Plato's Epistemology

Introduction

Plato's epistemology is closely related to his metaphysics and ethics. The basic reason for this is that Plato thinks that *epistêmê*— in at least one of the senses in which he uses this word— requires explanation. Fully adequate explanation must refer to what is ontologically primary. The Form of the Good is ontologically primary. Hence, fully adequate explanation must be teleological.

This chapter endeavors to clarify and elaborate on these fundamental points. The discussion focuses on four dialogues that prominently feature epistemological topics: *Apology, Meno, Theaetetus, and Republic*, in that order. Complicating an already difficult task is the fact that among these texts Plato uses "*epistêmê*" in at least three ways: to refer to a propositional attitude, a field of knowledge, and a capacity to realize either of the former two. For convenience, I will refer to the first use as "*epistêmê*ₚ," the second as "*epistêmê*ₜ," and the third as "*epistêmê*ₖ." I employ a "t" subscript for "*epistêmê*ₜ" because Plato often uses the word "*technê*" as a synonym for this use of "*epistêmê*." "Technê" may be translated as "(field or body of) knowledge," "skill," "expertise," "craft," "science," or "art." In cases where "*epistêmê*" is ambiguous, I leave the word without a subscript. In the course of pursuing our main objective, we will examine the relation between these three uses of "*epistêmê*" and consider to what extent the underlying concepts are consistent.

One further point should be mentioned at the outset. A number of scholars have suggested that Plato's conception of *epistêmê* is more akin to understanding than knowledge. Given that Plato uses "*epistêmê*" in at least three ways, we cannot simply accept or reject this view. But I do think that some such view is correct with respect to *epistêmê*ₚ. For now, however, I will leave "*epistêmê*ₚ," with and without the various subscripts, untranslated.

Epistêmê, Technê, and Definitions in Plato's Early Dialogues

In *Apology*, the character Socrates, hereafter simply "Socrates," distinguishes the trivial human *sophia* he possesses from the divine *sophia* he lacks. *"Sophia*" is commonly translated as "knowledge" or "wisdom." Socrates understands divine *sophia* to be ethical *sophia*. In the early dialogues Socrates also refers to ethical *sophia* as a "*technê*" or "*epistêmê*." In *Apology* Socrates emphasizes that his fellow citizens and he lack divine *sophia*. Socrates' trivial human *sophia* and superiority to his fellow citizens lie precisely in this recognition. (Note that this is one place where "*sophia*" is not interchangeable with "*technê*".) In contrast, Socrates admits that some of his fellow citizens, specifically the craftsmen, possess various forms of *technê*, for example, the *technai* (plural of "*technê*") of medicine and architecture. But Socrates says that when he conversed with these men about ethical matters, it became evident that they falsely believed their non-ethical *technai* endowed them with ethical *sophia* as well. This self-deception suggested to Socrates that his fellow citizens were in worse cognitive shape than he. Thus, Socrates
interpreted the Delphic Oracle's pronouncement that he had more sophia than any other man. Consequently, Socrates came to view his philosophical mission as an endeavor to encourage his fellow citizens to recognize their lack of divine sophia and thus to pursue it, in other words, to practice philosophia.

Epistemological concerns in Apology and other early dialogues arise, then, specifically with respect to ethical matters. Socrates is not a global skeptic; he does not doubt the existence of, nor does he have an interest in, ordinary non-ethical knowledge or cognition. Why epistemological concerns arise in relation to ethics is not much explored within the early dialogues. But this much is clear: Plato regards ethical technē, that is, epistêmē, as supremely valuable. It is understood that living well or eudaimonia is the goal of human life and that everyone in fact has this goal. Ethical epistêmē, or divine sophia enables one to live well.

The prominence of non-ethical technai in the early dialogues is due to the fact that Plato is attempting to introduce and conceptualize ethical technē and doing so partly by analogy with non-ethical technai. The reason for this is that the non-ethical technai are recognized, in their various spheres within the polis, as forms of epistemic authority. But it is questionable to what extent the analogy between ethical and non-ethical technai holds. One way the analogy does not hold is that ethical technē is supposed to govern all other forms of technē. In other words, ethical technē is supposed to provide the teleological framework for the operation of the non-ethical technai. For instance, the function of farming is to produce food, but it does not lie in the farmer's ken per se to determine just distribution.

Another way ethical technē differs from non-ethical technai concerns the role of definitions in ethical technē. In Apology Socrates says that in order to determine the meaning of Delphi's pronouncement that he has more sophia than any other man, he engaged his fellow citizens in ethical discussions; however, he does not clarify the nature of these discussions. In most other early dialogues Socrates is portrayed as pursuing ethical epistêmē, with his fellow citizens or with sophists who have come to Athens to educate his fellow-citizens. Many of these discussions are largely governed by a question of the form "What is F?" where "F" is some ethical general term and designates some aspect of human excellence (arêtê) such as justice, sound-mindedness, or courage. For example, in Euthyphro Socrates and Euthyphro pursue the question "What is holiness?"

