USE OF THESES

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FOREWORD

First a word about the title on the spine. I am not happy with it but can think of no better and so have let it stand. I am not happy with it for fear that it excite the expectation that this thesis is concerned with skill only. It is not; it attempts a more general version of Plato's epistemology and of the Idea of the Good. I was not quite aware that this was my goal when I began and the ways by which I reached it are varied and circuitous. For these reasons I cannot think of a title for the thesis which embraces all of its parts, and have to be satisfied with one for just its beginning and end.

....
PURE AND FAULTLESS SKILL

A study in Socrates' and Plato's conception of skill and science in some early dialogues, the Republic, and the Timaeus.

by

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This thesis was submitted in partial fulfilment of the requirements for the Degree of Doctor of Philosophy in the Australian National University.

April, 1974
I wrote this thesis

[Signature]
INTRODUCTION:

The text of this thesis is six chapters on Plato and an interlude on Parmenides. The six chapters are in two sets, the first three and the last three, and the interlude divides the two sets. The first three chapters are not interdependent: the first does not lead to the second nor the first and second to the third. Instead, each of the first three chapters is an examination of a different aspect of the early dialogues, and the conclusions of each are brought together in the last three chapters. The first three chapters are like the legs of a stool, not contiguous but still joined together in a greater whole. The last three chapters on the Line, the Cave, and the Good in the Republic are interdependent: the conclusions of the fourth are employed in the fifth, and those of the fourth and fifth in the sixth.

Here is an abstract of the seven parts of the thesis:

Abstract

Chapter I is an examination of three passages in which Socrates discusses skills - with Thrasymachus in the Republic about 'wanting more', the contrast between skill and 'empiric procedure' in the Gorgias, the analysis in the Laches of what a man must know to give good advice. I conclude that Socrates thinks of skill as perfected, as beyond improvement, and that it consists in the fullest understanding of the relations between some set of parts and the good which they combine to effect.
Chapter II compares Socrates' method of argument in part of his discussion with Polemarchus and in his discussion with the slave in the Meno. I conclude that Socrates supposes the two discussions essentially similar, that he thinks both the slave and Polemarchus confused about the proper relations between the terms they employ, and that he believes in a single system of terms, in moral discourse or geometry, which is common to all but variously misunderstood.

Chapter III is an analysis of the discussion about equal sticks and stones in the Phaedo. I argue that equal particulars image the Equals as Simmias' picture does Simmias, and that they fall short in being particulars as well as equal. The chapter continues by examining some difficulties in the theory of recollection, and concludes with a general account of the theory of forms.

The Interlude on Parmenides proposes that in fragments I-VIII Parmenides first illustrates then describes thinking and the experience by which he sees that his thinking is his being and all his thoughts inextricably connected and indivisible.

Chapter IV is about noesis and dianoia on the Line of the Republic. I maintain that the same relations between images and originals hold here as in the Phaedo and that the lower set of intelligible entities on the Line is of visible diagrams. I interpret 'the unhypothesized beginning' as similar to Parmenidean being and noesis as seeing that the
forms are simply intelligibles and make an indivisible whole. The understanding of this single uniform structure of thought, of the proper relations between its parts and the whole, I take to be the descent from 'the unhypothesized beginning'.

Chapter V is about pistis and eikasia on the Line and in the Cave. I propose that eikasia is the ability to predict the sequence of the phenomena called material objects and that pistis is the understanding of the natural kinds which occasion these phenomena. I continue with an examination of Timaeus' intelligible living creatures and conclude by showing how noesis, giaonia, pistis, and eikasia are compatible with a Parmenidean conception of being.

Chapter VI is an analysis of a central passage on the Idea of the Good in Republic VI, and shows how the Good, being, and 'the unhypothesized beginning' are identical. The chapter continues with an account of the Good Craftsman in the Timaeus and his reasons for making intelligent living creatures of all possible kinds. I conclude with a war-story.

All references to the work of Plato and Parmenides are included in the text. They are taken from Burnet's edition of Plato's works published by the Clarendon Press, Oxford, 1954-1957, and from 'Parmenides' by Taran, published by the Princeton University Press, 1965. All other references and some additional remarks may be found at the back, and are indicated in the text by stars. The thesis concludes with a bibliography of works cited.
Since the scheme of this thesis is a little unorthodox, it will perhaps help the reader if I show now how the unconnected first three chapters relate to the last three.

The first chapter examines what Socrates thinks to be a satisfactory account in a skill or science such as medicine, and the kind of knowledge he supposes a doctor must have. I suggest that the Socratic requirements for a skill or science may be satisfied if we suppose him to believe that this kind of knowledge consists in the fullest understanding of the relations between some set of parts and the whole which they combine to form. This theory, I think, underlies most of Socrates' epistemology, re-emerges briefly at the end of the second chapter, is one of two major strands in my account of noesis in the fourth chapter, and appears finally and most clearly in the sixth chapter, in my account of the Good and the good Craftsman.

The second chapter is on the early dialectic. My argument here is that Socrates believes in a structure of thought common to himself and his respondents, though variously misunderstood by them. Socrates himself, I argue, is much better at establishing the relations between the terms of this structure in a consistent manner, but does not believe that his ability counts as true knowledge. Instead, the early discussion with the slave in the Meno, which illustrates that dialectic, is what he later calls dianoia, and this I examine in the fourth chapter. Hence I suppose that the method of the early dialectic is the first stage in the ascent to noesis which is the main theme of the fourth chapter.
The third chapter is on one of the accounts of the theory of forms in the Phaedo. In this passage Socrates is no longer interested in relating a series of terms in the manner of the early dialectic, but instead produces a theory to explain the nature of one such term, equality, in itself and in its relation to equal particulars. The focus of his attention has significantly changed - no longer constructing the same kind of arguments, he now provides an unproven analogue of the relation between a form and a particular to help us to see the nature of an intelligible. Almost the same analogue reappears in his initial account of the Line which I examine in the fourth chapter. And this difference in approach to the terms of our thinking is the beginning of the move from dianoia to noesis.

Note. I do not in this thesis discuss the Socratic problem but talk of Socrates and Plato as expounding a single, consistent, albeit developing, world-view.
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But is not skill itself faultless and pure and right so long as each skill is what it is, exact and whole?

Republic 342 b. 5-6.

A difficult point about skills is made by Socrates in the first book of the Republic. Its baldest statement is: "The good and wise man does not wish to have more than the man like him but only more than the man unlike him and his opposite, but the bad and untaught man wants more than the man like him and the man unlike him." (350 b. 7-8.) The example given is that of the musical man who when tuning his lyre does not 'want more' than a musical man in the tightening and loosening of his strings (349 e.10.). Socrates then says "What of medicine? In eating and drinking would the doctor want more than either a medical man or medical practice?" (350 a.2.).

Socrates must think that skills establish limits in their field of operation and that the man who has a skill, the good and wise man above, recognizes when the limit is reached and does not try to overstep it. But Socrates cannot have thought that all the doctors of his day always agreed on what was the best treatment for every patient. He need only think that in any case of disagreement some or all of the supposed doctors do not have the skill or science.

Some of Socrates' remarks here appear true at first sight. An expert's tuning is not to be bettered, nor does another
expert try. If someone does try then he is obviously not such an expert as he rivals. Experts have not merely heard the best tuning: they also recognize it as the best, and perhaps know how to attain it. Socrates is probably right to think that in the tuning of instruments experts do not compete. But doctors do. Highly qualified doctors often disagree on what is the best treatment in a given case.

Socrates implies that the doctor does not 'want more' than a medical man nor than 'medical practice' (350 a.2.). 'Medical practice' may mean the practice best recommended by the medical science of the day. For some conditions of course there may be several practices all equally well attested and this the doctor would know. If this is what Socrates means, then he is saying that a doctor will not try to improve upon these best procedures, nor to outdo any other doctor who proceeds in the same way. If someone does try to go beyond this limit in his treatment of a patient, then he is not a doctor.

This makes Socrates' remarks about doctors mean something, but what they mean may not be acceptable. Doctors, one would think, are continually trying to improve upon existing treatments, and that is part of being a doctor. There is a difference here between tuning an instrument and prescribing diet. In tuning an instrument what counts as good at any one time does so at any other, but in prescribing diet what counts as good may change as science develops. So, in some tasks the limits of excellence stay the same, in others they change. And where the limits are not fixed, the skilled man we should think does or should 'want more'. 
There is a way out which saves both what I have said and Socrates' good sense. This passage does not make it clear, but I suspect that he presumes here a fixed limit to medicine also. I think that he conceives of medicine not as the science of his day but as completed, as efficient as the musician's tuning of his lyre.

In the Gorgias Socrates has more to say of the knowledge which constitutes a skill, and again he talks of the doctor. He says several times that the man with a skill can give an account of his actions: the doctor can give an account of the nature of his patient and his reasons for treating the patient as he does (465 a.; 501 a.).

Socrates in the Gorgias also talks of 'examining' as necessary to a skill. He uses the past tense. A skill does not examine; it has examined (e.g. 501 a.2.). This may mean that at any given time the doctor is completely in command of the medical science of the day. It may mean that the doctor has completed medical science, is as efficient a doctor as anyone ever can be. The Gorgias shows which of these two Socrates has in mind.

In the Gorgias Socrates contrasts skills and sciences with empiric procedures such as cockery. The empiric procedure is followed without logos, without making calculations or distinctions, by practice and experience, by the memory of what usually happens (501 a. 5-7.). And so its practitioner can give no account of what he does for he has no understanding of how what he does produces the desired end. He knows only that it usually does. So on any particular occasion he
cannot be sure that he will achieve his end, for this occasion may, for all he knows, be an exception to the rule according to which he operates.

This fallibility is suggested by Socrates’ use of the word ‘stochazetai’ (465 a.2.). This word can mean ‘aims at’ or ‘shoots at’ or ‘guesses’, and Socrates is saying that the cook does some or all of these in respect of pleasure. He is like the man with a bow waiting to see if his arrow will reach the target; until then he may not be sure that he has shot aright. This same word, in the form stochasamene, is found at 464 c.6. where it is used of flattery in general, and is carefully contrasted with gnothesi, knowing.

To the extent that any doctor is not sure that his treatment of a patient will be effective he is in the same case as the cook. To prescribe some pill or other on the grounds that it has helped other patients with a similar condition is to operate at the level of an empiric procedure, and not at that of skill or science. If doctors operated at the level of skill or science then they could give just that account of which Socrates speaks. Until then, they aim but do not know. And only then will their practice unfailingly bring about the result proper to their skill. For knowledge, as Socrates often says, always comes up with the goods.*

But what is it then to know? What kind of account or explanation will the doctor be able to give? In the simpler case of a man’s repairing a watch an answer can be found.* Imagine a repairer of watches who is asked to mend a watch. On examining the watch he finds that the main-spring has snapped. He is asked by his customer to estimate how much
the repairs will cost, and so he tests the other parts of the movement to make sure that they are in working order. As a result of this examination he can be sure that all that is required is a new main-spring, and he estimates the cost of the repairs accordingly. So in this simple case we see what 'knowing' in contrast to 'aiming' could be. Suppose that this repairer of watches is asked to explain why he fits a new main-spring. He could answer by giving an exact account of how the watch worked, how the other pieces of the movement work in order, and how an unsnapped main-spring was needed to set the whole in its proper motion.

To understand how a watch works is to realize how its parts contribute to the production of that end for which the watch is made. This realization derives from a knowledge of certain mechanical principles which are seen to apply to the operations of the parts of the watch. A man who knows these principles can determine merely from the description of a watch-movement whether or not it will work. And too a man who does not know the mechanical principles, and how each part affects the others, may be trained to recognize broken or misaligned parts and by replacing them set the watch in order. But he, of course, cannot explain what he is doing in the way that the man who knows the principles can.

It is this way which Socrates describes in the Gorgias when he says of medicine 'It has examined the nature of the patient and the reasons for what it does and has an account to give of each of these.' There is a way of assessing the efficacy of a treatment other than that of 'experience and memory'. That way is to understand how the patient works,
how the treatment works and so how it will affect the patient. The possibility of this way allows us to imagine a doctor whose prescriptions are not hit-and-miss but based on a kind of certainty.

The watch-repairer or doctor who has this kind of knowledge may be said to have reached a constant limit, at least in his understanding of what is wrong in a given case, and perhaps also in his way of dealing with it. The watch-repairer who makes sure that a given watch does not work because its mainspring is broken is not to be improved upon, and in recommending replacement of the mainspring he gives the best advice possible.

In the Laches also Socrates discusses medicine. He says:

If we know that sight when it comes to eyes makes them better and we can also make it come to eyes, then clearly we know what sight is and could advise someone how best and most easily to obtain it. For if we did not know what sight or hearing was, we could hardly be advisers worth the name, nor doctors, as to how anyone may best and most easily obtain hearing or sight (189 e.g. - 190 b.l.).

Let 'a' stand for 'knowing that sight makes eyes better', 'b' for 'being able to make sight come to eyes', 'c' for 'knowing what sight is'; and 'd' for 'being able to advise someone how best and most easily to obtain sight.' Then Socrates claims: first, if a and b then c and d; and second, if not c then not d.

What is knowing what sight is? It may be just to have had the experience of seeing. But on this interpretation it is hard to understand Socrates' second claim: for not knowing the experience of seeing does not obviously prevent one from giving good advice on how to cure blind eyes. For a blind man
could give such advice. My interpretation of the passage from the Gorgias fits this passage in the Laches, and shows what it is to know what sight is.

