

Lecture 7

Plato's Theory of Forms

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Introduction

- Plato was born about 428 BC and died about 348 BC.
- He was a student of Socrates.
- He set up a school at Athens called the Academy.
- Most of his books are dialogues in which Socrates is one of the characters. The opinions Socrates expresses are generally Plato's.
- The selections in this lecture are from Plato's dialogues *Phaedo* and *The Republic*. Socrates is speaking, unless otherwise indicated.

Kinds of explanation (*Phaedo*)

Explanation by what is best

- *When I was a young man I was wonderfully keen on that wisdom which they call natural science, for I think it splendid to know the causes of everything, why it comes to be, why it perishes and why it exists. [96a]*
- *One day I heard someone reading, as he said, from a book of Anaxagoras, and saying that it is Mind that directs and is the cause of everything. I was delighted with this theory and it seemed to me good that Mind should be the cause of all. I thought that if this were so, the directing Mind would direct everything and arrange each thing in the way that was best. If then one wished to know the cause of each thing, why it comes to be or perishes or exists, one had to find what was the best way for it to be, or to be acted upon, or to act. On these premises then it befitted a man to investigate only, about this and other things, what is best. [97b]*

Disappointment

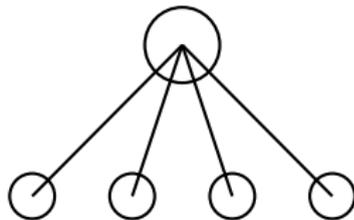
- *As I reflected on this subject I was glad to think that I had found in Anaxagoras a teacher about the cause of things after my own heart, and that he would tell me, first, whether the earth is flat or round, and then would add why it is so of necessity, saying which is better, and that it was better to be so. If he said it was in the middle of the universe, he would go on to show that it was better for it to be in the middle, and if he showed me those things I should be prepared never to desire any other kind of cause . . . I eagerly acquired his books and read them as quickly as I could in order to know the best and the worst as soon as possible. [97d]*
- *This wonderful hope was dashed as I went on reading and saw that the man made no use of Mind, nor gave it any responsibility for the management of things, but mentioned as causes air and ether and water and many other strange things. [98b]*

Explanation by forms

- *I would gladly become the disciple of any man who taught the workings of that kind of cause. However, since I was deprived and could neither discover it myself nor learn it from another, do you wish me to give you an explanation of how, as a second best, I busied myself with the search for it, Cebes? [99c]*
- *I assume the existence of Beauty, of Goodness and Greatness and all the rest . . . If there is anything beautiful besides Beauty itself, it is beautiful for no other reason than that it shares in Beauty, and I say so with everything. [100b]*

Beauty:

beautiful things:



Beauty, Goodness, Greatness, etc., are called *forms*.

- 1 In an ideal science, as conceived by Socrates, how would one explain why the earth is spherical? According to the “second best” method that Socrates actually uses, what is the explanation for why the earth is spherical?

Knowledge and opinion (*Republic*)

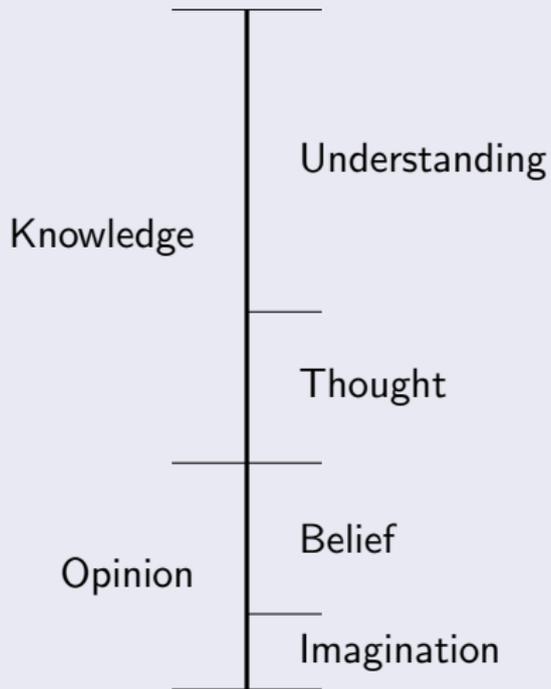
What they apply to [477–480]

- Beautiful things are also ugly in a way. In general, every perceptible thing has opposite qualities.
- Nothing can really have opposite qualities. Therefore, perceptible things don't really exist.
- But they aren't nothing either. So they are intermediate between existing and not existing.
- Knowledge is of what truly exists, so we don't have knowledge of perceptible things. What we have about them is opinion.
- Forms are what truly exists and knowledge is about them.