The prominence of the "What is F?" question in the early dialogues reflects Plato's commitment to an epistemological principle: the epistemological priority of definitions. According to this principle, epistêmē, of the definition of F is epistemologically prior to relevant non-definitional epistêmē. For example, in order to have epistêmē, that Euthyphro's prosecution of his father is holy, one must have epistêmē, of the definition of holiness. Put in more general terms, in order to have epistêmē, that some entity x is f, where "f" is the adjective corresponding to the noun "F," one must have epistêmē, of the definition of F. Why Plato commits to the principle of the epistemological priority of definitions is a question we will only be able to answer once we have a better understanding of Plato's conception of epistêmē. A further question, which we will also pursue below, is how epistêmē relates to epistêmē.

Epistêmē as True Doxa with Aetiological Reasoning in Meno
According to the standard analysis of propositional knowledge in contemporary epistemology, propositional knowledge is a kind of justified true belief. Plato is often taken to have apprehended this idea or something akin to it. In *Meno* Socrates distinguishes *epistêmê* from true *doxa*. "Doxa" is often translated as "belief," "opinion," or "judgment." Socrates claims that *epistêmê*, is true *doxa* with "a reasoning of the *aitia* (usually translated as 'cause')." (*Meno* 98a3–4) I assume that *doxa* here and belief are equivalent. Thus, *epistêmê*, is true belief with a reasoning of the *aitia*. It is questionable whether a reasoning of the *aitia* and justification are equivalent. First, note that "cause" is an unsatisfactory translation of "*aitia."

A *aitia* is an entity that is responsible for another entity's being as it is; it may be responsible in any number of ways: materially, logically, causally, teleologically.

Consider the following questions: Why does water at sea level boil at 100 degrees? Why does a triangle have 180 degrees? Why is the thermometer reading minus 50 degrees? And why is there cause for concern that my temperature is now 94 degrees? Accordingly, a reasoning of the *aitia*, or what I will call "aetiological reasoning," answers the vague question: "Why is such-and-such the case?" This appears to be a request for an explanation rather than for justification, that is, for reasons why a proposition should be believed.

Further reason to think that Plato understood the request for an *aitia* to be a request for an explanation derives from Socrates' discussion of aetiology in *Phaedo*. (96a5–107a1) There Socrates describes his early intellectual pursuits in natural philosophy: "I thought it was an extraordinary thing to know the *aitiai* (plural of 'aitia') of each thing: why it comes to be, why it perishes, and why it exists." (96a7–9) Socrates focuses on the *aitiai* of nourishment and growth, cognition and perception. He wonders whether heat and cold are responsible for nourishment and growth and whether the brain is the bodily organ responsible for perception. Note that, as in the present case, the *aitiai* Socrates tends to cite in his discussions are objectual rather than propositional, that is, objects rather than propositions, states of affairs, or events. But insofar as *aitiai* are explanatory, they must figure in propositions. Thus, when Socrates makes claims of the form "*a* is the *aitia* of *b,*" this must be taken to be elliptical. For example, in the case of heat and cold, Socrates' question may be put less elliptically as follows: Are heat and cold decomposing and reconstituting foodstuffs responsible for the nourishment and growth that occur in animals? In that case, we might more precisely refer to heat and cold and the like as explanatory or aetiological factors.

Socrates recounts that he ultimately abandoned inquiry into material and causal explanations in favor of formal or metaphysical explanations. Socrates says that he came to believe that the safest explanation for a thing's being *f,* for example, a thing's being beautiful, is that it participates in the Form *F,* that is, the Form Beauty. (Again, observe that the idea of a Form being an *aitia* must be elliptical for something such as a Form's being participated in.) We will have more to say about the aetiological role of Forms in Plato's epistemology below. Presently, note that Socrates' interest in formal or metaphysical *aitiai* relates to the principle of the epistemological priority of definitions. This is because Plato holds that *f* things are *f* because of the Form *F.* But let this suffice to support the suggestion that aetiological reasoning provides an explanation of the content truly believed.
Understanding entails explanation. Since aetiological reasoning is an explanation, arguably epistêmê, should be construed as understanding rather than propositional knowledge. On the other hand, the capacity to explain something may provide justification for believing the relevant content. Support for this suggestion derives from consideration of the way Socrates introduces the distinction between epistêmê, and true doxa in Meno. Socrates claims that true doxa is a fine possession so long as it abides, but that it tends to be unstable until it is bound with aetiological reasoning. He then claims that aetiological reasoning is recollection (anamnêsis). (98a4) In identifying aetiological reasoning with recollection, Socrates is referring to an earlier discussion in the dialogue, which was prompted by Socrates' thesis that all learning is recollection. (82b9-86b5) According to this thesis, prior to incarnation the soul acquired epistêmê of a range of contents. The range of contents is not clearly specified in this or any other dialogue in which the theory of recollection in discussed. Consequently, I have left "epistêmê" unqualified. After the acquisition of this epistêmê and prior to or precisely at the moment of incarnation, these contents were lost to consciousness and became latent in the soul. Learning is a process of recovering and thus recollecting the latent contents.