I argued before that by means of the analogy of the watch-repairer we may understand the peculiar certainty which Socrates attributes to skills and sciences. The analogy also gave some clue to what it would be for a skill or science to be infallible. The watch-repairer knows two things: he knows what the watch is made to do, that is, to tell the time accurately under certain conditions, by a certain disposition of its hands; he also knows how each part in the watch-movement contributes to its overall operation of telling the time accurately.

Likewise the doctor knows two things; first that an eye is the better for seeing; second, how the parts of the eye contribute to its seeing. Knowing both these, he knows what sight is, and he knows it just as well as the watch-repairer knows that a watch is for telling the time and how it works. So one of the two conditions in Socrates' first claim is met.

If $a$ and $b$ then $c$.

Socrates' second claim is that unless one knows what sight is one cannot give advice as to how it may best and most easily be obtained. In the analogy of the watch-repairer I mentioned the man who could change a broken main-spring but did not know what the main-spring did. In English he could be said in some sense to know how to mend a watch, and perhaps too in Greek. But this is not the sense of 'know' which Socrates has in mind. This is clear from the expression 'advisers worth the name' at 190 a.7. I think these words
mean that a man who advises without knowing for certain
that the advice is apt is not properly an adviser. The man
who advises the replacement of the main-spring but who does
not know what it does cannot know for certain that doing
this will make the watch work, and so is not a true adviser.
And so again knowing what sight is would be knowing what the
eye is for, and knowing how it works. If not c then not d.*

But Socrates claims more: knowing that sight is better
for the eye and knowing how to make an eye see entails being
able to advise how best and most easily sight may be obtained.
It is not hard to accept that these first two items of
knowledge as I interpret them would enable one to advise how
to make a blind eye see; but it is not clear that that advice
would be of the best and easiest means. To know one way of
making a blind eye see is not necessarily to know the best,
except in those cases where there is only one way. The
difficulty is removed if we suppose that the advice of which
Socrates speaks is not of the type 'Take this medicine, not that',
but rather of the type 'Realign the lens', advice which specifies
the necessary adjustment, but not necessarily the best or easiest
means of achieving it. If a and b then d.

In these three passages, Socrates talks only of the
reasoning of the skilful, never of their manipulative power.
Explicitly he does not mention physical abilities.* The
skilful know how a number of different parts combine to
effect one function, telling the time, sight, attunement.
They understand the relations between some one and many. This
is the theme of these chapters.
Nonetheless Socrates himself does not in the passages considered talk of parts and wholes. He talks only of the eye and sight, the lyre and attunement. Hence my analogy of the watch-repairer and my interpretation of the doctor's certainty go beyond the immediate evidence. But this interpretation fits — it allows a good sense to Socrates' remarks and enables us to see a kind of certainty in the operations of the skilful. Of course, it may be that another kind of accounting altogether would better fulfil Socrates' demands of a skill, a kind which received a more complete justification from the texts. But this at least is clear that in his more developed expositions of knowledge Socrates is indeed interested in the relations between parts and wholes, as later chapters of this thesis will show.

It is also clear from these passages that Socrates and Plato give a very special value to such terms as 'know', 'doctor', 'adviser'. To qualify for any of these one must have gained a limit, the furthest limit possible in the understanding of the relevant area.

For Socrates and Plato, the craftsman or doctor 'worth the name' is perfected not just in the science of the day but in the science as such. He understands as well as anyone ever may. For this reason words such as 'know' or 'doctor' have in Plato's use a very clear and precise meaning and it is from this clarity and precision that his dialectic receives its strength. And this is the subject of the next chapter.
This study of Socrates' early dialectic begins with an analysis of an argument in the Republic - the argument by which Socrates shows Polemarchus that justice is not harming bad enemies. I have chosen this passage at random: it illustrates well, though no better than most, some essential features of Socrates' method.

Here is a translation of Republic 335 b.2. to d.2.

Socrates  Is it, I said, (the act) of the just man to harm any person at all?

Polemarchus  Certainly, he said. One must harm those who are bad and one's enemies.

Socrates  When harmed, do horses become better or worse?

Polemarchus  Worse.

Socrates  In respect of the goodness of dogs or of horses?

Polemarchus  Horses.

Socrates  And when dogs are harmed they become worse in respect of the goodness of dogs but not of horses, don't they?

Polemarchus  Necessarily.

Socrates  May we not say, friend, that people when harmed become worse in respect of human goodness?

Polemarchus  Certainly.

Socrates  But isn't justice human goodness?

Polemarchus  This too, necessarily.

Socrates  And it must be then, friend, that people who are harmed become less just.

Polemarchus  It seems so.
Socrates: Do then the musical make people unmusical by music?

Polemarchus: Impossible.

Socrates: And do horsemen by horsemanship make them unhorsemanlike?

Polemarchus: No.

Socrates: But, then, do the just by justice make them unjust? Or altogether by goodness do the good make people bad?

Polemarchus: Impossible.

Socrates interprets 'harm' in Polemarchus' account of justice in an unusual way: to harm something is to make it worse in respect of that goodness peculiar to it. So to harm a horse is to make it worse as a horse. In the same way he interprets Polemarchus' claim that justice is, in part, harming one's enemies who are bad: to harm any person is to make him worse as a person. What Polemarchus himself means by 'harm' is not made clear, but it is not likely that he meant it quite as Socrates takes it.

What does Polemarchus mean? How does he think it just to treat one's enemies? By retaliating, by doing them a bad turn, by rendering them less prosperous and less successful, by making them 'worse off', by damaging them in person, property, reputation.*

Hence his emphatic agreement to Socrates' question "Are we not then to say that people, when harmed, become worse in respect of human goodness?" (335 c. 1-2.) What for Polemarchus is human goodness? He may agree to this last phrase in Socrates' question merely because he has agreed to it in the cases of horses and dogs. More probably he thinks of human goodness as precisely that in which the man harmed in his
view is harmed—prosperity, success, reputation, health. Insofar as the person harmed is diminished in these respects he becomes less good, worse in respect of human goodness.

No doubt Socrates would give the same answers to these same questions. But for him these same statements compose a very different picture. For him human goodness is not based on success, prosperity, or power, but is of exactly the same logical type as that of horses and dogs. For these and all other creatures goodness is to do that for which each kind is peculiarly fitted and to harm them is to make them less able to do it. In the human being, the Republic (443 d,5.) tells us, goodness, the appropriate human performance, requires a certain spiritual co-ordination, the proper combination of the proper operations of all the parts of the soul. This co-ordination is justice. To damage a human being is to make him less able to perform appropriately. It must therefore upset the co-ordination. It must therefore make him less just. Hence Socrates' claim: it must be that people who are harmed become less just (335 c. 2-3).

So the argument as far as 335 c.2. presents a spectacle not uncommon in the early dialogues—a series of questions all equally open to two quite different interpretations and all answerable in the same way from two quite different points of view.

After 335 c.2. the course of the argument and the significance of Polemarohus' replies may be understood in several different ways. The crux is Socrates' claim that people who are harmed necessarily become more unjust, and Polemarohus' reply 'It seems so.' For Socrates the claim
makes good sense. But does it for Polemarchus?

For Polemarchus to harm an enemy is to make him less good, less honourable, further from the top. This may in turn render him less a helper of friends and harmer of enemies, and so less just within the terms of Polemarchus' account. And this may be why Polemarchus agrees to Socrates' proposition that those who are harmed become more unjust. But why then does he agree so grudgingly? Again, on this understanding all that Polemarchus needs to do to make his account consistent is to answer 'yes' to Socrates' question 'But by justice can the just make people unjust?' (335 c.14.). And this he does not do. Of course, it may be that he has not understood before that this is an implication.

Another possibility is this: at the back of his mind Polemarchus distinguishes between human goodness and justice. Perhaps he supposes human goodness to consist in power and prestige while to be just is to use that power properly, to help friends and harm enemies. If this is what he thinks then he should not agree to Socrates' question 'But is not justice human goodness?' and to his claim that harmed people become more unjust. For on this view, Polemarchus does not in fact identify justice and human goodness and need not agree that people who become less powerful or prestigious become less disposed to help their friends and harm their enemies. The difficulty with this possibility is that Polemarchus does agree with Socrates on those two points. And they are put to him quite clearly.*

There is a third possible interpretation which is, I think, much closer to the truth. It is based upon the tone of Polemarchus' reply 'It seems so' to Socrates' claim that people who are harmed
become less just. The tone of that reply indicates that Polemarchus agrees because he thinks that his previous agreements force him to agree, but that he is not convinced of the truth of this claim as he is of those that have gone before. Up to this point he has agreed enthusiastically; 'It must be so', 'Certainly'. Then suddenly the emphasis and enthusiasm disappear, and all that he can manage is 'It seems so.'

And why? Because somehow the question is not quite appropriate to his view of the matter. It does not make very good sense. The man who is harmed is harmed in person, property, reputation. What has his being just or unjust to do with it? He has agreed enthusiastically that the man who is harmed becomes less good. What that means to him has already been explained. But his concept of justice, whatever it may be, has no grip here. Given his understanding of harm and his understanding of goodness the two fit fairly well together. But this understanding of harm and his notion of justice hardly fit at all. Hence the subdued reply.

According to the first interpretation there may well be a link in Polemarchus' mind between being harmed and being less just, according to his account of justice. But is this link in Polemarchus' mind? The subdued tone suggests not. Further, since being prosperous and being able to help friends and harm enemies are distinguishable, his agreement that justice is human goodness suggests not.

In his discussion with Socrates, Polemarchus seems to be sure of little more about justice than that it has to do with fitting conduct towards other people. In this argument he commits himself to the following statements about justice:
it is human goodness; by means of it the just do not make others unjust; those who are harmed become less just. To the first two he commits himself with enthusiasm, to the last not so. Together the three strangle his account of justice.

My attempts to explain Polemarchus' commitment to these fatal statements either by deducing them from his account of justice or by supposing some obscurity in Socrates' questions have so far failed. I have suggested that Polemarchus accepts the claim that people who are harmed become less just because he feels that he must, because his previous agreements seem to him to force him to it. I have also suggested that he accepts the claim without enthusiasm because the claim as he understands it offends his sense of the proper use of the term 'justice'. We may explain his commitment to the other two damaging statements thus: he agrees that justice is human goodness because he feels, as do Theognis, as well as Aristotle, that the term 'justice' so used is properly used; likewise he agrees that the just do not through justice make people unjust because his sense of the meaning of these words and the analogues of skills which precede them indicate to him that they are true.*

It must be stressed that these feelings, this sense of propriety, have nothing to do with his account of justice. In contrast to them, his account is artificial, and its consequences in logic easily forgotten. So too he accepts 'a infirmiori' that as the just do not make people unjust, so the good do not make people bad. His sense of the proper usage of the term 'justice' leads him to neglect not only the obligations of his account of justice but even the consequences of his claims about goodness.

This account of Polemarchus' psychology would, I shall argue, be acceptable at least to Socrates. Adkins has a different
view - that Polemarchus' problems arise from his adherence to two antithetical notions of justice - the traditional competitive versus the co-operative modern. Whether Socrates or Adkins is right, whether indeed they cannot both be right, is beyond the scope of this paper. Here I am interested only in elucidating Socrates' understanding of his dialectic. Enough to say here that both Theognis before and Aristotle after likewise claimed that justice and human goodness were identical.

Three aspects of the argument so analysed are worth remarking.

First: Socrates generates the contradiction by proposing what he himself takes to be true. Socrates leads Polemarchus to contradict his claim that justice is helping one's friends who are good and harming one's enemies who are bad by securing Polemarchus' agreement to the following statements: people who are harmed become worse in respect of human goodness; justice is human goodness; people who are harmed become less just; by justice the just do not make others unjust. The foregoing analysis makes clear what each of these statements means for both Polemarchus and Socrates. It shows that each statement interpreted in a certain way, is a recognizable element in the picture of morality which we know to have been Socratic. So Socrates' argument against Polemarchus' account of justice is not ad hominem. Socrates is not interested merely in securing Polemarchus' agreement to statements to which he is himself indifferent or which he himself regards as false.

His way of asking the questions also suggests this for he
asks them in such a way as to indicate what he himself thinks the reply should be. Thus, where he does not make positive statements (e.g. 335 c.6. 'It must be that people who are harmed become less just') he asks questions which expect the answer 'yes' (e.g. 335 c.4. 'But isn’t justice human goodness?').

Socrates generates the contradiction by juxtaposing the original account and what he thinks true. That this is so here suggests that it may be so throughout the early dialectic. And so also does the discussion with the slave in the Meno, which I examine later. It is remarkable that Robinson has nothing to say on this matter. Robinson writes 'The Socratic elenchus is a very personal affair.' And later in the same paragraph 'The art of elenchus is to find premises believes by the answerer, and yet entailing the contrary of his thesis.'

There are other passages in Robinson which contradict my analysis of Socrates' discussion with Polemarchus. For example, 'In fact the impression vaguely given by the early dialogues as a whole is that Socrates thinks that there is no truth whatsoever about \( x \) that can be known before we know what \( x \) is.' He quotes the last lines of the first book of the Republic (354 c.) where Socrates says 'For when I do not know what justice is I shall scarcely know whether it is a virtue or not or whether he that possesses it is unhappy or happy.' This Socrates says after constructing an argument with Thrasyvachus which shows that the just soul is happy, and after using the premiss that justice is human goodness in his discussion with Polemarchus. (354 c.4. and 335 c.4.)