Subdivisions [507–511]

- *Opinion*: Uses sense organs (eyes, etc.) and is about perceptible things. Subdivisions:
 - *Imagination*: Is about images, e.g., shadows, reflections.
 - *Belief*: Is about originals of those images, e.g., animals, plants.
- *Knowledge*: Uses intellect and is about intelligible things (things grasped with the mind, not the sense organs). Subdivisions:
 - *Thought*: Uses hypotheses of which no account is given, like the geometers do. Also uses visible things (e.g., diagrams) as images of the intelligible things being investigated (e.g., straight lines, circles).
 - *Understanding*: Reaches the unhypothetical first principle of everything by dialectic. Deduces conclusions about the forms from this principle. (The principle is “the good,” i.e., everything is the way it is because that is the best way for it to be.)

The divided line



knowledge:opinion = belief:imagination = understanding:thought

Restatement

Glaucon: *You want to distinguish the intelligible part of that which is, the part studied by the science of dialectic, as clearer than the part studied by the so-called sciences, for which their hypotheses are first principles. And although those who study the objects of these sciences are forced to do so by means of thought rather than sense perception, still, because they do not go back to a genuine first principle, but proceed from hypotheses, you think they don't understand them, even though, given such a principle, they are intelligible. And you seem to me to call the state of the geometers thought but not understanding, thought being intermediate between opinion and understanding. [511c]*

Socrates: *Your exposition is most adequate.*

How to study astronomy (*Republic*)

What Socrates says

- *We should consider the ornaments that brighten the sky to be the most beautiful and most exact of visible things, seeing that they're embroidered on a visible surface. But we should consider their motions to fall far short of the true ones—motions that are really fast or slow as measured in true numbers, that trace out true geometrical figures, that are all in relation to one another, and that are the true motions of the things carried along in them. And these, of course, must be grasped by reason and thought, not by sight. [529c]*
- *Let's study astronomy by means of problems, as we do in geometry, and leave the things in the sky alone. [530b]*

Sounds like a total rejection of observation in science!

What he means

- Problems in geometry are propositions that require something to be constructed.
- Geometric problems relevant to astronomy: Find geometric constructions that would produce observed motions like those we see in the heavens.
 - There needn't be an exact match with the observed motions; the construction can be an idealization.
 - Plato got students in his Academy to work on such problems.
- Modern scientists often idealize and then use their idealizations to explain phenomena. Plato is saying: That's the right way to do astronomy.
- Contrast: The Babylonians made precise observations of the heavens, and could predict eclipses, but had no *understanding* of the heavens.

Questions

- ② For each of the following, say (i) whether Plato would classify it as knowledge or opinion, and (ii) what kind of knowledge or opinion he would classify it as. Explain why he would classify them in these ways.
 - (a) Thinking there is a desk at the front of the room on the basis of seeing it.
 - (b) Thinking that the angles in a triangle make two right angles on the basis of reading the proof in Euclid.

- ③ Socrates said “let’s study astronomy by means of problems, as we do in geometry, and leave the things in the sky alone.” What are problems in geometry? How could the study of astronomy be like that? In light of this, would you understand Socrates to be saying that astronomers need not look at the sky? Why, or why not?

References



Plato.

Phaedo.

Many editions.

Translations given here are by G.M.A. Grube.



Plato.

Republic.

Many editions.

Translations given here are by G.M.A. Grube, revised by
C.D.C. Reeve.

Numbers in brackets are standard page numbers given in many editions.