Socrates offers Meno a demonstration of learning as recollection using Meno's slave. Socrates presents a geometrical problem to the slave, who begins the conversation ignorant of geometry. The problem is to construct a square $S$ double the area of a square $T$ with side 2. The slave first pursues two false avenues: the construction of a square with side 4 and the construction of a square with side 3. Finally, the slave arrives at the correct conclusion that the side of $S$ must equal the hypotenuse of $T$. Socrates does not claim that the slave has now acquired epistêmê; rather, he says that the slave is well on his way. In other words, the slave has true doxa, but as yet an inadequate grasp of why his conclusion is true. So the example demonstrates recollection in progress rather than fully achieved.

On what grounds does Socrates take his conversation to demonstrate that learning is recollection? Through the conversation, Socrates guides the slave by asking him what appear to be leading questions. Indeed, one might object that the slave could not have achieved the correct answer without Socrates' help; and since, presumably, Socrates begins with explicit epistêmê of the correct solution, the slave is in fact acquiring explicit epistêmê, not from himself, but from Socrates. But Socrates insists that throughout the exchange all the slave's answers have been "his own (heautou)." (85c1) By this Socrates means that the slave has not simply been obediently and blindly led by Socrates, but has been thinking through the implications of each question and responding on the basis of his considered judgment. In fact, Socrates allows the slave to pursue two false avenues precisely to ensure that the slave thinks for himself and does not assume that Socrates will lead him to the answer. Throughout the exchange, then, the slave increasingly gains insight into the logical relations between various geometrical objects relevant to the solution to the problem. In short, he increasingly comes to see for himself how the geometrical figures and their components are related and thus why the side of $S$ must equal the hypotenuse of $T$.

Granted this, it is still questionable why the slave's cognitive process should be conceived as the recollection of latent epistêmê as opposed to the acquisition of wholly new epistêmê. One reason may relate to a distinction between the purely rational, that is, non-perceptual process in which the slave is involved and a process of acquiring direct perceptual information. In order to acquire direct perceptual information, for example, of
whether there is a river on the other side of some hill, one needs to walk over the hill and look. In this case, the information sought lies in one's external environment and one has to apprehend it by perceiving that environment. In contrast, in the case of the geometrical problem, one reasons one's way to the solution. Again, this follows from the fact that one comes to apprehend the logical relations for oneself. But in coming to apprehend this information, one does not venture into and perceive one's external environment. The process of information acquisition is wholly internal. Thus, Plato thinks, the information and ultimately the solution lies within one. A reasonable objection here is that one may construct the information and the solution within oneself rather than come to find it there. But in response Plato may ask whence came the rational or conceptual resources employed in the construction of the information and solution. This line of questioning might ultimately lead us to the admission that some rational or conceptual resources are innate, or at least that we have innate pre-dispositions to develop them. In granting this, however, we remain quite far from the theory of recollection that is actually advanced in *Meno*.

Recollection is an important epistemological theory in its own right. It is also a highly controversial theory. Indeed, I find it hard to avoid the verdict that the theory incurs much heavier epistemological burdens than those it proposes to resolve. Plato discusses the theory again in *Phaedo* (72e1-77a5) and *Phaedrus* (245c2-257a2), but I will not discuss recollection further in this chapter. Rather, let us now return to the problem that initially prompted our account of recollection. Recall that when he distinguishes *epistêmê*, from true *doxa*, Socrates refers back to the geometrical demonstration to clarify his claim that aetiological reasoning is recollection. Here the aetiological reasoning consists of the reasons that clarify and corroborate the slave's thesis that the side of \( S \) equals the hypotenuse of \( T \). This suggests that *epistêmê*, requires comprehension of why the content that is truly believed is true. But such comprehension also justifies one's belief in the truth of the content. Thus, although explanation and justification need not overlap, they can. In this case, the kind of justification that explanation affords is internalist. By "internalist justification" is meant that the justification is directly available to the subject. Thus, *epistêmê*, qua true belief with aetiological reasoning may be a kind of propositional knowledge. We may call this kind of propositional knowledge "explanatory knowledge." In contrast to mere propositional knowledge, explanatory knowledge entails understanding.

At the end of the preceding section, I raised the question of how *epistêmê*, and *epistêmê*, are related. The example of aetiological reasoning in the case of the geometrical problem suggests at least a partial answer: the fact that *epistêmê*, requires aetiological reasoning suggests that *epistêmê*, is impossible independently of the comprehension of a network of related propositions. Possibly, this network of related propositions or a subset of it constitutes the relevant *technê*. The answer is limited, however, precisely insofar as it remains unclear what content a *technê* requires. The principle of the epistemological priority of definitions encourages the view that at least ethical *epistêmê*, requires definitional *epistêmê*. But what definitional *epistêmê*, entails and what other content *epistêmê*, requires are unclear. In addition, it is noteworthy that the geometrical demonstration does not begin with definitions.