It looks then as though Robinson is right and I am wrong, but I do not think so. As my first chapter indicates,'knowing'
for Socrates is a very strong word. For Socrates, to know that what he says about justice is true requires that he knows what justice itself is. But that does not entail that he is in no way committed to the many claims about justice by which he generates his refutations. In fact there are many reasons for supposing that he is committed to those claims: their internal coherence; their consistency with what he has to say about virtue in the Republic; their constant reiteration to people of widely differing views. And, as I shall show, the model of the dialectic in the Meno is no model if Socrates does not believe these claims to be true. These claims and his understanding of them do not, for him, have the status of full knowledge. But that does not entail that he does not think them true. To anticipate chapters to come, we may say that Socrates in the earlier dialectic is doing what geometers do, operating at the level of dianoia, the second of the four stages of cognition on the line of book VI of the Republic.

Second: each of Socrates' words has a mathematical precision. Socrates introduces to the argument four statements by means of which he generates the contradiction. Of the several terms which constitute these statements, one at least is for Socrates to be defined in terms of another: or, in our language, his use of the term 'harm' is logically dependent on his use of the term 'goodness'. This logical connection gives to his argument clarity and strength; his claim that whatever is harmed becomes worse in respect of its peculiar goodness is very clear. The next premiss 'justice is human goodness' has the same clarity and strength. It is definitive. Each of these moves has the precision of a
mathematical proof. This aspect of his dialectical method Socrates perhaps refers to in the Gorgias (509a-1.) when he claims that his arguments are fastened with reasons of steel and adamant.

Socrates' use of language is in this way very systematic. On the hypothesis above, that Socrates generates every or almost every elenchus by introducing premises which he himself thinks true, it would be possible to abstract from the early dialogues a series of propositions all thought true by Socrates. These propositions could then be arranged in accordance with their relations to each other. I would argue that for Socrates and Plato they must form a single unified and consistent system.

Third: a question: what is the relation between Socrates' and Polemarchus' use of language? All but one of the statements which constitute the argument are acceptable to both Socrates and Polemarchus. The exception is, of course, Polemarchus' original claim that justice is helping friends and harming enemies, which Socrates does not accept. For the most part Socrates uses his terms in the same way as Polemarchus, though there are two, 'harm' and 'human goodness', for which his usage sometimes differs. But even granted this difference it is clear that Polemarchus cannot hold consistently both his claim and all the statements, as he interprets them, which Socrates puts to him. There is no false move, the argument is valid, and Polemarchus fairly caught. Socrates on the other hand is very sure, very systematic, unlikely to relate his terms to each other in
such a way as to generate inconsistencies. This is a second and more important respect in which Socrates differs from Polemarchus in his use of language. Socrates moves carefully through the network of his words; Polemarchus does not.

Polemarchus, I suggest, agrees to some of the damaging propositions put to him by Socrates because he feels he must, because his sense of the proper use of language compels him. This suggests that his view of the relations between these terms, the net-work with which he operates, is in some ways identical to the net-work with which Socrates operates. It may even be that the difference between Socrates and Polemarchus is not so much a difference between their respective net-works but instead a difference in their use and understanding of the same net-work. This is Socrates' view of the matter. For it is an essential presupposition of that image of the early dialectic which is his conversation with the slave-boy.

Thompson writes of the Meno 'The dialogue with the slave is a perfect model of the Socratic process. It copies on a small scale the discussion with Meno himself.'* It must be such a model. Meno says (80 d. 5-8.):

And how will you look for it (goodness), Socrates, when you don't have the least knowledge of what it is? How can you set up something you don't know as the goal of your search? And even if you should actually encounter it how will you know that this is what you do not know?

Socrates' answer to the last two of these three questions is the theory of recollection. His answer to the first - how the search is to be conducted - is of course his dialectic. His discussion with the slave must therefore demonstrate
recollection and that his method of question and answer effects that recollection.

The discussion with the slave is a long one; here an extract will be enough. (82 e.13 - 83 c.2.)

Socrates Tell me: you say that the double area comes from the double line? I mean an area like this, not long in one direction and short in another, but it is to be equal in all directions like this one, only twice as big, an eight-foot figure. Do you still think it comes from the double line?

Slave-boy Yes.

Socrates Surely we'll get a line double this one, if we add another the same length from this point?

Slave-boy Certainly.

Socrates Now you say we get the eight-foot figure from this line if we have four such lines?

Slave-boy Yes.

Socrates Let's draw them in. Isn't it just this that you say is the eight-foot figure?

Slave-boy Certainly.

Socrates Surely in this area there are four areas each of which is equal to the four-foot figure?

Slave-boy Yes.

Socrates How big is it then? Is it not four times as big?

Slave-boy Of course.

Socrates Then is double this four times this?

Slave-boy Heavens, no.

Socrates How many times bigger is it?

Slave-boy Four times.

Socrates From the double line there comes a figure not twice but four times as big.

Slave-boy You're right.

The three features remarked in Socrates' discussion with Polemarchus are reproduced in this part of his discussion with the slave.
First: Socrates demonstrates to the slave that he is wrong to claim that doubling the side of the figure doubles an area by eliciting his agreement to a series of statements which Socrates thinks true and which eventually force the slave to contradict his claim. As has often been remarked, Socrates' questions begin with the Greek equivalents of 'Surely' or 'Wont it be the case that ...' (e.g. 83 b.3, 83 b.5). His questions indicate how he thinks they should be answered. Exactly the same technique has been noted in his discussion with Polemarchus. It is clear that Socrates leads the slave to contradict his original claim by making him agree to a series of statements which he, Socrates, thinks to be true. And this, of course, is the way that geometry is always taught. No master demonstrates to his pupil his pupil's mistake by showing him that it is incompatible with some other mistake that he has made.

Socrates' discussion with the slave is intended to convince Meno of the virtue of dialectic. In this discussion Meno, an educated man, has a good idea of which statements are true and which false. (e.g. 82 e.5.) And he knows that Socrates has the same. Meno can see therefore that Socrates leads the slave into self-contradiction by making him agree to statements which Socrates thinks true. It is precisely Socrates' understanding of geometry that enables him to refute the slave, and Meno must see this. So for the demonstration of the value of dialectic to the pursuit of goodness Meno must either grant Socrates a similar understanding of the language of goodness, or fail to notice a massive discrepancy between model and original.
In the Charmides (165 b.5-7.) Socrates says  'You treat me as if I professed to know the matter I ask about ... On the contrary I enquire into the proposition along with you because I do not know.' Robinson however remarks of all such disclaimers 'The denial that he is conducting an elenchus is insincere.' But the interpretation of dialectic given in this chapter allows for Socrates to be speaking the truth when he disclaims any intention to refute. For if the dialectic consists in the study and understanding of the relations between the terms of the moral vocabulary, it is quite possible to begin such a study from the terms of a given account and not know until the study is complete whether the account relates those terms consistently; to know whether the account is right or wrong, one has to work it out, just as in geometry the proof or disproof of a proposition may require time and scribbling.

Second: In Socrates' discussion with Polemarchus it was remarked that the use of some forms depended upon the use of others ('harm' on 'goodness'), that some of the propositions were definitive ('Justice is human goodness'), and that in consequence the argument was precise and systematic. And so here with the slave. At 83 a.4-6. Socrates asks 'Surely the line is doubled if we add here another of the same length?' and at 83 b.1-2. 'Let us construct four equal lines. Isn't this what you call the eight foot figures?' First Socrates moves from the single line to the double then from four equal lines to the square. This is somewhat similar to his move from 'harm' to 'goodness' with Polemarchus. At 83 b.6, there is a parallel to the proposition 'Justice is human
goodness' in the denial of the falsehood 'Is double the same as four times?'

Again, the geometrical model makes very clear certain aspects of the dialectic. Meno at least will understand how some terms in geometry depend logically upon others or are mutually interdependent, and he will see, if dimly, that the precision and clarity of Socrates' arguments depends on this. But the drawing of the figures illustrates those relations in a quite new way. Each new line and figure derives from the ones which have preceded it and must so be understood. In parallel the verbal refutation of the slave constitutes a logical progression.

Add a line equal in length to a given line to construct a line double the length of the given line; construct on this new line three other lines equal in length to this new line; is the square so constructed the eight-foot square, the square double in area to the square constructed on the given line?

To harm something makes it worse in respect of its peculiar goodness. To harm people makes them worse in respect of human goodness. Justice is human goodness. To harm people makes them less just. Do the just make people less just?

Third: Socrates constructs the square which the slave suggests and they find that it is not the square required; Socrates explicates Polemarchus' account of justice and they find that it is not the account required. In each case Socrates asks a number of simple questions about the terms of the original account and the sum of the answers to these questions contradicts the account. In both cases those small
or secondary questions as Robinson calls them are of the type 'Is this what you mean when you say ....?' In each case Socrates takes the account seriously and then proceeds to see what it involves both for his respondent and for himself. He exposes carefully and clearly the presumptions and consequences implicit for both of them in the terms of the original account. He unpicks a complex weaving, examines each thread intimately with his respondent, and then asks again whether the original weaving was properly woven.

How could it have been otherwise? Certainly Socrates' secondary questions are in no way complex or difficult to answer and afford his respondents no new insight, and yet their sum is the contradiction of the original account. Their simplicity is no doubt what leads Socrates to call his technique not teaching, but eliciting or reminding. The original question, the primary question, as Robinson calls it, 'What is justice?' or 'How do we construct a square, twice the size of a given square?' is always far more difficult and perplexing than the secondary questions which come after it. Accordingly the primary answers are almost always wrong and the secondary answers likewise right. Each primary answer is explicated by means of a number of secondary questions, and it is precisely this - the art of explicating primary answers by means of secondary questions - which constitutes the art of dialectic as practised by Socrates in the early dialogues.

Given then that it is so easy to see that some answer to the primary question is the wrong one, whence the wrong answers? The slave's wrong answer has a certain commonsense -
'For a square twice as big, twice the base line.' It is plausible, rapid, unconsidered. The slave has not examined carefully the exact relations between base-line and the area of a square. Socrates then makes him do so, taking him step by step through the proposed construction. 'Watch him recollecting in order as one should recollect' Socrates tells Meno (82 e·12.). The slave leapt without looking. Now he is made to walk the distance and finds his leap misplaced.

Do Polemarchus and the slave fall into the same pit? The slave misconstrues the terms under discussion, but does Polemarchus? The slave's mistake springs from a risible commonsense: he does not propound an elaborate counter-theory to Socrates'. But Polemarchus does, and so even more does Thrasy-machus. Polemarchus does not fall because he misconstrues: he merely has different opinions from Socrates on what counts as harm, goodness, justice, and then fails to observe the logical consequences of these opinions. So at least we would say.

But Socrates would not. His use of geometry to demonstrate his dialectic demonstrates that he thinks Polemarchus and the slave in the same case exactly. Socrates shows in his argument with Polemarchus just how closely they agree on the criteria for the disputed terms and then uses that agreement to upset those opinions wherein Polemarchus disagrees. In this context the Socratic method of argument from analogy is interesting: for this method first
establishes those cases to which Socrates and his respondent agree on the application of a rule, and then applies that rule and the weight of their agreement to the case where they may disagree.

Socrates would not admit the possibility of a genuine difference of opinion. He would not allow that someone just might have a different but equally secure moral frame-work of his own, any more than the Greeks would allow that there could be two different but equally valid geometries. Instead Socrates believes that the respondent who disagrees does so only by doing violence to the common structure of thought which they both share, and can always be shown his mistake by being reminded of other relations within that structure which conflict with his position, however radically they may appear to differ. Like the doctor, the dialectician discovers a maladjustment in his respondent's understanding of that structure and then realigns the maladjusted parts with those which they both agree to be in place. And as with the structure of eye and ear, this structure of thought has a certain good, a function like seeing or hearing, without knowing which one cannot understand it. But before coming to that, we must first look at the theory of forms.
This chapter is the third of the three unconnected studies which are the first half of this thesis. Its subject is the theory of forms as expounded by Socrates in the Phaedo from 73 c.1. to 77 a.5. Its purpose, as with the first two chapters, is to provide some preliminary conclusions essential to the understanding of Plato's vision of the overall structure of human thought. This vision is the subject of the last three chapters.

The chapter starts from a recent paper by Gosling on recollection in the Phaedo: first, a summary of the article and where I agree with it; second, where I disagree and an extended analysis of the passage in the Phaedo; third, an attempt to understand this theory of recollection as an answer to some problems of cognition and to defend it against some common and obvious attacks.

In his article Gosling argues against a very common interpretation of the difference between the Equals themselves and the equal sticks and stones: that the equal sticks and stones are not properly or perfectly equal, while the Equals themselves are. This very common interpretation turns on the meaning of Socrates' question from 74 b.7 to b.9. 'Do not equal sticks and stones sometimes, though the same, appear equal in one respect, but unequal in another?'.

