(4) CLASS DIALOGUE- the THEORY of FORMS

In class an attempt was made to re-create the kind of dialogue that might have arisen around the Platonic idea of forms. This is a very brief summary of the ideas and points that were made in the discussion, along with some remarks of my own at the end.

(1) THE QUESTION AT ISSUE

Very briefly, the argument in question is Plato's argument for the existence of Forms, given in allegorical form in the discussion of "the Cave" (see also in SUPPLEMENTARY NOTES" on the Course Web Page). The argument for Forms typically starts from the observation that instances of justice, or of a "square" can be found all over the place- although it is clear that if we look at a square object it is not a defining instance of a square, but rather it possesses in approximate degree the quality of "squareness". Now Plato, mindful of what was already known in geometry and mathematics, argues that a perfect square exists nowhere in the world of appearances, but can nevertheless be defined mathematically. This is clear not only because a perfect square cannot be found in Nature, but also because any square we do find is only one of many imperfect examples, which hardly define for us a "real" square. Such a definition may not need any elements of the real world for its definition, but nevertheless a square CAN be defined, and in this case it must exist. If so, there must be a "higher realm" of "forms" or "Ideas" in which many such forms exist. In fact there will be a hierarchy of such forms, accessible only to reason rather than to the senses. Although this is not immediately relevant to the question at issue, we note that according to Plato, the highest (ie., most "primitive" or "fundamental") of these was the form called "the Good", a kind of perfection to which all other ideas were subsidiary. Note that ideas or Forms, by their very nature, do not change (unlike the world of appearance); and anything that does change is thus not an Idea or Form. True knowledge can only be of Forms.

This argument (sometimes called the "Many to One" argument) is put in this way to emphasize the importance attached by Plato to Mathematics- undoubtedly he was strongly influenced by the mystical ideas of Pythagoras as well as his concrete work in coming to this formulation. One can also view the argument as an attempt to argue from language, in which names denote different specific objects, called 'particulars', to the existence of what are sometimes called "universals"- a concept due to Aristotle. The idea of Plato is that if we are given a whole bunch of particular 'squares', all of which are actually different but all of which have something in common, then this thing they have in common (what one might call 'squareness'), comes because they all to a greater or lesser degree resemble the perfect 'Square', which exists in the world of Forms.

Another way of looking at this is to say that if we have something like a particular square or a horse, then these are *examples* of squares and horses - but the only thing that makes them so is that they all have something in common. According to Plato, this thing that they have in common is that they resemble or in some way 'partake of' the Forms 'Square' and 'Horse' respectively.

For more details go to the course notes. If you read more by Plato you will be able to explore both his other arguments both for, and later on, against, the idea of "Forms". The key thing to understand here is the arguments, not the detailed history- and the best way to do this is not to study them slavishly, but instead to construct your own arguments- this is the first step to doing this kind of philosophy. So as a useful exercise you can begin from the class discussion, summarized below:

(2) CLASS DIALOGUE

The arguments that were put forward in class, by various members of the class, were:

(1) The idea of all horses sharing some property or properties is all very well. But in some cases we can't just define something by listing all its defining qualities or properties (as is done in a dictionary). This may be insufficient, or it may even be impossible. In philosophy this is to some extent recognised - for example, philosophers talk about "ostensive definitions" (from the Latin *ostendere*", meaning to show or point to); these are definitions of things given purely by exhibiting them (or an example of them). In any case, normally in order to arrive eventually at the concept of a 'universal', we have to start from particulars - it would be futile (as well as being very hard) to try defining a horse of none existed. Instead, we extrapolate from the examples we have in the real world. Note that there are many of these, and they are all different from each other.

From this point of view the definitions we use in discussing objects in the real world are usually just a kind of classification of the different objects- the lists of qualities help in making this somewhat taxonomic classification.

Thus Forms can be defined by a list of qualities referring to objects in the real world, not any abstract world.

It is unlikely perhaps that Plato would have been terribly impressed by these remarks- for him they would not touch on his main point, which is that apart from unique particular objects (eg., Mt Everest), which cannot be defined except by pointing them out, all language is based on a distinction between particular objects and general properties, and that this leads inevitably to Forms in the way described above.

(2) A perhaps more serious objection is that Plato is making a rather important assumption here, which is that if we can talk about a general property like 'squareness', there must always be an *object* corresponding this property, to which the general concept of squareness must be referred. There are 2 obvious objections to this, viz.,

(i) Just because we have some quality, does not mean that there must be an object to which we must refer in defining it. Thus if we say that certain things are 'heavy', it is in no way clear that there must be some "Heavy', or 'heaviness', or even 'Weight', from which the heaviness or weight of given objects is defined. To summarize- there is no obvious reason why qualities have to be converted to special 'objects' called Forms. One might say that Plato is making an elementary confusion between 2 categories, of objects and qualities (ie., he is assuming that all adjectives must have a corresponding noun).

(ii) Even if one is prepared to accept that to all qualities and other sorts of abstract concept there must be a corresponding object, or 'Form', there is another hidden assumption, viz., that just because we can conceive of, or discuss something, it must thereby exist. This is certainly not obvious. For example, do the objects in a hallucinatory experience exist? To recall the example of Bertrand Russell, does the 'King of France' exist? One can conceive of a Golden mountain (ie., a mountain made of solid gold); but it is unlikely to exist anywhere in the universe. Now if we accept that the existence of an 'idea' in someone's head does not necessarily imply that there is anything existing anywhere, in any realm, to which this corresponds, then one can surely argue that Plato is wrong to assert that the existence of 'circles' in the real world implies a 'Circle' in a higher realm of Forms.

