hypothesis that follow directly from the nature of the forms involved and not from contingent or artificial features of the hypothesis. Moreover, philosophers will recognize that until they have followed this confirmation process all the way to the unhypothetical *archē* and responded, as though in battle, to all of the contrary evidence of its consequences, they cannot be said to know the answer to the original question. They will not have completed the dialectical method.

Of course, if we are fully to understand Plato's notion of the work of philosophy there remains much work to be done. For now I simply hope to have advanced the potential benefit of examining Plato's dialectical method with the current model of philosophical inquiry in mind.⁵⁸

NOTES

1. See (Burnyeat 1987, p. 217) who calls this "the great question." Smith 1996 offers an excellent discussion of the literature of the twentieth century prior to 1996. Since 1996 see, especially, Burnyeat 2000, Denyer 2007, Foley 2008, and Netz 2003.
2. Although we should note that even here the beings are distinguished in terms of our cognitive access.
3. To be precise, Plato may suggest that the top two sections of the line have distinct objects at 511d6–e5 and 534a5–8. But the vast majority of Plato's discussion of the difference between these sections is focussed on the distinct methodologies. A full account will have to address this passage but for now I, like Plato, will be focussed on the distinct methodologies. See Robinson 1953, p. 194: "we must distinguish a lower and a higher way of getting at the intelligible world. That is the main point of the Line, the two 'ways' or methods of mathematics and dialectic." See also Cross and Woosley 1964, pp. 226 and 232 and Fine 1990, pp. 100–05.
4. See Cross and Woosley 1964, pp. 252–53, Moravcsik 1973, p. 159, perhaps Smith 1996, p. 33, and Bailey 2006, pp. 102–03. Pace, e.g., Gonzalez 1998, p. 14.
5. We should recall that the three analogies that occupy the end of Book 6 and the beginning of Book 7 are motivated by an attempt to explain the greatest *mathēma*, or the form of the good; *Republic* 6.504a–506e.
6. A potential equivocation is associated with Plato's use of the Greek words that get translated as "dialectic." In *Republic* 7 passage dialectic is treated more like a fixed state, an *epistēmē* or *technē*, analogous to the propaedeutic *epistēmai* or *technai* of arithmetic, calculation, geometry, astronomy, and harmonics, while in the Divided Line passage dialectic is treated more like a method or procedure by which one acquires *epistēmē* or *noēsis* analogous to the dianoetic method or procedure of arithmetic, calculation, geometry, and the rest. This difference between the two passages is not insurmountable and much of what is said about dialectic in the two passages helps to inform the other but it is important to keep these two distinct treatments or ways of referring to dialectic distinct. Throughout the course of the present essay I will be treating dialectic as the method or procedure of acquiring *epistēmē* – the method of philosophy – not as the skill or fixed state one acquires when one acquires *epistēmē* – philosophy itself.
7. Of the eighty lines of the divided line passage only fifteen or so are devoted to the distinction between L1 and L2. The remainder of the passage is devoted explaining the difference between between L3 and L4 almost all of which is focussed on a contrast in the method of L3 and the method of L4.