So, at least, the traditional interpretation. Against this, Gosling makes the following points:
(1) The question which Socrates asks from 74 b.7 to b.9 merely suggests either that sticks said to be equal to one thing also seem clearly unequal to others, or that sticks that seem equal to one person seem unequal to another. Neither of these amounts to saying that any stick is imperfectly equal to another or that it strives to be equal but fails. *

(2) If Plato has only one view of resemblance and failure in it for both objects which resemble forms and pictures which resemble people, then since objects always fall short of forms, pictures must always fall short of people in that very respect in which they are like them; but this commits Socrates to the sweeping and absurd assertion that pictures are never accurate likenesses of what they picture; further Socrates will now be arguing that seeing that a picture falls short of what it pictures in this sense is a necessary condition of recognizing the picture at all, which is obviously not true. *

With these two points I agree. Gosling makes two points with which I disagree:

(1) 'When in 74 d-e it is agreed that we recognize that the equal things do fall short in their resemblance, in their effort to be just like the Equal itself, there is no reason why we should, no indication of what this failing is. This is because the failing has already been given and admitted as obvious and there is no point in repeating it two or three lines later.' ** Hence Gosling supposes that Socrates intends his audience to think that the equal sticks fall short of the Equals themselves either in that sticks said to be equal to one thing also seem clearly unequal to others or in that sticks
that seem equal to one person seem unequal to another, neither of these being true of the Equals themselves.

(2) '... when the discussion moves on to the question of being reminded by similars the examples are pictures. This is doubtless primarily to condition us into thinking of things as having quite a different status from forms: the main point could have been made just as well with an example of members of a family.'

Against these two points I have no knock-down arguments. Nonetheless I am sure that they are both wrong. To show how, I must give a more extended exposition of this passage in the Phaedo, especially in respect of its structure, which provides a key to the role of each step in the argument.

The general points made in the preliminary exposition from 73 c.1. to 74 c.8. are here numbered a1, a2, a3, etc. The parallel points, the application of the general to the case of equal things and the Equals themselves, are here numbered b1, b2, b3, etc.

a1) 'If someone is to be reminded of something, he must have known it at some time before.' (73 c.1-2.)

a2) 'If someone who has seen or heard or in some other way perceived something knows not only that something but also thinks of another thing, the knowledge of which is not the same but different, he is reminded of that of which he thinks.' (73 c.6-10.)

Here Socrates gives an example, the example of the lover reminded of his beloved by his beloved's lyre (73 d.5-9.). The satisfaction of this condition alone establishes a case as one
of being reminded (73 d.8. 'This is being reminded').

a3) 'The most extreme case of being reminded is being reminded of things which one has not encountered for some time and so forgotten.' (73 e.1-2.)

a4) 'One can be reminded of Simmias by a drawing of Simmias (lit. 'Simmias drawn'). Thus one can be reminded by objects both like and unlike that of which one is reminded.' (73 e.9.ff.) It is important to note here that 'when the discussion moves on to the question of being reminded by similars the examples are pictures.' All the other examples which Socrates gives of being reminded seem to be examples of being reminded through associations.

a5) 'In any case of being reminded by 'likes', one must realize that what reminds one falls short of that of which it reminds one.' (74 a.5-7.)

b1) 'If someone is reminded of the Equals themselves he must previously have known the Equals themselves.' b1 is stated at 75 b.4-6.

b2) Socrates demonstrates the applicability of a2 to the equals from 74 a.9. to c.10. Socrates tries to show that our knowing equal things does not account for our knowing the Equal itself. Socrates states the general form of this proposition as a condition for being reminded at 73 c.4 - d.1. At 73 d.3-9. he gives an example: to know a lyre is not to know a man, and so if a lover on seeing a lyre of his beloved thinks of his beloved he must already have knowledge of the boy before seeing the lyre. His seeing the lyre
and his taking the form of his beloved in his mind's eye are contrasted. Since the form of his beloved is not the lyre nor a part of it, knowledge of the former may never be derived from knowledge of the latter. This is obvious, but in the case where one of the objects of knowledge is a likeness of the other, as are equal things of the Equal itself, it is not so obvious that a knowledge of the second cannot be derived from a knowledge of the first. The passage from 74 a.10-c.9 is an attempt to prove this unobvious point in the case of the equals and it is a point which is vital to Socrates' argument. It is not 'almost an aside' as Gosling thinks it is.* Socrates must show, not that equal things differ from the Equal itself, but that a knowledge of the Equal itself cannot be derived from knowledge of equal things.

If this is Socrates' aim, Gosling's first interpretation of 74 b.7, is the one more likely to say what Socrates meant. For his second interpretation is not obviously to the point. The fact that some equal sticks appear unequal to some people is not an obvious barrier to a man's deriving his knowledge of the Equal itself from them. On the first interpretation 74 b.7, refers to single objects, all of which are unequal to some things if equal to others. Socrates is arguing that from the mere perception of single objects nobody may derive a knowledge of the Equal itself, since all single objects in their relations to other objects are no more equal than unequal.*

Simmias admits this reasoning. So this argument demonstrates to his satisfaction that the case of the equals satisfies the condition specified in a2. The satisfaction of
this condition establishes any case as a case of being reminded. Hence the argument establishes the case of the equals as a case of being reminded. And so Socrates insists immediately after at 74 c.13-d.2 'It must be a case of being reminded.'  

b3) 'Being reminded by equal objects of the Equals themselves is an extreme case of being reminded, a case of being reminded of those things which one has not encountered for some time and so forgotten.' b3 is claimed by Socrates at 75 e.2-7.  

b4) 'To be reminded of the Equals themselves by equal objects is to be reminded by likes.' This claim is never made in quite this way, but is an element in Socrates' statements at 74 e.3., 75 a.2., 75 b.1. etc.  

b5) Socrates asks at 74 d.5-7 'Do they (the equal sticks) appear to us to be equal, in the same way as the Equal itself? Do they or do they not fall short in some respect of being such as is the Equal itself?' Precisely what has Socrates in mind when he asks this question and what Simmias when he replies emphatically 'They fall short by a long way'?  

It is important to note that Socrates and Simmias in establishing proposition b5 of my analysis are not talking of any difference between equal objects and the Equals themselves; they are talking about a single psychic event which occurs at a particular time under certain special circumstances. This psychic event is the realization of a difference or differences between equal objects and the Equals themselves. The problem is what difference or differences?  

There is an oddity about both of Goslings' interpretations of 74 b.7. If they specify this respect in which equal objects
fall short of the Equal itself, as Gosling thinks they do. Socrates and Simmias agree that when they see equal things they realize that the equal things try but fall short of the Equal itself (74 d7 - f3). According to Gosling, then, when Socrates and Simmias see equal things they think either 'These things are equal to some things and unequal to others', or 'These things are equal for some people and unequal for others'.

Now speaking for myself, I can say that neither of these thoughts comes to mind every time I see things as equal. Of course it may be that I just differ from Socrates and Simmias in this respect. It may also be that since the realization that equal things fall short of the Equal itself is so obviously not a part of our ordinary experience, it does not matter if our interpretation of that realization does not make it commonplace. But Gosling himself objects to the traditional interpretation that it makes Socrates argue that every time we recognize a picture we do something which we clearly do not do — judge how good a likeness it is. But his own account falls to the same objection.

Again, 'falling short' has already been mentioned in the preliminary exposition. There it is a feature of the case of being reminded of Simmias by his picture. Simmias agrees that in such a case one must see that the picture falls short of its original. How? Presumably in that it is just a picture, a two-dimensional, static, canvas-backed representation hanging on a wall. This difference is quite unlike the differences which, according to Gosling, Socrates and Simmias think that one must realize in the case of the equals. For in the
case of the pictures there can be no equivalent to the differences between the Equals themselves and the equal objects mentioned from 74 b.7 to c.5, for those differences depends on the opposites, equal and unequal, to which there is no analogue in the case of the picture.

Another point against Gosling's interpretation of proposition b5 is one that he himself makes when he points out that on his interpretation 'the main point could have been made just as well with the members of a family.' Hence Socrates has no better reason for using the picture analogue than 'to condition us into thinking of things as having quite a different status from forms.'

So the cost of Gosling's interpretation of b5 is that it misses some of the sense of the text, it makes Socrates and Simmias claim something very strange, it breaks the parallel between the equals and Simmias and his picture at one of the points where Socrates seems to maintain it, it renders elements of the picture analogue redundant and makes the motive for its introduction suspect. There is a less expensive interpretation of proposition b5 for which there is also some warrant in the text.

There are several ways in which Simmias' picture may be seen to differ from the original of which it serves as a reminder: it is two-dimensional, static, paint and canvas; its original is three-dimensional, animate, flesh and bone. Picture and original, each has properties which the other does not. Socrates does not in this argument use the expression 'Simmias' picture.' Instead he says 'Simmias drawn'. This suggests that
to see Simmias' picture is in a sense to see Simmias, but it is also to see lines, paint, and canvas. To see Simmias' picture and realize it is to realize that one is seeing the lines, paint, canvas, which support the appearance of Simmias. We think of a picture and its original as two visible objects mostly independent of each other. But 'Simmias drawn' makes another distinction - not between Simmias and his picture, but between Simmias in the flesh and Simmias on paper. A common 'form' expressed in different modes.

In the case of the picture, the difference which one must realize between what reminds one and of what it reminds one may be expressed as the difference between Simmias himself, just Simmias, and Simmias drawn, Simmias on canvas. And, of course, this way of expressing the difference employs Plato's famous idiomastic language of the forms, the x itself by itself, language used throughout this argument in the Phaedo. Hence the respect in which equal stick's must be seen to fall short of the Equals themselves or of the Equal itself may be merely this, that they are seen to be stick too, just as the picture of Simmias is also paint and canvas.

Equal things fall short of the Equal itself because as well as being equal, they are 'mortal trash', in Socrates' phrase from the Symposium (211 e.3). Anyone who sees them must see that they are not just equal, that is, not that something which is the Equal itself. I am not saying that every time I see things as equal I think to myself 'These things are like the Equal itself but fall short of it in such and such way' any more than that every time I recognize a picture of a friend
I rapidly enumerate all the differences between picture and friend. But there is a more or less unconscious realization there, which must be there if I am not to mistake the picture for the friend. This realization is of those differences which I have described in my account of its 'falling short'. But so rapid usually is the process of this realization that it cannot easily be put in the form of propositions.

On this interpretation, apart from the simplicity of its psychology of 'falling short', there is no need to sacrifice an essential feature of the theory of forms as it is expounded in Plato's work: that forms are to their instances as originals to their images.

Socrates, we may feel, should show that those analytic and psychic features which are essential to a case of being reminded are to be found in the case of our perceiving equal things. But this he does not show. He argues only for the appropriateness of one of the essential features to the case of perceiving equal things – that the knowledge of the Equals is not to be derived from a knowledge of equal things. At this stage of the argument at least, he has not shown even that when I perceive equal things I think of the Equals. Nor does he show it. He merely asks Simmias whether it is from the equal things that Simmias has taken his knowledge of the Equal. (74 c.7-9.) Simmias immediately agrees that he has.

This lack of argument has some dramatic justification in that Socrates' audience requires not a proof but a reminder. And so the course of the exposition is not so much a reasoned proof of each stage of a complicated argument, as the proposing
and accepting of the correspondences between the points of the general theory of recollection and the case of perceiving equal things. A 3 and a 4 for example are never shown to be appropriate to the case of perceiving equal things, though they are often assumed by Socrates to be so. In the course of the exposition a 1 and a 5, the 'falling short' condition, are immediately accepted as appropriate by Simmias. Socrates only has to ask.

So this exposition of the theory of recollection is more like Socrates' account of the correspondences between the Sun and the Good in the Republic. It is not at all like a proof.

I will now ignore the structure of the Phaedo argument, and examine instead Socrates' understanding of how we come to see things as equal. I am more interested here in Socrates' theory than in his arguments for it. In fact, as I have suggested, this passage in the Phaedo is not much of an argument. It is more like a list of correspondences between 'being reminded' and 'seeing equal things'. These correspondences are accepted by Simmias without much discussion, and the theory thus developed is shown to yield the required conclusion - that the soul existed before birth. But the argument is not convincing to anyone who does not accept many other Socratic theories. The argumentation is ad hominem, in that it relies upon a wide and unusual agreement between questioner and respondent. Hence the argument will not be understood merely by examining its logic; to understand it we must try to see what in the process of seeing things as equal could possibly
correspond to the process of being reminded.

Socrates proposes that when someone sees the equal sticks and stones he is reminded of the Equal itself and realizes that the equal sticks and stones fall short of the Equal itself. Therefore, he suggests, we must have known the Equal itself before that time when we first saw that equal objects fell short of the Equal itself. (74 e.9 – 75 a.3.) This may be paraphrased by 'Whenever someone sees some objects as equal, he is reminded of the Equal itself, and realizes that those objects differ from the Equal itself in not having properties which the Equal itself does have and vice versa.'

So far the only component of original statement and paraphrase which is readily acceptable is that people do see objects as equal.

Unlike Simmias I have no views about the Equal itself. So I shall work from the picture analogy. Suppose then that I agree that if someone is reminded of something by something else then he must have known the thing of which he is reminded before being so reminded; that people see some things as pictures of Simmias, that a picture of Simmias is always seen to fall short when it serves as a reminder of Simmias himself; and that there is someone who is Simmias. Suppose that I accept Socrates' model of recollection in its most general statement from 73 c.1 to 74 a.7. Must I agree that anyone who recognizes a picture of Simmias must have known Simmias himself first?

The obvious counter-example is recognizing a picture of a film-star without ever having met the film-star. This can be
done by people who have seen other pictures of the film-star and who see a likeness between this picture and those others. I am not interested here in how they come to know the name of the person pictured. In these cases they do not recognize the picture as being of someone whom they have met, but only that it is a picture of the same person of whom they have seen those other pictures. But they can be as sure of this as they are that some picture is the picture of their closest friend. And so we may reply to Socrates 'Certainly one way in which I come to be able to recognize a picture of Simmias is through meeting Simmias himself. But, as described above, there are other ways which do not require that I meet him. And so with equal sticks and stones. I have seen many equal things and from them have constructed a notion of equality and the forms that it may take, and I have never met the Equal itself, whatever that may be'. And so Bluck in his commentary 'Probably most people nowadays, if asked where we get such conceptions as perfect equality or perfect straightness from, would reply that they are derived by a process of 'abstraction' by comparison of a series of particular instances.'