Note also that our answer to the question of the relation between *epistêmê*, and *epistêmê*, would only seem to hold for theoretical *epistêmê*, or only to some extent for
practical *epistêmê*. In that case, it is questionable to what extent Plato thinks that certain so-called *technai* are forms of *epistêmê*. As we will see below, Plato elsewhere rejects the view that certain so-called *technai* are in fact forms of *epistêmê*, properly speaking. Finally, consider two further questions. How must the various propositions constitutive of a *technê* be logically related? Surely they must be coherent. But are some logically primary and others secondary? A second question concerns the cognitive status of the aetiological reasoning itself. I have been speaking of *epistêmê*, as requiring "comprehension" of why the content that is truly believed is true. But precisely what sort of cognitive state is comprehension here? *Meno* does not broach these two questions, but *Theaetetus* engages them or at least something akin to them.

**Epistêmê as True Doxa with an Account in Theaetetus**

In *Theaetetus* Socrates also distinguishes *epistêmê* from true *doxa*. But the dialogue contains no theory of recollection, and Socrates does not speak of aetiological reasoning. Instead, Socrates examines the thesis that *epistêmê* is true *doxa* with an "account (logos)." (201c8-d1) I take it that true belief with aetiological reasoning is equivalent to true belief with an account; however, the kind of account Socrates actually examines in *Theaetetus* is but one kind of aetiological reasoning. More precisely, Socrates examines and criticizes two serious candidates for the form of account that *epistêmê* requires: decompositional (201d8-206c6 and 206e6-208c3) and differential (208c4-210b3). A decompositional account characterizes some entity *x* in terms of *x*’s elements. Socrates illustrates this with the letters constituting a word. The elements of the name "Theaetetus" are the letters "t", "h," "e," and so on. A differential account characterizes *x* as distinct from everything else. That is, a differential account is a sort of uniquely specifying description. Socrates illustrates this conception with an example that assumes a geocentric conception of the universe: the sun is the brightest celestial body moving around the earth.

How are such accounts supposed to supplement true beliefs? The most salient kind of belief featured in the investigation is recognitional or identificational. Assume that the beliefs in question here are of this kind; for example, "this is Theaetetus' name," said of some inscription, and "that is the sun," said of some celestial object. Accordingly, in order to have *epistêmê* that something is *x*, one must have an account of *x*. For convenience, let us call this an "identificational account." Assume that an identificational account is a form of aetiological reasoning. Consequently, *Theaetetus*' examination of an identificational account supersedes *Meno*'s treatment of aetiological reasoning in the following ways. In *Meno* there is no discussion of the form that aetiological reasoning should take. But in *Theaetetus* Socrates examines the form that identificational accounts and thus the form that one kind of aetiological reasoning should take. Additionally, in *Meno* Socrates does not consider the cognitive status of the aetiological account; but in *Theaetetus* he criticizes decompositional and differential accounts on epistemological grounds.

Socrates rejects the decompositional conception of an account for two reasons. One is that it applies to compounds, but not to elements themselves. If elements cannot be accounted for, they cannot be objects of *epistêmê*. This is taken to be especially paradoxical since according to the thesis under consideration cognition of elements is
fundamental for all epistêmê. Let us call this the "problem of elemental epistêmê." The second reason is that it seems possible to have true doxa that certain elements constitute a compound, but to lack epistêmê of those elements as constitutive of the compound. Socrates offers the following example: a child could learn to spell his name, but lack understanding of why it was so spelled. In that case, a decompositional account seems inadequate when conjoined with true doxa to yield epistêmê.

Socrates offers a differential conception of an account, at least partly, to overcome the problem of elemental epistêmê. Again, a differential account explains x, not in terms of its constituents, but in contrast to everything else. One criticism Socrates makes of the differential conception of an account concerns the cognitive status of the differential account itself. Does one grasp the differential account doxastically or epistemically. If doxastically, then how can this yield epistêmê? If epistemically, then the definition of epistêmê as true belief with a differential account is circular and viciously regressive.

Socrates' examination of decompositional and differential accounts in Theaetetus relates to the question of how aetiological reasons are structured. Arguably, the examination of decompositional accounts attempts to construe the structure of aitian in terms of logically primary and secondary entities. (Note that the example of Theaetetus' name suggests that decompositional accounts needn't be restricted to material terms. However, a fundamental problem implicitly raised by the discussion of decompositional accounts is how material decomposition and logical decomposition, that is, analysis, are related.) Furthermore, the sun example looks like a definition in the form of genus and differentia. Indeed, definitions and decompositional and differential accounts seem to be related. Definitional accounts, that is, accounts of the definitions of things, are not as such examined in Theaetetus; however, both decompositional and differential accounts appear to be accounts of what things are.

Theaetetus concludes without resolving the epistemological problems of an account or of what form accounts should take. But one needn't, and I do not, interpret the aporetic conclusion to indicate that Plato relinquishes the view that epistêmê, is true doxa with an account or that the account that epistêmê requires is aetiological.