8. All translations of the *Republic* are from Grube and Reeve 1992.
9. The point is made explicitly by Glaucon in his summary of Socrates' distinction at 511c3–d5, which Socrates is immediately made to endorse.
10. [A2] differs from [B2] in three ways: [1] [A2] uses *zētein* while [B2] uses *iousa*, [2] [A2] uses the plural *hupotheseōn* while [B2] uses the singular *hupotheseōs*, and [3] only dianoetic is said to be forced (*anagkazetai*) to proceed from hypotheses. The first two differences are insignificant. The third difference is more significant. See Burnyeat 1987, p. 219.
11. Or at least so I have argued; see Benson 2003.
12. See *Phaedo* 99c ff. Socrates does not use the phrase “proceed from” or “investigate from a hypothesis” in the *Phaedo*, but the method he describes as “hypothesizing (*hupothemenos*) the *logos* that seems best” is essentially the same as the method described as proceeding from a hypothesis in the *Meno* and the *Republic*. See, for example Bluck 1955, p. 156, Bedu-Addo 1979, pp. 122–24, and Moravcsik 1973, p. 159, *pace*, for example Robinson 1953, p. 121, Weiss 2001, p. 187 n. 10, Scott 2006, p. 204, and Byrd 2007a, pp. 141–42 n. 4.
13. Again, at least so I have argued; see Benson 2008. In what follows I will be using words like “imply,” “proof,” “derive,” “consequences,” and “propositions.” I do so, however, in full recognition of Annas' salutary comment that “Plato, . . . , actually says little in non-figurative language that implies that knowledge forms a body of truths in which the lower depend on the higher and can be shown to be derivable from them. And this view involves two serious problems. One is that, in a world where Aristotle has not yet begun to codify the forms of valid argument and formalize logic, Plato has no precise terms for ‘proposition’, ‘imply’, ‘derive’, and no explicit distinctions between premises, conclusions, and rules of inference. . . . And, second, on this view the ‘unhypothetical first principle’ ought to be a proposition, indeed a super-proposition from which all the basic propositions of the special sciences can be derived” (Annas 1981, pp. 288–89). I believe, but will not argue here, that the seriousness of the first problem can be mitigated a bit, and Plato's notion of an “unhypothetical *archē* of everything” is a serious problem in my view regardless of what language we use. In what follows, however, I do not intend the language of “derive” “imply,” “proof,” etc. to be used in anything other than the relatively figurative sense of Plato's actual language of “consequences,” “agreement,” etc.
14. This portion of the second stage is simply a repetition of the proof stage directed at the hypothesis identified in [1a].
15. Bailey 2006, p. 102 takes [2b] to temporally precede [2a]. This is evidently the suggestion of *Phaedo* 101d1–102a2, but this is not how the method gets practiced in the *Meno* and the *Republic*. I suspect that the temporal order does not matter. See Benson 2003 and Benson 2008.
16. See Robinson 1953, pp. 160–62.
17. See Annas 1981, p. 292.
18. See, e.g., Cornford 1932, p. 72, Mueller 1992, and Menn 2002.
19. See Mueller 1992, p. 175: “in synthesis one simply writes down the proof discovered by analysis, that is, one goes through the steps of analysis in reverse

order"; Menn 2002, p. 195 suggests that synthesis "confirm[s] what has been discovered by analysis." Insofar as synthesis is seen as a further confirmation of the hypothesis, and not simply the writing down of the proof as discovered by analysis, the difference between the method of analysis (and synthesis) and the method of hypothesis I am proposing will be diminished.