Here is another difficulty. Seeing a picture of Simmias as a picture of Simmias does not involve any visual perception over and above those had by someone who does not recognize the picture as being of Simmias at all. This is also true of seeing equal things as equal. Someone may or may not; and if at the time he does not, he may later recall them as equal. But if seeing objects as equal involves no visual perception other than those of just seeing them, what tells me that they are equal?
If I ask the same question of my seeing the picture as a picture of Simmias I answer 'The picture jogs my memory in some way' and then I can point to the eyes or the expression of the man in the picture and say 'They are just like Simmias'. But this only after I have recognized whose picture it is. I may use the phrase 'to construe the features of the man in the picture as the features of Simmias' to describe part of the process of being reminded. It is as though I read a memory into the picture. But not uncritically, for I can stop and ask myself 'Does the picture in fact bear the imposition?' Some pictures, a good forged passport photograph for example, can bear several different impositions - 'It's got a look of all sorts of people'.

Recognizing the picture is seeing it in a certain way and so also with seeing objects as equal. In recognizing the picture I impose a memory upon it, but to this I can introspect no equivalent in seeing objects as equal. I compare the objects carefully to one another, but I cannot find in myself any further item which I use to examine whether or not they are equal. The theory of recollection is most strange to us for our not thinking of equality as an object known at all. To see two objects as equal I compare them and see that in some or all dimensions they are alike. This is quite unlike recognizing a picture of Simmias. Here an additional factor, my memory of Simmias is also at work. But Socrates often talks of the forms as like the things we see and our knowledge of them knowledge by acquaintance.* This is the sense of episteme throughout the argument. It is so used even of the lyre and the
man in the preliminary examples. (73 d.2.)

These two objections to the theory of recollection are answerable. And those who, like Bluck, suppose that Plato means, more or less, the 'abstract concept of Equality' when he talks of Equality or the Equal itself, are, I think, mistaken.

How do I acquire the ability to see objects as equal? For Plato this ability is closely linked to being reminded of the Equal itself. This is a necessary and prior condition. To those who say that we derive our concept of Equality by abstraction from the observing of a series of many equal things, Plato may reply 'That may be so but the Equality of which I am talking must come to mind before we can see anything as equal. We cannot learn of this equality from contemplating equal things for our knowing it is already part of our seeing them so'.

Two questions: why can I not learn to see things as equal from looking at things? And why if I cannot, is acquaintance with the Equal itself and its recollection the correct explanation of my ability?

The answer to both questions is given by the distinction between the Equal itself and the equal sticks and stones which Socrates makes from 74 b.7 to c.5. Every set of equal objects which a teacher of equality may present to his pupil is also a set of unequal objects, of which he cannot point to that feature which is just their being equal to each other. The teacher cannot direct the attention of his pupil to that feature, for it is no more a feature of these single objects than is its opposite. How then does the pupil ever learn to see things as equal?
Seeing objects in the world is not by itself sufficient for seeing them as equal. We can imagine a man who has never seen things as equal in the world. Just seeing things which need not be seen as equal is not sufficient for our seeing them as equal. But perceiving things that cannot be perceived without being perceived as equal is sufficient for our perceiving them as equal. And this I think is the distinctive feature of the Equals themselves. If we perceive them at all we must perceive them as equal for that is all that is to be perceived. And once the knack has been acquired, we may repeat the process indefinitely even in those cases where we need not. The perception of the Equals themselves enables us to see other things as equal.

To return to the case of the man who recognizes the film-star's picture but who has never seen the film-star in person. I have argued that to recognize is to be reminded and to be reminded is already to know. What does the man who recognizes the pictures of the film-star already know? If he had no other knowledge of people or of himself, but had been confined just to pictures of them, he would know neither that these were pictures of a person nor that they were pictures at all. To see for himself that they were pictures of a man he must know how a man looks. Otherwise the picture would seem no more than an item of strange graphic design, and not a picture of anything at all. But knowing how men look he can infer just from the picture of a particular man how that man looks. And when he recognizes other pictures of that man, the image which he imposes on those pictures is the constructed image of that
man, not of a picture of the man. And so he always sees that the pictures fall short.

The film-star is a member of a class all of whose members share or copy the characteristic 'being a man'. And that characteristic is such that we may know it without knowing all the members of the class. But the Equal itself is more like 'being a man' and not like the film-star. The Equal itself is that characteristic which is shared or copied by all members of the class of equal objects. The film-star is not just a film-star, but also a man. But the Equal itself is just the Equal itself. Another phrase which Plato uses is the Equal itself by itself. But if it is just equal, it can have no characteristic in common with anything other than itself through perceiving which and seeing the images of the Equal itself in the world I may construct an accurate idea of the Equal itself. For the Equal itself is terminal; by definition it can only belong to the class of equal objects and it cannot belong to any other class whose characteristic features it shares. But Simmias belongs both to the class of 'Simmias objects' (himself and his images) and to the class Man. And so we may abstract an idea of him just from his pictures.

Socrates explains to his disciples that our knowledge of the Equal itself is recalled every time we see things as equal, and that this knowledge is not acquired in this life but is somehow constantly with us. The task of the philosopher is to fix his mind on and understand forms such as the Equal itself. Plato is trying to make clear to our conscious minds those
processes of our thinking of which we are but partially conscious.

These processes are continuous. They are operative throughout all our lives and thoughts. But they are not clearly understood by us because they operate somehow in an area to which we do not give our attention. They are not themselves visible but they effect our understanding of what we see — the understanding without which we cannot think or speak about what we see. To furnish any thought, to see anything, we must use such categories as one and many, same and different, equal and unequal. The forms are constantly operative in our thinking, even though what we see may so preoccupy us that we pay no attention to them. It is their constancy that qualifies them to be 'the (things) that are being', to translate the Platonic phrase usually translated 'the real things'. This substantive use of the present participle of the verb 'to be' conveys the presence and constancy of the forms to our minds. So present and constant are they that we may fix our intellectual eye on them as long as we wish.*

In this they compare strangely with the rapidly changing world through which we move. And so we may have unchanging knowledge of them for what we discover to be true of them now will be true of them always. They are the unalterable elements of our thinking. The sights and sounds around us change but the forms are forever the same.

We know and we do not know. We have crossed a stream which divides the kingdom of our minds in two and we have forgotten
the other side. The forms are there but we do not see them. Perhaps it is because they are so familiar to us that we do not notice them. Plato thought that everybody in the world already knew what was to be known: what they needed was the way to knowing that they knew.*

The recollection of the Phaedo is different from that of the Meno discussed in the last chapter. There what was at issue was the recollecting of the relations between the terms of dialectic and geometry; here the recollecting of what these terms are in themselves, their relation to the visible world, and their peculiar attributes. Hence the Phaedo marks an important stage in the transition not of Plato's subject but of his focus. And the two kinds of recollection work in harness: we must begin our study of forms by studying their interrelations without knowing what they are; we cannot complete our study without the knowledge of what they are, which enables us to understand better how they inter-relate; knowledge of both is necessary to an understanding of the whole and of the good they combine to form.

But this passage from the Phaedo is more than this. It is not a proof of immortality. As I have said, it hardly constitutes an argument at all. But it is perhaps a demonstration of immortality. It is the practical demonstration of an understanding of the processes of human thought, which convinces its exponent at least that there is that of him wherein he does not change. This conviction allows him to await his appointed death in calm. By fixing his mind upon the forms he prepares for the experience which he expects after his death and ensures that his transition will be as easy as may be.
INTERLUDE

This interlude is called so because it is about Parmenides in a thesis on Plato. I make sense of Plato only by seeing him through Parmenides, by reading Parmenides' 'Way of Truth' into Line and Cave and Good. These are the titles of the last three chapters and in Plato's phrase (Rep. 511 b.8.) they 'hold onto' a peculiar conception of being, shared by Plato and by Parmenides before him. Plato, I think, takes the attributes of this being for granted, as though he thought their proofs already given.

Socrates' and Plato's accounts of knowledge in the latter part of the Republic and in the Timaeus are very difficult to understand and have been the subject of more commentary than any other part of his work. The interpretations of these passages are so various that very little common ground lies between them. This alone makes the business of offering a new interpretation difficult, since there are hardly any commonly accepted facts from which it may begin. But in the case of my interpretation this difficulty is compounded. For I wish not merely to interpret the Line and Cave and Good but also to relate them to and clarify them by the work of Parmenides, whose work is equally obscure and as variously interpreted. So I have given myself the task of fixing not one but many variables, and then of plotting them in relation to each other. In this task the best that I hope to achieve is to present these interpretations clearly and to render them plausible. I cannot hope to show here that only these interpretations fit all the facts of the two cases, that they alone are right. Instead I shall confine myself to a
simple exposition of my position, give my reasons for holding it, and argue for it only where others have made specific attacks against its assumptions.

Parmenides' poem begins with an introduction which describes in the first person how the writer journeys by chariot and arrives at the house of a goddess, how the goddess receives him in her house and tells him the rest of the poem.* This story is told in a detail which excites many fantastic images and interpretations. (In my opinion, for example, it best describes the act of love.*) But most people would agree to this at least, that this story describes the course of a philosophical experience in the terms of physical experience.

Parmenides did not write much; the little we have is probably most of it.* And of this little the introduction is a large fraction. So we may not easily accept that Parmenides denied the reality of such things as philosophical and physical experiences. For that is what his introduction is all about. In any case, a man who can describe a chariot-ride (or love) as vividly as Parmenides is not likely to have undervalued his every-day experiences.

Yet Parmenides' being as later described is peculiarly cold and inhuman. And again his introduction is passionate and physical. This is perplexing, and the answer may be that Parmenides misleads and did not intend as much as is conveyed by his introduction.

But there is another answer: that Parmenides thought he could have both worlds, and not only thought but said so too. For the goddess tells Parmenides that he must learn all things,
both the unshaken heart of well-rounded truth
and the opinions of human beings in which is
no true conviction. (Frag.I. 11 28-30)

Then she says:

Yet, even so, learn these things too, how the
things that seem had certainly to be, all of
them passing through everything. (Frag.I. 11 31-32)

I suggest that the things that seem are our human experiences,
for example our experiences in imagining this introduction,
and that their interpenetration is illustrated by the complex
weaving of symbol and reality in this introduction. The
introduction introduces the exposition which it precedes by
illustrating the thought which the exposition describes.

This in mind we go on to what Parmenides says about being
and thinking. There is the fragment, which Taran first
translates:

To think and to be is one and the same thing.
(Frag.5.)*

Taran argues that this translation is not only possible but
also the most natural, even though he himself does not finally
adopt it.* Let us suppose however that Parmenides does
identify thinking with being. What then is thinking? The easy
answer is that thinking is what is exemplified by the
introduction, that thinking and being consists in just such
various experiences as he there relates.

For Parmenides experiencing is what is. What is is more an
acting or a happening than a substance; and 'estì', the
repeated premiss of the poem's argument, should be translated
not 'it is', but 'is'. To translate 'estì' by 'it is' invites
the question 'What is?' But this question is misleading, since it asks for a subject for the existential proposition, a subject which Parmenides never intended to give. For being is thinking, a process, not a thing. This is the force of the third person singular of the present tense of the verb 'to be.'

Against this interpretation it will be argued that Parmenides describes being as spatial: it is equal in all directions from the centre like the mass of a well-rounded sphere. (Frag. 3. 11. 43-44)

And so, it will be said, being for Parmenides cannot be thinking as I suggest. To this objection there are several answers: first, Parmenides does not say that being is a mass but only that it is like a mass; second, Parmenides describes Truth also as well-rounded (Frag. I. 1. 29) and Truth is not obviously spatial; third, there are other poets who describe mind, thought, or thinking in spatial terms. For example William Blake:

One thought fills immensity.*

And Milarepa:

The mind is omnipresent like space .... I see it clearly like a crystal in my palm.*

I shall now try to describe Parmenides' philosophical experience in simpler, less effective language of my own. His account begins with a description of a mad onward rush of passion by which he is carried along out of control to his passion's fullest satisfaction. In a single moment he
becomes aware of a vast range of different experiences and memories all at once. His mind begins to operate consciously at many different levels at the same time. This simultaneous multiplicity of experiences is communicated to us who read the introduction by the extraordinary number of different meanings suggested by almost every word the poet uses. The poet's mental hyperactivity occasions a corresponding withdrawal from attention to the senses, a withdrawal so intense that it is almost sleep. This is suggested by his entrance into the palace of night wherein the goddess dwells. In this state of withdrawal the poet is aware only of the operations of his own thinking, an awareness as broad as his withdrawal from attention to the outer world is complete. He understands many things: how these many different experiences which now crowd upon him comprise his thinking and how each experience which he conceives is shot through with every other. He understands that his thinking is his being, that each of its elements is necessary to the whole and inseparable from it. He understands that everything that he had previously considered apart from himself is in fact present to him so far as he now conceives it.

Behold, absent things are nonetheless present to the mind firmly. (Frag.4) *

He understands that his past and future exist only in so far as he now conceives them in the present.