**Epistêmê and Doxa in Republic 5**

Another important passage in which Plato distinguishes epistêmê and doxa occurs in Republic 5 (474b4-480a13). More precisely, Socrates argues for a distinction between three cognitive states: epistêmê, doxa, and agnôsia (ignorance). For the time being, I will leave "epistêmê" unqualified and thus its referent underdetermined. Socrates argues that epistêmê is "set over" (epi) what is, agnôsia is set over what is not, and doxa is set over what is between what is and what is not. It is questionable what Socrates means by "set over." It is controversial what he means by "what is" (to on) and "what is not." Toward the end of the argument Socrates suggests that what is between what is and what is not is what no more f than the contrary of f, for example, what is no more beautiful than ugly. This supports the view that by "what is" and "what is not" Socrates means "what is wholly or purely f" and "what is not in any way f." According to Plato's metaphysics, what is purely f is the Form F; what is no more f than the contrary of f are perceptual participants or instantiations; and what is in no way f is nothing at all. Note that the first claim, that the Form F is purely f, expresses the notorious thesis of the self-predication of
Forms. If Plato takes self-predication to entail that the Form $F$ has the property $F$, then a vicious regress ensues. But clearly the relation between $F$ and the Form $F$ differs from that between $F$ and perceptual instantiations. The Form $F$ does not participate in $F$. Instead, the self-predication thesis should be interpreted to mean that the Form $F$ is (formally, but not materially) what it is to be $f$. In other words, Forms are logical entities; they have logical, not material properties. Regarding the third claim, more precisely, what is $f$ in no way at all is nothing qua $f$. Something, for example, a number, may be neither just ($f$) nor unjust (the contrary of $f$), but nonetheless be odd ($g$) or prime ($h$). In short, Socrates holds that epistêmê is set over Forms; doxa is set over perceptual participants; and agnôsia is set over nothing at all qua $f$.

Socrates maintains that epistêmê and doxa are distinct capacities or powers (dunameis, plural of "dunamis"). Accordingly, I will refer to them as "epistêmê," and doxa," Socrates claims that distinct capacities are set over distinct kinds and enable distinct functions with respect to those kinds. He illustrates these principles using the examples of sight and hearing. The functions of the capacities of sight and hearing are the acts of seeing and hearing. These capacities are realized in relation to what is visible and audible. Analogously, epistêmê is the capacity whose function is the act of epistemically cognizing (epistasthai), while doxa is the capacity whose function is the act of doxastically cognizing (doxazein). (Note that agnôsia is rightly not characterized as a dunamis at all; agnôsia is akin to blindness or deafness, a lack of capacity.) I interpret these claims to mean that epistêmê is the capacity whose function is the act of making epistemic judgments, while doxa is the capacity whose function is the act of merely making judgments. What are epistemic and doxastic judgments? I take it they are epistêmê and belief without an aetiological account respectively. Accordingly, in Republic Socrates does not treat epistêmê and doxa as propositional attitudes, but as capacities for such attitudes. In this respect, the treatments of epistêmê and doxa in Republic 5 and in Meno and Theaetetus are at least linguistically inconsistent.

To clarify how epistêmê and doxa enable epistemic and doxastic judgments, let us turn to the relation between epistêmê and doxa, on the one hand, and the distinct kinds over which they are set, again, Forms and perceptual participants, on the other. The Greek phrase corresponding to the phrase "set over," namely, "eph' einai," can and here does have the sense of "having power over." Consider again the capacities of sight and hearing. The capacity to hear has power with respect to audible properties, but none with respect to visible ones. Analogously, Socrates is suggesting that doxa is a cognitive capacity whose power is limited to some sort of cognition of perceptual participants, whereas the power of epistêmê extends to the cognition of Forms. But what does cognition of participants and Forms here mean?

Socrates claims that Forms are unities, but that when they are instantiated in perceptual entities, they appear as pluralities. For example, the Form Beauty is a unity, but there are many apparent, beautiful perceptual entities that partake of or instantiate the Form Beauty. Perceptual entities both multiply instantiate and variously realize Forms. That is, there is not only a plurality of perceptual participants, but the perceptual characteristics through which those perceptual participants instantiate Forms are various. For example, some perceptual entities are beautiful (to the extent that perceptual entities can be beautiful) with respect to their colors; others are beautiful with respect to their sounds; some that are beautiful with respect to their colors are, more precisely, beautiful
with respect to the arrangement of their colors; others with respect to the selection of
their colors; and so on. Epistêmê, enables one to reason from the plurality and variety of
instantiations of Beauty to that in virtue of which the many, various beautiful
instantiations are beautiful, namely, to the nature of the Form Beauty. In other words,
estimê, enables one to grasp what it is to be beautiful. This, I take it, is what it means to
cognize Forms, in this case, the Form Beauty. In contrast, the perceptual characteristics
that instantiate the Form in a given context are themselves not what it is to be beautiful.
In fact, they may be ugly in some other context. For example, consider Socrates'
exchange with Hippias in Hiippias Major. When Socrates asks Hippias what beauty is and
Hippias responds that gold is beautiful, Socrates responds that in some contexts gold is
not beautiful. For instance, in some contexts gold is garish. Likewise, in some contexts, a
shade of red or a certain musical note may be beautiful, but in other contexts ugly. For
such reasons, Socrates speaks of perceptual participants as no more f than the contrary of
f. Accordingly, doxa, does not enable one to grasp what it is to be beautiful and thus to
understand why a perceptual participant is beautiful. Doxa, only enables one to judge,
that is, to form the belief that some participant is f. Moreover, since perceptual
participants variously realize Forms, doxa, cannot generally enable one to judge truly that
some participant is f. In contrast, the understanding of what it is to be f that eistimê,
enables ensures the truth of judgments about whether participants are f. Thus, as Socrates
says, eistimê is "unerring." (477e6-7)