20. See Mueller 1992, p. 182 concerning *Phaedo* 101d3–6. See also Mueller 1992, p. 187.
21. See Glaucon's repeated claims to understand at 511b1, 511c3, and 511e5.
22. See Netz 2003, pp. 303–04.
23. "This, then, is the kind of thing that, on the one hand, I said is intelligible, and, on the other, is such that [A2] the soul is forced to use hypotheses in the investigation of it (*hypothesesi d' anagkazomenēn psuchēn chrēsthai peri tēn zētēsēn autou*), [A3] not travelling up to a first principle (*ouk ep' archēn iousan*), since it cannot reach beyond its hypotheses (*hos ou dunamenēn tōn hypothesēōn anōterō ekbainein*), [A1] but using as images those very things of which images were made in the section below (*eikosi de chrōmenēn autois tois hypo tōn katō apeikastheisin*), and which, by comparison to their images, were thought to be clear and to be valued as such" (511a3–b1).
24. Plato's reference to the geometers here and at 511b1–2 and 511d3 is significant. It reinforces the earlier suggestion that he has in mind the method of hypothesis which he introduces in the *Meno* as the method practiced by the geometers. It also supports taking the procedure of the propaedeutic disciplines – beginning with number and calculation and ending in harmonics – to be the method of hypothesis as well. Of course, Socrates' point in introducing this method in the *Meno* is not to engage in geometry but to employ it on the question that Meno is insisting on pursuing – whether virtue is teachable? And he does employ it on this question in the last third of the *Meno*. The method, then, is apparently paradigmatically employed in geometry, and mathematics more generally, but it would be a mistake to take it to be confined to geometry (see 511b1–2). While the method can (and presumably often is) employed on geometrical objects like the various figures and angles, it can also be employed on "ethical objects" like virtue and its teachability among other things.
25. *Homologoumenōs* cannot be translated as "consistently" as Shorey does since the *teleutē* is not simply consistent with the hypothesis but is in some way a consequence of the hypothesis, hence I translate "validly" following Grubel/Reeve. For a similar difficulty see the translation of *sumphōnein* at *Phaedo* 100a3–100a8; for a helpful discussion see Gentzler 1991.
26. That is, both methods go up to a hypothesis [1a] and then down (see *katabainēi*) to the answer to the question with which one began [1b]; contra Cornford 1932, p. 72 who apparently takes the dianoetic method to represent the downward path and dialectic to represent the upward path.
27. See 511c6–7 in Glaucon's summary.
28. See *Republic* 7.533c1–3.
29. Burnyeat 2000, p. 23 n. 33 takes the use of *homologian* here to indicate "that knowledge or understanding should not depend on an interlocutor's

- agreement; all relevant objections should have been rebutted." I agree that in the wider context (533–34), part of Plato's point is precisely this (cf. pp. 000–000 below), but at 533c this is not Plato's point. Rather Plato's use of *homologian* here is allusion back to 510d where the point is clearly that knowledge (*epistēmē*) cannot be acquired by an argument whose premises are unconfirmed or unsecured – however that confirmation is to be accomplished.
30. And by testing the coherence of their consequences, [2b]. More on this second confirmation procedure below.
 31. See Reeve 2003, pp. 40–41, who points out that these mathematicians also give definitions (*logoi?*) of their starting points. Reeve takes this as evidence that *logos* cannot be understood as definition, but must be understood as argument or justification (see Annas 1981, p. 287), since geometers do not fail to give definitions of their starting points but do fail to give arguments for or justifications of them. I doubt that Plato would be much impressed with this distinction, because for him to give a definition is to give a justification and vice versa (or at least so I believe). But the important point for our purposes is that the geometers who do give *logoi* of their starting points fail to practice dialectic to the extent that they fail to take the *logoi* of their starting points to require confirmation.
 32. That Plato views dianoetic as an incomplete version of dialectic is strongly reinforced by Glaucon's suggestion in his summary of the distinction that the things which the dianoeticians does not yet know are knowable once they reach the unhypothetical *archē* (511d2).
 33. Consequently, insofar as Plato is critical of contemporary mathematicians it is not because they use hypotheses. As Burnyeat points out, they are forced to. Rather it is because at some point in the process they treat their hypotheses as *archai*. They take what requires confirmation as not requiring confirmation.
 34. See n. 43 below.
 35. And later in the parallel passage in Book 7 the propaedeutic practitioners are described as unable to either give or receive *logoi* (*Republic* 7.534b3–7).
 36. The suggestion may be that dianoeticians do not think it is necessary to make *logoi* about the square itself, but do make *logoi* about squares, even though the *logoi* that they make are for the sake of the square itself, not for the sake of squares.
 37. See Mueller 1992, p. 184, who writes concerning the two differences we have been examining between dianoetic and dialectic: "There is little doubt that Socrates has in mind here two features of mathematics that we associate particularly with geometry: the use of diagrams in arguments and the derivation of conclusions from initial assumptions (synthesis)." Indeed, Plato may even be supposed to have in mind geometry's practice of construction. For the latter see, for example, Mueller 1992, pp. 175–77, and Menn 2002, p. 199.
 38. See also *aisthētōi* at 511c1.
 39. See Byrd 2007a and 2007b, who dubs the sensible objects or their sensible properties which turn the soul toward truth and knowledge "summoners."
 40. I am aware of only one place where the non-empirical nature of dialectic may be highlighted. At 532a1–b3 Plato says that the dialectician "tries through