Nor ever was it nor will it be, since it is now all together, one, continuous. (Frag.8. 11 5-6)

And he understands by the peculiar logic of 'is' that his being is without beginning or end, unchanging, and immobile. In short,
he experiences the supreme moment of self-consciousness, the clearest and most direct of all experiences, and he sees how his own present nature satisfies his every desire for immortality, perfection, and unity. He becomes aware of what he is always and thinks his new-found awareness divine.

I can make sense of Plato only by seeing him through Parmenides. To my mind Parmenides makes clearer what Plato is writing about - thinking. With a firm grasp of this thinking I can understand better Plato's elaborations. Plato and Parmenides clarify the nature of the thinking we do all the time. They are philosophers of self-consciousness, of knowing themselves.
The following three chapters are studies of the later Republic, studies of the Divided Line, the Cave, and the Good, in this order. Socrates opens this part of the discussion with his account of the Sun and the Good, but I begin with the Divided Line. In this I am with Glaucon: Sun and Good are too difficult. But even Glaucon manages to recapitulate most of what Socrates says about the Divided Line.

On the Line Socrates locates four levels of human understanding. But in the passage considered in this chapter, from the introduction of the Line to the end of book VI, he explains only two of these levels, noesis and dianoia. These two levels are the most intelligent, and so his account of them is the most intelligible. His account is scientific, is itself the account which proceeds from the understanding which Socrates calls noesis. We do not have to go far for an illustration of the method. The Line too illustrates how a visible image may help us to see an intelligible proportion, a major point in the distinction which Socrates makes between noesis and dianoia.

The Line illustrates justice too, the topic of the Republic. The Line is one of the mathematical representations of justice. If the parts of the Line are given whole number values according to the proportions; if these four numbers have no common factor, are in their simplest form: then the sum of these four numbers will be the square number of a whole number.* The same number of marbles used to illustrate the Line may be reformed into a square. A
number equal times equal the Pythagoreans believed justice.*

Each section of the Divided Line represents one of four levels of human understanding. These four levels of thinking are bound together in these proportions. Justice for Parmenides also holds thinking fast

in the limits of great bonds.*

(Frag.8 14; 26)

The first use to which Socrates puts the Line is to locate upon it sets of entities. Since there is controversy concerning the identification of these sets, I had best begin here. Two sections of the Divided Line are for 'the visible kind' (lit.'what is being seen') two for the 'intelligible kind' ('what is being thought'). Of the two sections of the visible, one is for images of visible objects, such as shadows or reflections, the other for what these image. (509 e.1. - 510 a.6.) The problem is what are the corresponding entities for the sections of the intelligible? The problem arises from the way in which Socrates introduces these intelligible sets. For at 510b4, his interest suddenly shifts from entities to modes of understanding; and just when the reader is prepared for the intelligible entities he is given a complex epistemology.* Socrates remarks that geometers and mathematicians use visible diagrams in order to aid their thoughts about the Square and the Diameter and so on.* These diagrams are images. So the entities of the two upper sections of the Line may be at the top forms, the Square itself for example, and in second place diagrams of forms, a drawing of a square for example. This provides us with the following equations: the Square itself is to the drawing of a square as is a visible object to its reflection as are the Square itself and the drawing of a square to a visible object.
and its reflection.

The first of these equations, the Square itself is to a drawn square as is a visible object to its reflection, is of the same order as the one which underlies Socrates account of recollection in the Phaedo: the Equal itself is to equal things as Simmias to his pictures (73 e.2). In the Phaedo Socrates talks of pictures, here of visible reflections. The difference makes little difference since reflections are also only recognizable in the light of their originals. But here in the Republic there is one important refinement, for the second and third terms, drawn squares and visible objects, may be the same, since a drawn square is also a visible object. And so in Socrates' exposition the same object, a drawn square, may occupy two sections of the line, for it may be viewed either as the image of a form or as a visible object.

The last item of the complex equation is strange: its presence indicates that the visible mode of reflection between visible objects and their images is itself an image of the intelligible mode of reflection between forms and particular objects. And so we see that the visible world is so perfect an image of the intelligible world that it even contains within itself an image of its relation to that intelligible world.

It will be objected that this interpretation is impossible, since it assigns to the lower section of the intelligible visible diagrams, and visible diagrams could not be said to be intelligibles. To this I reply that the only images Socrates mentions in the context of his analysis of the intelligible are these diagrams, that he calls them images just as he calls shadows and reflections images (510 b.4.), and that Socrates
himself no less than three times (510 b.4; e.3.; 511 a.6) remarks that these diagrams were the originals in the divisions of the visible kind but are now to be thought of as images, presumably when considered under the aspect of the intelligible. In the third chapter I have tried to show how physical objects that partake of forms can be viewed under two distinct aspects, as 'equals' and as 'sticks' — that their partaking of forms makes them to some degree intelligible. If however we do not accept that visible diagrams are a part of the intelligible then we are left with a gap and no indication from the text as to what should fill it. Hence the introduction by some scholars of a special range of mathematical entities, for whose existence there is, as far as I know, no other certain evidence in Plato's work.*

After introducing the two sets of entities of the 'visible kind' and explaining their relations to each other Socrates asks (510 a.8-10.):

And would you also wish to say that in truth and falsehood it (the visible kind) is so divided that the copy stands in the same relation to that of which it is the copy as does the opinable to the knowable?

Adam in his commentary on this passage suggests that here for the first time Socrates calls the visible 'the opinable'.* The only reason for thinking this is the fact that on the Line the two sections of the visible are in the same proportion to each other as is the visible to the intelligible. Nonetheless I think Adam is wrong to suppose an exact equivalence here between 'the visible' and 'the opinable'. At best we may say that the opinable world is manifested through sight. (cf. 517b2.) The opinable is rather the entire world of
becoming, and it is this entity which stands in the same relation to the knowable as the images of visible objects to those objects. This point is important because it prepares the way for the introduction of pistis and eikasia as the two modes of opinion, the two ways of understanding the opinable world. After Socrates has made his point that the relation between the two sets of the visible images that between the intelligible and the opinable, the visible is no longer relevant to his exposition of opinion. The visible helps cash the notion of image, looks back to the account of Sun and Good, and forward to the simile of the Cave.

From 510b4 Socrates' exposition is no longer a progression of points but a recrossing of the same points several times. It is easiest therefore to consider all that is said under the two headings noesis and dianoia.

Noesis

In respect of the intelligible, geometers and mathematicians are contrasted with philosophers throughout the next paragraphs: geometers and mathematicians postulate the Odd and the Even and so on, give no further accounts of these postulates, and immediately proceed to the deductive proofs of their demonstranda; the philosophers on the other hand do not use these postulates as principles from which to deduce other propositions but use them as stepping-stones to grasp that which requires no assumption and is the starting point of all. So much Plato himself tells us. (510 c.1. - d.3.) The problem is to know what the philosopher does and what it is he grasps.
My answer to the problem is this: the starting-point of all, which requires no further assumption, is just such a being as Parmenides describes in the 'Way of Truth'. For Plato, as for Parmenides, this being is thinking. The philosopher, in grasping this principle, understands that his being is his thinking and that the forms postulated by mathematicians are indeed intelligibles, noetes, the fixed terms of his thinking. He sees that of this thinking the forms are parts, and that their differences are reconciled in the thinking which embraces them all. This understanding requires no further justification because it is already as certain as can be; and it is this because it is the understanding of what is clearest to our minds - our own thinking.

The starting-point as it appears on the Socratic Line is such a being as is described in Parmenides' poem. Noesis is the ascent to and descent from the experience of that being. The terminal points of ascent and descent are being and the forms. In the descent the forms, which depend from being, are now fully understood in the light of that being. In the ascent they are used as spring-boards to the final vision. The words here translated 'spring-boards' suggest not a slow process of analysis but a sudden intuition, a leap not a climb.* This is one of Plato's few metaphors in the Line. Nonetheless it is by the power of dialectic that such a leap is made, and it is the logos itself which grasps being. (511 b.4.) Likewise it is to the judgment of the logos that the goddess presents her poem the 'Way of Truth'. (Frag. 7.)

In the Sophist Plato writes and the Elean stranger says:
And the man who can do dialectic discerns clearly one form everywhere extended throughout many, where each one lies apart, and many forms different from one another but embraced from without by one form, and again one form connected in a unity through many wholes, and many forms entirely marked off apart. (253 d.5. - 542.)

It is the realization of the necessity of such a system, that it must be so, that is in part the grasping of the beginning which requires no further assumption.

Forms are intelligible only in so far as they are contained by intelligible being, from which it follows that no form can be known as distinct from being or from any other form. They are intelligible only within the system, and must be connected to each other by the same necessary logical relations as, say, the notes of a key-board. Socrates says in the Meno (81 c.9. - d.4.):

All nature is akin and the soul has learned everything, so a man who has recollected a single thing is in no way prevented from discovering everything.

Socrates does not argue his claim; for he knows that what is to be known must be so.

In the Philebus Socrates gives a description of the establishment of the science of letters by the god or godlike man, Theuth. Theuth observed that the sound of speech had had no bounds set upon it, and proceeded to make distinct classifications according to differences between the elements which composed that sound. These elements are the letters, and Theuth saw that no one could learn any one letter of an alphabet by itself without learning the others. Thinking that this was a common bond which made them in a way all one, he assigned to them all a single science and called it 'grammar' (18 b.6. - d.2). The
similarity between this description and the passages just quoted from the Meno and the Sophist indicates that this mode of conceiving of a unity within a plurality is a common thread running through the dialogues. In the Epinomis, after an account of mathematical studies, there is this passage:

Him who has mastered all these lessons
I account in truth as wisest: of him
I dare affirm— it is a fancy yet I am
in earnest with it too — when death has ended his allotted term, if he may be said still to endure beyond death, he will no longer be subject, as he is now, to a multitude of perceptions; he will have only one allotted portion even as he has reduced the many within himself to one, and in it will be happy wise and blessed all in one. (Epinomis 992 b.2-8.)

For Socrates the experience of being as thinking, noesis, is the beginning of all certain knowledge. For him as for Parmenides this experience is the highest inspiration of which man is capable. All else cannot be understood but in relation to this experience and the Socratic theory of this relation is most elaborate. The experience ensures that thinking is being, and is unitary, unchanging and so on. The problem is to relate this experience to the varied experience of the world without impugning its unity, homogeneity, immutability; but to relate it in such a way that our other experiences also remain in some sense valid. In the Line are the foundations, the first stages of Socrates' method of relation. He makes the experience of being the perception of a single aspect of a complex system of eternal unchanging forms. Noesis is the grasp of the system as a whole, as one. Noesis teaches the philosopher that the forms to which his studies have accustomed him are not discrete nor
independent, but inseparable parts of a complex whole, embracing the entire range of the intelligible and all his studies at once. He understands that of this whole he has always been dimly aware, and that this awareness has allowed him to comprehend by intellect and diagrams the necessary relations between the entities of his studies.

Now through the experience of this being he comes to see the point of that education. And that point is the science of all the forms and all their relations, the complete and perfect science which unites all the branches of mathematics, music and astronomy, and understands all of them completely. The philosopher who has passed through all these subjects in his training now reaches a point from which he views them all whole and at once. He now looks down upon them from a point beyond them and above them; and only now is he able to map them properly, knowing that they comprise a single landscape. His previous maps of parts of that landscape, made during his ascent to the summit can now be incorporated in a greater whole. He understands the aim of his laborious education. But he learns not by some further study of the same sort as those previous studies, but through an intuition.

By itself this intuition does not show the philosopher exactly how the forms are arranged in relation to each other.* Rather it shows him the necessity for that arrangement. The philosopher sees this in seeing that he and his world are no more than the sum of his experience, his thinking, and that this thinking must be continuous, complete, and such that each part of it is somehow present to every other part. How this
last may be a feature of the forms we have already seen. The grasping of the unhypothesized beginning is the realization that being is thinking, and the understanding through this realization that all the forms are equally necessary to the whole and completely interrelated.

Diánoia

Diánoia, understanding, is the name which Socrates gives to the intellectual operation of (at least some of) the geometers and mathematicians of his day. Diánoia is between noesis, or true science, and mere opinion. It needs no more description than Socrates gives it; we may recognize the study of geometry as practised in the school-room. Each entity of the system is taken for granted, its representation on the black-board easily grasped, and its relation to the other entities of the system the only object of study.*

Geometry and mathematics, as so practised, will never be true sciences, since their postulates will never be as clear and therefore as sure as is being. Nonetheless the Odd and the Even, the Square, the Angle and so on are its forms, so near to this being that even those who have not grasped its nature may appreciate the necessity of the connections between them. Unlike the philosopher and dialectician, mathematicians and geometers use visible symbols to aid them in their task.

It may be objected to this interpretation that it allows of no distinction between noesis and diánoia, since both now deal with forms. But I would reply that noesis and diánoia are not so much distinguished by being correlated to different sets of entities as by their different approaches to the same set. Noesis examines
forms and only forms, while dianoia studies forms through the medium of visible diagrams; noesis understands forms for what they are while dianoia proceeds merely to conclusions which relate forms. Of course, on this interpretation the strict one-to-one correspondence between the four sets of entities and the four pathemata of the soul (511 d.6 - e.4) breaks down, since dianoia is now correlated with two of the sets of entities, forms and visible diagrams. This does not seem to me a very serious divergence since there are still four sets of entities, four pathemata in the soul, and it is still possible to distinguish noesis from dianoia by reference to different sets of entities, noesis being concerned with forms only while dianoia deals with visibles as well.