Finally, it is important to observe a distinction between two kinds of epistemic
judgment for which eistimê is a capacity, but which the Republic 5 argument does not
explicitly or clearly distinguish. One is definitional: epistemic judgment of what F is or
of what it is to be f. The other is non-definitional: epistemic judgment that some
participant is f. Non-definitional epistemic judgment depends upon definitional epistemic
judgment. But what does definitional epistemic judgment entail? Again, it is important to
observe a distinction between two kinds of aetiological reasoning correlating with
definitional and non-definitional epistemic judgment respectively. Non-definitional
epistemic judgment requires cognition of Forms as aitai or rather as aetiological factors.
But what sort of aetiological reasoning does definitional epistemic judgment entail?
Again, Republic does rather little to answer this question.

Grades of Epistêmê

We have just seen that eistimê, is a capacity for eistimê, generally and for
cognition of Forms in particular. This entails that eistimê, is a capacity for aetiological
reasoning. Granted this, consider once again the example of recollection through
geometrical reasoning in Meno. The demonstration seems to show that aetiological
reasoning and so eistimê, which is true doxa supplemented by such reasoning, does not
require cognition of Forms. This yields the odd consequence that eistimê, qua capacity
to cognize Forms may enable eistimê, but without cognition of Forms. What are we to
make of this? An explanation lies in passages from Republic and elsewhere that express
the view that there are different grades of eistimê, eistimê, and eistimê, only the
highest or purest of which entails cognition of or the capacity to cognize Forms.

The idea that there are different grades of eistimê, eistimê, and eistimê,
emerges in Socrates' illustration of the Divided Line in Republic 6 (509d1-511e5).
Socrates divides a line into two segments; each segment represents a distinct kind of cognitive object, perceptual and intellectual respectively. Socrates then labels the segments according to correlative forms of cognition. The perceptual segment is called "doxa"; the intellectual segment "epistêmê." Socrates thus appears to use "doxa" and "epistêmê," as he did in Republic 5, to refer to cognitive capacities, that is, to doxa, and epistêmê. However, whether Socrates understands epistêmê and doxa in Republic 6 as precisely the same as or rather as continuous with the epistemic and doxastic capacities of Republic 5 is questionable. I discuss this point below. Socrates subsequently divides each segment of the line into two sub-segments and associates each of the four resulting sub-segments with a distinct cognitive capacity and correlative kind of cognitive object. The perceptual sub-segments of doxa are called "eikasia" (conjecture) and "pistis" (confidence); the intellectual sub-segments of epistêmê are called "dianoia" (thought) and "noêsis" (intelligence). The cognitive objects of eikasia are natural and artificial copies, imitations, or reflections of perceptual originals; those of pistis are the perceptual originals; those of diANOIA are mathematical objects; and those of noêsis are Forms. Observe that while the terms "eikasia," "pistis," "dianoia," and "noêsis" are appropriately chosen to the extent that they are applied to forms of cognition of lesser and greater power, there is no reason to think that Plato believes that, say, "eikasia" means "a cognitive capacity whose objects are limited to perceptual copies or imitations." As such, Plato's choice of terms is to some extent a convenient referential device. Granted this, the extension from eikasia to noêsis represents an ontological and cognitive hierarchy, with diANOIA and noêsis, in particular, constituting lower and higher forms of epistêmê. More precisely, cognitive objects are hierarchically ordered insofar as lower objects are ontologically dependent upon higher objects. For example, a painting of a horse is ontologically dependent upon a biological horse. Forms of cognition are, correspondingly, hierarchically ordered insofar as aetiology correlates with ontology. For example, noêsis has greater explanatory reach or depth than diANOIA because the former refers to Forms as aetiological factors.

In book 7, Socrates discusses mathematics and distinguishes it from dialectic (dialektikê). Dialectic is an intellectual practice whose objective is the acquisition of epistêmê of Forms. (Presumably "epistêmê" here covers both epistêmê and epistêmê.) Thus, dialectic relates to noêsis as distinguished in the Divided Line. In book 7, however, Socrates suggests that it was misleading of him, in the discussion of the Divided Line in book 6, to have identified mathematics with epistêmê: "These mathematical technai, we have often, through force of habit, spoken of as epistêmai (plural of 'epistêmê'), but we need another term, brighter than doxa, but darker than epistêmê. Previously, we defined it as diANOIA. Yet I don't think we should contend over a word." (533d4-e1) Note that Socrates' reference to mathematics as a technê, epistêmê, and thus epistêmê, here appears to be inconsistent with his use of "epistêmê" to refer to epistêmê in book 6. I will return to this problem below. Note also that Socrates' nonchalant attitude toward terminology supports the suggestion above that Plato's choice of cognitive terms is to some extent a convenient referential device.