argument and apart from all sense-perceptions to find the being itself of each thing (*hotan tis tōi dialegesthai epicheirēi aneu pasōn tōn aisthēseōn dia tou logou ep' auto ho estin hekaston horman*) and doesn't give up until he grasps the good itself with understanding itself (*mē apostēi prin an auto ho estin agathon autēi noēsei labēi*).” But even here dialectic may be being contrasted with L_a, i.e., the method of the empirical *technai* (for Plato's reference to these see *Republic* 7.533b3–6), rather than with L₃, i.e., dianoetic.

41. For the identification of the propaedeutic disciplines (at least when not followed to their completion in dialectic) and dianoetic, see 533d1–7.
42. In addition, one will be obliged, I suppose, to understand Socrates' method in this portion of the *Republic* as dianoetic rather than dialectic. See Cooper 1966, p. 67, who sees this as a positive result.
43. See Annas 1981, pp. 280–82.
44. See, for example, Cornford 1932, pp. 73–74, Robinson 1953, pp. 172–76, Cross and Woosley 1964, pp. 252–53, Santas 1980, p. 255, and most plausibly Bailey 2006. Annas 1981, pp. 281–82 does not explain the indirection in this way, but in my view leaves the indirection unexplained.
45. See, especially Bailey 2006, pp. 102–03.
46. Bailey 2006, pp. 102–11, plausibly argues that the principle of non-contradiction which Aristotle treats as an unhypothetical *archē* would also be so treated by Plato. Nevertheless, we will need more contentful propositions than the principle of non-contradiction to derive answers to the questions in the subsequent sentence.
47. For others who reject understanding Plato as appealing to incorrigible or certain intuition see, for example, Annas 1981, pp. 283–84, Reeve 1988, p. 77, and McCabe 2006.
48. See, for example, Robinson 1953, p. 139, Baltzly 1996, pp. 164–65 n. 34, and Denyer 2007, pp. 306ff.; *pace*, for example, Bedu-Addo 1978, p. 124.
49. Perhaps Bostock 1986, p. 168.
50. Baltzly 1996 offers an alternative way of understanding the second confirmatory process. Unfortunately, Baltzly's account leaves unrelated the second confirmatory process and dianoetic's use of ordinary objects.
51. See, for example, Foster 1937, White 1984, and Pappas 1995, p. 55.
52. The consequences of justice if it were only a good of Glaucon's third type.
53. See *Republic* 6.487a–502c and Benson 2008.
54. If one only examines justice as it is in fact instantiated one might conclude that it only results in good reputation and power and not in pleasure; if one only examines philosophy as it is in fact instantiated, one might conclude that philosophers are useless and/or vicious; if one only examines virtue as it is in fact instantiated one might conclude that it is unteachable.
55. Adeimantus is using ordinary objects and examining the consequences of the hypotheses *kata doxan*.
56. Socrates is using forms alone and examining the consequences of hypotheses *kata ousian*.
57. For a defense of this interpretation of *Republic* 471c–502c see Benson 2008.

58. I am grateful to the audience of the Arizona Colloquium in Ancient Philosophy and a number of individuals, whose comments, questions, and objections have forced me to clarify, if not abandon, my position, especially, Dom Bailey, Monte Cook, Ray Elugardo, Lee Franklin, Michelle Jenkins, Rusty Jones, John Malcolm, Andrew Payne, Jerry Santas, Rachel Singpurwalla, Nick Smith, Jan Szaif, and Nick White.