Further, Socrates' remark at 511 a.1. that mathematicians seek to see those things themselves which cannot be seen but by dianoia by using images indicates that there are indeed two ways of thinking about visible originals. First they can be thought of simply as visibles, just as the equal sticks can be seen merely as sticks, and in this case they occupy the third place on the original line. Second, they can be used as images 'to see those things themselves which cannot be seen but by dianoia', namely forms, in which case the visibles are used as images in their intelligible aspect and occupy second place on the original line. The care with which Plato makes this point suggests that he was fully aware of this ambivalence in the status of the visibles and was trying in his account of dianoia to be as clear as he could.
It is now time to summarise the relation between Parmenides and Plato. I propose that Plato in describing the grasping of the unhypothesized beginning is describing essentially the same experience as Parmenides describes in the 'Way of Truth'.

Most of my reasons for thinking this I have already given in showing how such a supposition makes effective sense of what Plato gives us in the Line. But there are some other similarities between the work of the two philosophers which should be pointed out: the language of the Line is in some important elements identical to the language of the 'Way of Truth', especially in the value given to εἰναι, to be, and the verb so often correlated with it, νοεῖν, to think; second, both Parmenides and Plato teach a philosophy of enlightenment, of an extraordinary experience which makes certain sense of the world; third, both describe the experience as the highest fulfilment of desire; fourth, the structures of the Platonic and Parmenidean systems are similar in having some ultimate premise, the 'unhypothesized beginning' or 'is' which requires no further support, but guarantees the remainder of the system. These similarities are so far as I know confined to Parmenides and Plato. No other philosophy of the time shares them. But, of course, there are a number of important differences between Plato and Parmenides also, and it seems that in his later dialogues, especially the Sophist, Plato attacks Parmenides.* If we ignore these dialogues on the grounds that they do not furnish conclusive evidence about the direction of Plato's earlier work, we are still left with the differences between Republic VI and the 'Way of Truth' to explain. One way of explaining these differences and yet of maintaining
the essential similarity between the two would be to say that Parmenides and Plato did indeed have similar visions but arrived at them independently and with the solutions of rather different problems as their goals.

I must say, however, that I am not content with this explanation, and therefore advance this further proposition — that Plato realized this essential similarity between his vision and Parmenides'. It seems to me too great a coincidence that he should have arrived at such similar conclusions and so similar a description independently, especially given that he knew Parmenides' work well. But I would agree that the divergences in his account from Parmenides' may best be explained by his starting from a different point, with the solution of different problems as his goal. The absence of any explicit reference to Parmenides in Plato's account does not seem to me to count for very much against what I have said about their relation to each other. Clearly, Plato has modified Parmenides' theories. He may have thought his own account sufficiently clear and original to stand by itself.
After this, I said, liken our nature to such a state as this in respect of education and the lack of it.

The first four words are deliberately colourless. They throw all the emphasis of the sentence on to the word immediately after them - 'liken' (apeikason). This word is the key-word in the account of the Cave. In his account of the Line, as I have shown, Plato talks like a scientist; it is clear and undiluted. Though the Line has located upon it four pathemata he analyses there only the top two, and at the end of the Line he gives us just the names of the third and fourth, 'pistis' and 'eikasia'. Thus the word apeikason at the beginning of the Cave simile echoes eikasia at the end of the account of the Line. In order to talk of these lower pathemata, the modes of thought which are most correlated with images, he uses an image, just as in talking of mathematics and science he has used the language of mathematics and science. Again, just as on the Line there are places for all the modes of cognition, so are there in the simile of the Cave. We may view our progress through Line and then Cave as the two parts of the same journey, and the alteration in perspective in our view of the same landscape is such as we would expect, had we seen all from the summit and now turned to look back at it from the depths. This change of perspective is exactly conveyed by Plato's change of style - he is talking of and we are seeing
the same things in a different way.

Now the order in which Plato describes to us the features of the Cave. He begins:

Behold human beings as it were in an underground cave. (514 a.2.)

Then follows a general description of the Cave, the people, the fire, the wall, and the relation of the Cave to the outside world. That 'behold' is very powerful. It suggests that moment when a guide reveals to his companions an entirely new view. It is as though we stood with Plato on the very brink of the Cave, as though we had just stepped in from outside, and the whole of the inside of the Cave lay revealed to us for the first time. It is an overview. This initial vision lasts from 514a2 to b6. From 514b8 to 515 a3 Plato describes to us the puppets carried along the wall. It is as though we had gone down into the Cave and he was describing to us what we passed as we proceeded further from the light of day to the Cave's deepest darkest places. Finally at 515a7 he gives a description of the wall furthest from the entrance. We have at last reached bottom - our journey which began with the cutting of the Line is complete.

In this way the simile of the Cave is the tally of the Line. It is also a new view of the Line, seen through an image. Once the primary division of the Line is crossed, we enter a world entirely comprised of images, so lacking in clarity that an image is the best (or perhaps only) way of describing it. The relations between artificial Cave and Line are intended to convey the relation Plato believes to hold between the worlds of opinion and intelligence. The Cave complements and images
the Line - the two are so interwoven as to make a single work of art. Two ideas, one mathematical and the other metaphorical, seemingly quite disparate, are so combined that it becomes impossible to disentangle the second from the first and view it adequately just by itself.

There are two ways of coming to understand what Socrates means by the terms \textit{pistis} and \textit{eikasia}. The first is to deduce from the conclusions already given concerning \textit{noesis} and \textit{dianoia} what must be the analogous or proportionate natures of this other pair of the four modes of cognition related by the Line; the second is the interpretation of the simile of the Cave. In this chapter these two ways will be travelled simultaneously.

It is clear that the experiences of the prisoner who leaves the Cave for the outside world represent \textit{noesis} and \textit{dianoia}. In the outside world there are three sets of entities which that prisoner comes to know. These are in ascending order the reflections or shadows of natural objects, natural objects, and the sun. The analysis of \textit{noesis} and \textit{dianoia} given above makes it clear that these three sets represent three sets of intelligible entities, which are in ascending order diagrams or symbols of forms, forms, being. In the Cave there are also three sets of entities which correspond to and represent the entities of the outside world. The three sets in the Cave are in ascending order the shadows of the models of natural objects, the models of natural objects, and the fire. If the simile of the Cave is precise, and if \textit{pistis} and \textit{eikasia} are analogous or proportionate to \textit{noesis} and \textit{dianoia} according to the divisions of
the Line, then these three sets of entities in the Cave represent the correlates of \textit{pistis} and \textit{eikasia}.

From 517 a.3 - b.4 Socrates goes some way towards relating the entities within the Cave to the correlates of \textit{pistis} and \textit{eikasia}. He tells us that the Cave represents the world manifested through sight, and that the light of the fire represents the power of the sun. From these indications there is a temptation to conclude that the entities of the Cave stand for the visible entities of the outside world, namely images of natural objects, natural objects, and the sun. But this is to misunderstand the simile.

The strongest argument against this interpretation is that it renders \textit{eikasia} most obscure. If \textit{eikasia} is analogous to \textit{dianoia} then it consists in the understanding of one set of entities through the study of another set of entities which image that first set. The geometer learns about the Square itself with the help of diagrams of squares. Hence if the shadows in the Cave represent the reflected images of the outside world, then \textit{eikasia} consists in the understanding of natural objects through the study of their reflections. But this method of study has never been practised either in Plato's day or our own. But at 515e5 Socrates insists that the prisoners who see only the shadows represent the human condition in general.

The prisoners see nothing of themselves, of each other, of the object carried across the Cave but the shadows and they think these shadows reality. In so doing they represent the human condition. I know of no one who thinks reflections and only reflections reality, but I know many who suppose the real world to consist of the physical objects around them. They
call themselves materialists.

Let us hypothesize that the prisoners in bondage in the Cave represent materialists and that the shadows on the wall of the Cave represent what they call material objects. And let us suppose that Socrates is representing eikasia when he says at 516 a.7ff:

Now suppose that these prisoners had among themselves a system of honours and commendations, that prizes were granted to the man who had the keenest eye for the passing shadows and the best memory for which usually came first and which second and which came together. *

Eikasia then consists in the ability which some materialists have to predict the sequences and coincidences of material objects. It is like geometry or mathematics insofar as it asserts and in some sense establishes connections between a range of entities without knowing the reason for these connections. But it is unlike geometry in that it is memory and not deduction which establishes the connection. In this respect the distinctions which Socrates makes between the doctor and the pastry-cook are interesting (Gorgias 464). For Socrates attributes the ability of the cook to gratify palates to memory.

Two problems remain, to which there is a single solution. The first problem is this: if the shadows in the Cave represent material objects and the light of the fire the power of the sun, what do the models of natural objects, the third set of entities in the Cave, represent? The second problem is this: geometers use their diagrams to discover the properties of the Square itself and other forms; eikasia is analogous to dianoia;
material bodies are analogous to the geometric diagrams; of what then do materialists discover the properties by studying the sequences of material objects?

The material objects of the outside world represent the forms with which noesis and dianoia deal. In the Cave there are models of the natural objects in the outside world. Clearly, then, pistis and eikasia deal with entities which image the intelligible forms of noesis and the mathematical sciences which constitute dianoia. The obvious candidates for the objects of pistis and eikasia are those kinds of the natural world which Socrates sometimes mentions, the Bee in the Meno (72b2), or Man in the Parmenides (130c1).* These kinds mediate between the power of the sun and material objects, so as to produce material objects which belong to those classes which constitute the structure of the natural universe. And the materialist in his study of material objects classifies them according to these classes and produces rules or guides to memory which relate these classes to each other, and not the individual objects which he sees. But pistis, if it is like noesis, studies only these kinds.

The three sets of entities within the Cave are therefore capable of at least two quite different interpretations: they may be taken to represent either shadows of material objects, material objects and the sun, or material objects, kinds of material objects, and the sun. Socrates himself says that the fire in the Cave stands for the power of the sun. But the sun has a dual power.
You will say, I think, that the sun provides not only the power of being seen to the things that are seen, but also their becoming, increase, and nourishment. (509 b.2-4.)

The sun not only gives light; it brings about the generation and development of what we see. 'The world manifested through sight' I take to be the entire world of becoming which we perceive with our eyes but must understand in terms of those processes which bring it to be.

To return to eikasia. **Eikasia** is the constructing of theories about the relations between the entities of the visible world; these theories are based upon observation, upon the observed order of events. The visible entities so related are not considered individually but are classified in sets and the theories relate these sets. So general rules are constructed which allow the clever prisoner to guess what will happen on the basis of his past experience: an entity of type B will now follow this entity of type A, since in the past entities of type A have always been followed by entities of type B. But the clever prisoner cannot be sure that what he predicts will happen, nor can he say why it does even if it does. And so he can be said to rely on guess-work (**eikasia**) rather than science.*

The prisoner, the man engaged in **eikasia**, notes certain similarities between the shadows, the visible objects before him, and classes them in different classes according to their similarities, giving members of the same class the same name. But he does not understand why there are these similarities because he does not know of the existence of the puppets, each one of which casts the many yet similar shadows which he calls
by the same name. He does not know of the puppets because he cannot see them; they are not in his direct field of vision. In this he is like the mathematician, looking at visibles and thinking in terms of intelligibles. But he is even less aware than the mathematician of the real nature of the terms of his thought.

And it is here that eikasia differs from pistis just as dianoia differs from noesis. For the man engaged in pistis is much more interested in understanding the reasons for the common classifications than in relating the object so classified to each other. Pistis is looking at the kinds and understanding how the visible entities which those kinds 'cast' are similar by virtue of being cast by the same kinds. This understanding is achieved not by looking at the far wall, at what is to be seen or sensed, but by a fundamental turnabout, by introspection into the nature of how we think about the phenomenal world. So pistis, even though it is a part of opinion, is not primarily concerned with sights and sounds but with the origin of the similarities between these sights and sounds. That pistis is not primarily of the phenomenal world is illustrated by the way in which the puppets which cast the shadows lie outside, directly behind, the prisoner's range of vision; that it is part of opinion, part of the understanding of the Cave, is explained by the fact that it looks at the origins of those similarities by which we understand the classes of the phenomenal world. According to the image of the Cave, the
prisoner need only be freed and turn around in order to see the puppets and understand their role. But at 515 d.4-5. Socrates temporarily exceeds his image of the Cave to make it quite clear that the way to understand the puppets is not merely to see them but to be forced to answer questions about them. Socrates’ momentary departure from his frame of reference suggests that the puppets do not stand for visibles at all but for entities to which dialectic offers the only approach.

What are these kinds for which the puppets stand? They are not classes even though they make possible the classifying of the shadows; for the relation between a class and one of its members is not the relation between a puppet and its shadow. Somehow the visible entities which belong to a certain class are, for Plato, no more than images of the kinds for which the puppets stand. And just as the puppets are invisible to the bound prisoner so are these kinds to us though they help bring about what we can see. So in coming to understand these kinds we are freed from the error of supposing that only what we see is real: instead we understand that these kinds are far more real and constant even though invisible. The kinds like the forms are elements of our thinking; they systematically fashion what we sense and are the forms in which we think about it. The unliberated man is only partially aware of these kinds and makes the mistake of supposing that only what is before his eyes is real. But pistis is the awareness that what we sense is but a projection of what we think.