Compare now Socrates' distinction between kinds of epistêmê in Republic 6 and 7 with Socrates' discussion of epistêmê at Philebus 55c4-59d9. Following his division of kinds of pleasure in Philebus, Socrates divides kinds of epistêmê. Here, as in Republic 7, Socrates uses "epistêmê" to refer to fields of knowledge, hence, epistêmai. As in the case
of pleasure, Socrates divides kinds of epistêmê, according to their relative purity. Socrates suggests that the purest kind of epistêmê, has the most precision (akribêta) and clarity (saphêneia). Among the least pure kinds Socrates includes medicine, agriculture, navigation, and strategy. Those that involve applied mathematics, such as architecture, are regarded as purer. Theoretical mathematics is purer than applied mathematics, and dialectic is regarded as the purest kind of epistêmê. In fact, Socrates says of the less pure kinds: "most of the technai and those who work at them principally employ doxai and pursue matters pertaining to doxa." (58e5-59a2)

Recall that our consideration of the Divided Line, the Republic 7 passage, and the Philebus passage arose from the puzzle that in Republic 5 epistêmê, is conceived as enabling cognition of Forms as well as epistêmê, but that in Meno geometrical epistêmê, is presented as an example of true doxa with aetiological reasoning, but without cognition of Forms. Plato's distinction between higher and lower or purer and less pure kinds of epistêmê, (and, I presume, correlatively epistêmê,) provides an explanation. Purer kinds of epistêmê, are distinguished by their cognitive objects. For example, navigation and all other applied technai are concerned with perceptual participants and thus objects that are not purely f. Accordingly, such technai are, to use the language of Philebus, less precise (akribes) than theoretical technai. Again, although, for example, geometry is clearer than navigation, it is less clear (saphês) than dialectic. Geometry is less clear because it lacks the aetiological or explanatory depth of dialectic. On this point, consider Socrates' criticism of the mathematicians in Republic 6: "Those who study geometry, calculation, and the like posit the odd and the even, geometrical figures, the three types of angle, and other kindred entities … and they regard these as epistemically cognized (eidotes) … as things they do not deem it necessary to give an account (logos) of, on the ground that <these entities> are clear to everyone." (510c2-d1) By beginning with such unexplained posits, Socrates thinks, the aetiological reasons available to mathematicians are limited. In contrast, dialectic engages the question of the logical and metaphysical grounds of the mathematical entities and propositions that the mathematicians treat as starting points (archai) requiring no explanation.

Given that Plato distinguishes grades of epistêmê, epistêmê, and epistêmê, we must also refine our former definition of epistêmê, Epistêmê, proper, that is, epistêmê, in its purest form, is not merely true doxa with aetiological reasoning; it is true doxa with aetiological reasoning that grasps the ultimate aetiological factors. The ultimate aetiological factors are Forms. Observe also that this conception of epistêmê, explains the principle of the epistemological priority of definitions: one cannot have non-definitional epistêmê, properly speaking without epistêmê, of the definition of the relevant F, where the relevant F is the Form F.

Let us now return to the problem that in Republic 5 and 6 Socrates uses "epistêmê" to refer to epistêmê, but in Republic 7 to refer to epistêmê. Moreover, in Republic 7, Socrates refers back to his usage in Republic 6 as if he previously meant "epistêmê," as well. The problem can be overcome or at least partially overcome insofar as a technê is a dunâmis and specifically a dunâmis that enables one to make epistemic judgments. Consider the example of the technê of arithmetic. One who possesses this technê does not possess epistêmê, of every sum. However, arithmetic technê enables one to make epistemic judgments about any sum. Granted this, it must nonetheless be acknowledged that reconciliation between the uses of "epistêmê" in Republic 5, 6, and 7
is partial. A shift does occur from a logically prior epistemic capacity in Republic 5 and 6 to a logically posterior epistemic capacity in Republic 7. In other words, although we may grant that a given technê is an epistemic capacity and thus may be characterized as an "epistêmê," this use of "epistêmê," is distinct from the use of "epistêmê," in Republic 5. Yet while the uses differ, they are at least continuous. For example, the capacity for making epistemic judgments about intellectual entities is logically prior to the capacity for mathematics; and the capacity for mathematics is logically prior to the capacity for arithmetic. Just as the capacity for arithmetic is logically prior to the capacity for judging that a certain sum is equal to a certain number.

Finally, a few additional problems should be mentioned. One is how to delineate the contents that a technê comprises from those of the epistemic judgments that the technê enables. Another relates specifically to the technê of dialectic. The technê of dialectic, rather than entailing cognition of Forms, seems to be a method or means of inquiring into the identity of Forms. So it is particularly obscure what content dialectic encompasses.