It is not obvious how Plato would have treated the first objection here- it turns to a great extent on the grammatical structure of language and on our notion of logic. One suspects that Plato would have fairly quickly dealt with the second objection, as follows. Again, the fact that, eg., no *real* unicorn exists is irrelevant to his argument- for Plato, one can easily have a Form with no exemplars int he 'real' world. Not only is no contradiction involved, this is actually a fairly natural consequence of his idea that the real world is a highly imperfect, 'dumbed down' correspondent to the world of Forms. However, he would argue, if we can conceive of or imagine something, then the only possible way that this can be is if the properties or qualities of the imagined object refer to some ideal qualities in the world of Forms.

(3) Another objection to Plato was presented in class as follows. Suppose it is true that the real world is not a world of Forms, and that there is some more fundamental world of Forms. Then in this case - what is the relation between the 2 worlds. Plato is not so clear on this, because although he talks a lot about the world of Forms, he does not say so much about the real world! Note that same problem arose with the discussion of Parmenides, who dismissed the real world of sense perceptions as quite illusory, and not corresponding in fact to anything 'real' at all. Thus one can ask- what is the real world of sense perceptions? And in what way are Forms actually *embodied* in our world? One can argue rather strongly that since Plato himself is also in this world, and gains his knowledge with the same sensory apparatus as we do, he needs to explain this first - in fact, he needs to start from the sensory world like everyone else!

Plato's response to this may well have followed his line of argument that whereas one cannot apprehend the Forms by sense perception, or by any inspection of the real world, they can be examined and understood- at least to some degree- by imperfect mortals, using the intellect, ie., using rational thought. Here of course his 2 guiding lights were (i) the ideas of mathematics, and (ii) the Socratic method of exploring and refining concepts, to isolate and extract their essential meaning. In fact Plato did try occasionally to talk about the real world of sense perception, and was rather interested in a number of different features of this world- notably in astronomical phenomena, and in the mechanisms of sense perception itself (for which he had an elaborate theory); see in particular the *Timaeus*. He also had a kind of theory of physics, which was based essentially on Pythagorean forms and the Elements of Empedocles- although Plato was very firm that the universe was in some sense alive, and that it had been molded by a 'Demiurge'.

(4) A final objection to Plato's ideas was presented in class, which followed on from the 3rd one above. It arose again because Plato was not sufficiently specific about the relation between Forms in his inaccessible worlds, and the phenomena in our perceived world. It is then not only not clear how to understand the real world in terms of Forms- it is also unclear how we are to decide, by doing things in the world of perception, on the truth or otherwise of our ideas about the world of Forms. To put it in modern language- the theory of Forms is UNTESTABLE, because we

can only test the truth or otherwise of a theory by operations performed in the real world.

By putting this objection in modern terms we make it hard to understand how Plato might have responded. He certainly would have objected that one can test the propositions of mathematics by purely rational means- by 'tests' performed within mathematics itself, by purely logical manoeuvres. But this does not really answer the argument, because Plato did have a theory of the universe, and of how it is constructed (although it is important to note that like Parmenides and Democritus, he did not pretend that he was sure it was correct). Given that, for example, his theory of how matter was constructed ultimately reduced to a consideration of geometric forms (the 5 regular or 'Platonic' solids), one can ask what method could, in his theory, give us certain knowledge of its truth (or otherwise)? It seems fairly clear, at least to a modern thinker, that if he cannot have certain knowledge of the phenomena of the perceived world, it is not clear how he can possibly have any sure knowledge of the world of Forms. And in modern thought, the question of *how* one is able to establish the truth of something has become very important.

From this we see that the way in which the Greeks thought was in important respects very different from how most of us look at the world. For us, the easiest kinds of truth to establish are those which are 'public', ie., accessible to everyone. The idea of 'private knowledge', or knowledge derived not from observation, but by pure thought or even by an act of faith, is regarded with much more suspicion. Yet for Greek intellectuals like Plato, the propositions in mathematics or of logic seemed far more sure than anything that one might say about the world of perception. And at that time they simply did not have any clear idea of how one might systematically derive or test truths about the 'real world' of perception.

A few extra remarks are in order here.

First, note that whatever one might think about the dichotomy introduced by the Greeks, between the perceived world that we know, and the abstract world (of Forms, or some other intangible objects or entities of which we can have no direct awareness), it is here to stay- it is so deeply ingrained now in the human psyche that it is hard to imagine how to proceed without it.

Second- as remarked in the notes, it is a great pity that, for various reasons, the Greeks were never able to apply their amazing mathematical creativity to the sensible world. The efforts of Archimedes are remarkable mainly because of their exceptional quality- almost no other Greek thinker was really interested in following this line of development. Some of the reason for this may well have lain in the divorce between numbers and geometry, which came from the work of Pythagoras. But although this meant that physical science in the modern sense was left stillborn, one shouldn't forget that the level of abstraction reached by some of the Greek thinkers would be, in the long term, just as important for the development of science as the experimental methods which we will come to in the Renaissance.