**Epistêmê and the Form of the Good**

Forms are the ultimate aetiological factors, but all Forms are not logically and so not aetologically on par. In a number of late dialogues Plato examines relations of priority, posteriority, and coordination among Forms. (Note that it is controversial to what extent the treatment of Forms in the late dialogues is consistent with that in the middle dialogues. One might prefer to speak here of logical kinds rather than Forms. I will continue to speak of Forms.) In particular, such investigations proceed through the application of a method of division (dihairesis) and collection, of which the division of kinds of pleasure and knowledge in Philebus is one example.

In the middle dialogues, Plato is relatively quiet about the logical relations among Forms. His primary interest lies in distinguishing Forms from perceptual participants. Even so, in Republic Socrates emphasizes the superordinance of one Form to all others. This is the Form of the Good (hereafter "the Good"). In Republic 6 Socrates proposes that all epistêmê depends upon and culminates in the Good. When Glaucon presses him for an account of the Good, Socrates balks, claiming to be incapable. Instead, Socrates offers his view of what the Good is like. He does so using two celebrated illustrations, one of which we have already discussed.

The Divided Line serves to explain what the Good is like insofar as the Good is the highest cognitive object of the noêsis sub-segment. In his second illustration, the allegory of the Cave (514a-517c), Socrates proposes that the cognitive states of ordinary citizens are akin to those who pass their lives in a cave seated and facing a wall. Behind and unbeknownst to them a fire burns, before which puppets are variously manipulated. The fire casts the shadows of the puppets on the cave wall, and the shadows are the objects of the cave dwellers' cognition. One cave dweller eventually stands and looks around to discover that the objects his fellows and he have taken to be real are mere shadows. Gradually he ascends from the cave, acclimating to the increasing light of the sun. As he proceeds, perceiving the greater scope of perceptual entities, his comprehension of reality grows. The ultimate perceptual object is identified as the sun, on the ground that as the source of light it makes all visual perception possible. The Good
is said to be analogous to the sun, itself the ultimate object of cognition, which makes all intellectual entities intelligible.

It is unclear how the Good is superordinate to other Forms and serves to make all intellectual entities intelligible, above all because Socrates only says what the Good is like, not what it is. But where Plato is silent, the Peripatetics speak. Aristotle and his student Aristoxenus report that Plato conceives of the Good as the One, that is, as unity. (Aristot. *Metaph.* 1091b13-15; *EE* 1218a15-24; Aristox. * Harm.* 2.1) I believe that their testimony is accurate. Generally speaking, the Good plays metaphysical or ontological, ethical, and epistemological roles in Plato's thought. Unity is, in ways that are difficult to make out, the logical and metaphysical basis of being or entification. For example, compare the unity of the Forms with the plurality of perceptual participants. Also, contrast the essential purity and thus uniformity of Forms with the impurity and complexity of participants. Participants are bundles of properties, none of which is stable, and each of which is both partially $f$ and the contrary of $f$. In the case of mathematical entities, units are points, which the Greeks identify both as numbers and as the principles of geometrical objects. Forms, numbers, and geometrical objects serve to delineate, structure, and thus give definition, both logically and materially. Ethically and ontologically, unity is responsible for wholeness. Wholeness is that from which nothing is lacking. Thus, unity is responsible for perfection and self-sufficiency. But unity also logically entails and materially brings order and cohesion to complexes. For example, in *Republic* justice in the individual is identified with the order of the tripartite soul and analogously in the polis with the order of the three political classes.

Epistemologically, unity can be understood as necessary for *epistêmê* and *epistêmê*, at least in the following way. Coherence is a kind of unity. The contents of a *technê* must be coherent, as must aetiological accounts, whatever their form. Indeed, as we emphasized in our discussion of recollection in *Meno*, the cognizing subject must comprehend the coherence of the aetiological account. That is, he must grasp how the various elements or propositions of the account hang together.

Since the Good is the ultimate cognitive object, we must refine Plato's conception of pure *epistêmê*, once more. *Epistêmê*, in its purest form is true *doxa* with an account whose explanatory reach extends to the Good. In other words, *epistêmê*, in its purest form is true *doxa* with a teleological explanation. Assuming that *Apology* and the early dialogues were indeed composed early in Plato's career, we can say that the pursuit of ethical *technê* or *epistêmê*, motivates Plato's epistemology from its inception. Whatever other content *epistêmê*, requires, definitional *epistêmê*, is its fundamental constituent. In this case, definitional *epistêmê*, is definitional *epistêmê*, of the Good. As such—and despite inconsistencies, points of obscurity, and loose ends—Plato's various epistemological treatments are basically unified.

**Further Reading**


Chappell, Timothy, *Reading Plato's Theaetetus*, Hackett Publishing Company, 2005
Moravcsik, Julius, "Understanding and Knowledge in Plato's Philosophy," *Neue Hefte für Philosophie* 15/16 (1979) 53-69
Szaif, Jan, "Doxa and Episteme as Modes of Acquaintance in Republic V," *Études platoniciennes* 4 (2007) 253-72