This account of pistis is all right as far as it goes. But left here, it would involve me in an absurdity. For so far in my account of the four kinds of understanding I have given no
place to Plato's own understanding of the world of becoming. For the Cave shows that Plato thinks of that whole world as an image of the intelligible, while neither pistis nor eikasia on my account realizes this. So there is the question: is either pistis or eikasia the understanding also of how the world of opinion images the intelligible world? It is clear that eikasia is not. Further, if pistis is the stage of understanding gained immediately after eikasia and before dianoia, then it is not either. If however pistis is the proper and full understanding of the world of opinion as noesis is of the intelligible, then it must be an understanding of how the former images the latter. I judge that pistis is Plato's understanding and that it is not a stage in the prisoner's ascent as the simile of the Cave may perhaps suggest. Pistis is that vision of the world of becoming given to him who returns to the Cave from contemplating the forms and being. For this reason if for no other the simile of the Cave follows the account of the Line.

This concludes my account of the Cave. It ends just where it begins. For pistis is that overview, that appreciation of likenesses, with which Socrates introduces his simile. That first step into the Cave from the outside world represents best the understanding which is pistis. And I have argued that Socrates' account of knowledge and opinion are parallel and complementary in this further special way: in his account of knowledge he demonstrates noesis and describes dianoia; in his account of opinion he demonstrates pistis and describes eikasia.

The simile of the Cave and the outside world is a geographical representation of the psyche. The prisoner, who
may be freed and move at will through both realms, is an emblem of self-consciousness, tied at birth, but capable of withdrawing from the senses and travelling upwards through the interior landscape of the soul.

What I have so far concluded about the statues in the Cave may I think be fairly deduced from the account of them in the Republic. That is, up to now I have restricted myself to the two ways of interpretation which I outlined at the beginning of this chapter. This done, however, there is more that can be said of the statues, since Plato talks of them in the Timaeus, in Timaeus' account of the creation of the visible universe. So I shall continue this chapter with an examination of this passage in order to clarify and consolidate my interpretation of the Cave.

At 30 c.3 Timaeus asks:

In the likeness of which of the living things did the framer frame it (the universe)?

The answer he then gives is:

To that whereof the other living things individually and according to their kinds are parts. (30 c.5-7.)

The process by which he arrives at this answer will be considered in the next chapter. Here I wish to consider only the answer itself. What are the living things? Timaeus continues:

For that contains within itself all the intelligible living things just as this cosmos comprises us and all other creatures.

For the identity of the intelligible living things, I can do no better than quote Cornford who writes:
We have seen that, although the creator god, as such, is a mythical figure, the relation of likeness to model none the less subsists between the visible world and the intelligible. The model is not a piece of mythical machinery. The visible world, being 'in very truth' a living creature with soul and body, has for its original a complex Form, or system of Forms, called 'the intelligible Living Creature'. This is a generic Form containing within itself the Forms of all the subordinate species, members of which inhabit the visible world. The four main families, 'contained in the Living Creature that truly is', are enumerated at 39E: the heavenly gods (stars, planets, and Earth), the birds of the air, the fishes of the sea, and the animals which move on the dry land. These main types, as well as the indivisible species of living creatures and their specific differences, are all, in Platonic terms, 'parts' into which the generic Form of Living Creature can be divided by the dialectical procedure of Division. The generic Form must be conceived, not as a bare abstraction obtained by leaving out all the specific differences determining the subordinate species, but as a whole, richer in content than any of the parts it contains and embraces. It is an eternal and unchanging object of thought, not itself a living creature, any more than the Form of Man is a man. It is not a soul, nor has it a body or any existence in space or time. Its eternal being is in the realm of Forms. Plato does not say, here or elsewhere, that this generic Form of Living Creature contains anything more than all the subordinate generic and specific Forms and differences that would appear in the complete definitions of all the species of living creatures existing in our world, including the created gods. We have no warrant for identifying it with the entire system of Forms, or with the Form of the Good in the Republic, or for supposing that it includes the moral Forms of dialectic or the mathematical Forms, or even the Forms of the four primary bodies, whose existence is specially affirmed at 51B ff. Plato looks upon the whole visible universe as an animate being whose parts are also animate beings. The intelligible Living Creature corresponds to it, whole to whole, and part to part. It is the system of Forms that are, together with the Forms of the four primary bodies, relevant to a physical discourse, because they are the patterns of which the things we see and touch are sensible images, coming to be and passing away in time and space.*

Cornford adds in a foot-note that the phrase which I have translated 'individually and according to their kinds' refers in the first place ('individually') to the 'forms of indivisible
species' and in the second to the 'four main families which are enumerated at 39E' - Gods, birds, fish and land-animals. Hence Plato makes here a start on the task of producing a complete and hierarchical classification of the natural kinds, a task which he has not begun in his account of the puppets in the Cave.

I have no quarrel with anything that Cornford says in this passage. I would point out what I take to be an omission only, that we do have some warrant for supposing that Plato is referring to this same model of natural kinds in his account of the Cave and of 

*pistis*. Furthermore, this complete model which contains within itself all the intelligible living things may be paralleled with the sum of the forms, according to the proportions of the Line. There are two distinguishable sets, one of mathematical forms, one of intelligible living things, each complete and holding first place on one or other of the two major divisions of the Line.

The Timaeus throws more light on another obscurity in the account of the Cave as I have interpreted it - on the nature of the power of the sun. I have suggested that Plato thought that the power of the sun was responsible for the generation of sensible living creatures on the earth, and that the natural kinds mediated between the power of the sun and the sensible world so as to transform that power into creatures or creations belonging to the many different classes which comprise the structure of nature. At 41a.7 of the Timaeus God addresses the lesser Gods which he has made and tells them to make the other living creatures necessary to a perfect universe. These lesser Gods are the heavenly bodies, the earth, the stars and
the sun. Cornford writes on this passage:

This delegation of the rest of the work to the celestial gods may perhaps be connected with the notion that the heavenly bodies, especially the Sun, are active in generating life on the Earth... In Republic vi the Sun is singled out among the heavenly gods as 'the offspring of the Good which most resembles his parent'. He is the cause of the birth, growth, and nourishment of things in the visible world (509B)." 

It is notable however that in the Timaeus passage the sun is not so singled out.

So the Timaeus clarifies the obscurity of the Cave. The fire and the puppets reappear as the intelligible living things and the lesser Gods, and in the same relations to each other. On this interpretation the simile of the Cave tells us no more than Plato himself tells us more clearly elsewhere. But there is one serious difference: Timaeus' intelligible living things are called intelligible while the entities for which the puppets stand do not belong to the 'intelligible place' (517 b.5.). But the puppets too are subjects for questions and answers as to what they are (515 d.4-5.) and so may stand for intelligibles in fact if not in name. And in the Parmenides (130 c.1-2.) Socrates' position on the form of Man lies between these differing positions of the Republic and Timaeus. He agrees that there are such forms as Man but not with confidence. Hence the status of these entities is unclear and so the differences on this point between Republic and Timaeus need not count for much against their similarity.

The unclear status of these entities explains their relegation to the sphere of opinion in the Republic. Less clear than the mathematical forms, the proper correlates of
knowledge, they must belong to opinion if anywhere. This may not square with the account of opinion in Republic v, but then this in turn hardly squares with the account of opinion at the end of the Meno. Plato's terminology is notoriously fluid—here for example between 511 d,8. and 533 e,8. noesis and episteme change places.*

Such are noesis dianoia pistis eikasia—four types of understanding. Plato does not make it clear whether these are the only four. But he does make clear how the last three of these four derive from and depend upon the first, just as their correlates image or image images of forms. All four attempt to bring system and unity to human experience. But dianoia and eikasia do not realize the presupposition, justification, motive and end of their attempt, the unity and order of thinking. Just as Simmias' picture is only recognizable to someone who already knows Simmias, so dianoia and eikasia involve some dim awareness of being, of its unity at which they aim.* Noesis and pistis on the other hand are an exact recollection of that original acquaintance.

Again, to see that two sticks are equal is to remember equality: the part brings to mind the whole. To remember equality is to conceive dimly of all the forms of being: the part brings to mind the whole. In this way every thought of forms, or images of forms, or images of images of forms, leads back to and derives from the vision of being, more or less clearly. Plato shows how every instant of our thinking implies our awareness of this whole and that our thinking in this sense does not change but is forever at one.
At 509 b.6-10, Socrates says:

And it may be said that not only does their being known come to the things known by (virtue of) the Good but even their being and their essence come to them by it. But the Good is not essence, but transcends even essence in seniority and power.*

This makes these three claims, though not in this order:

(1) By the Good do the things known exist as essences.
(2) By the Good are the things known known.
(3) The Good is not essence but is older and more powerful than essence.

Let us identify the Good with being. Then:

(1) The claim that the forms owe even their existence to the Good is strange, for they are co-existent with being. The sense of the claim is this: the only reality is being which is thinking; so anything else that exists only does so insofar as it is part of or assimilated to being; so the forms exist only insofar as they are aspects of being. In one respect the forms are quite distinct from one another. But this they can be only because in another respect they are indivisible and unitary. They are indivisible and unitary because each form is necessary to the whole, which cannot do without it.

(2) The sense of this second claim has already been explained in the fourth chapter. It has been shown there that the forms are known not in isolation from each other but only insofar as they are seen to be interrelated parts of a single system.
Though the relations between them may be comprehended even by those with no clear conception of being, this is only possible given a partial awareness of that being; and this it is that geometers and mathematicians must always have, but do not care to examine. Without it they could not see the relations to do what they do; it is the unexamined principle from which their studies depend, and the goal towards which their systems tend.

There is another more difficult sense in which the forms owe their being known to the Good. The realization that thinking is being and of its nature guarantees that being is incorruptible and perfect. And this certainty guarantees that the forms of that thinking are also incorruptible and perfect, the proper correlates of knowledge. Being, as it were, passes on its attributes to the forms and it is by virtue of these attributes that the forms can be known.

(3) The Good is not essence, because it is not differentiated. It is senior to essence in the senses given above; and more powerful because though the forms condition all else that exists, the Good conditions the forms.

The Good, being, and the unhypothesised beginning of the Line are thus the same. But there is another way of making clear the place of the Good in Plato's system: the Good is the form as telling the time to the part of a watch. Just as a watch-maker first conceives the function his watch is to effect, so the Good is the original idea of being. The parts of the watch are as they are by virtue of that one end which
they are created to achieve. Similarly the forms, in themselves and in their interrelations, are as they are that the Good may be achieved - that there may be a single, complete, unified, and eternal thinking. The parts of a watch cannot be understood properly by anyone who does not know what their overall function is meant to be. Likewise no-one can understand the forms who has not grasped the good they combine to effect. And this simile of the watch helps to explain a peculiar paradox in the description of the Good. The Good is beyond the forms in seniority. But the forms are eternal. So the Good is senior, not in time, but as plan to execution.

There are at least three reasons why Plato should have called being or the unhypothesized beginning the 'Idea of the Good'. First, because it is the original idea or function of all the parts of being, the overall work which they combine to effect. This is their good just as sight is the good of the eye and hearing of the ear. Second, because being is the sum of all perfections, perfect, complete, single, balanced, eternal and so on. Aesthetically the sphere of thinking is the most perfect and beautiful thing conceivable. The Good is also called 'the author of all things beautiful and right' (Republic 517 c,2.). So it has the same function as the Idea of the Beautiful in Diotima's speech in the Symposium (211 b.). It is notable also that Diotima claims that the final approach to the Beautiful is through the sciences. So is the final approach to the Good in the Republic. I presume that both the Beautiful and the Good impart their natures to other things as other things become like them - complete, integrated, balanced. The third reason for calling
being 'the Good' is this: Diotima tells Socrates (204 e.1.) that good is the object of desire; the ultimate object of desire is the vision of the Good because this most satisfies desire, is the most lasting and substantial filling of the emptiness of the soul.

Who is the good Craftsman Timaeus describes? He orders the visible (30 a.2-5.). The effect of his ordering may be seen in the experience of all of us. For we all understand our individual perceptions in the terms of the same natural kinds, just as one set of puppets lies behind all the different prisoners. We all share one mind which metamorphoses the visible into its terms.

The process is as follows: God, thinking, chooses to make himself the model for his arrangement of the visible. (29 e.3.). Calculating his initial step he finds that of the natural kinds the intelligent are in the who:e superior to the unintelligent, presumably because the intelligent are more like himself, more like the thinking which conceives them. So on these calculations he places intelligence in soul which enables him to place intelligence in visible body (30 b.1-6.).

Plato is here describing the process by which our thinking animates the visible world; together we see ourselves and other visible things as intelligent, animate, living. Our intelligence, operating at a level of which we are not conscious, determines us to this because it has calculated that the more like thinking this visible world, the better. Thinking intelligently predetermines that the universe be like itself, capable of its
own intelligent activity. For this reason intelligence is made incarnate; intelligent living creatures are born into this world.

How best then to fashion the intelligent universe? To which of the natural kinds to liken it? Not to any one kind for that would make the universe partial and imperfect - instead, to all of them together. (30 c.2. - 31 a.l.). And so we all live in a world which we all see to contain all the kinds of intelligent living creatures that we can conceive. Behind all the different prisoners is one complete range of puppets.

Just as the Good imparts its own existence to its elements, and its own unity and completeness, so does the good Craftsman ensure that the visible universe is living, unitary, and complete like himself. The good Craftsman is the Good operating at the level of sensation.

As Thomas Taylor says:

For as Timaeus refers the cause of everything in the world to the first artificer, so Parmenides suspends the progression of all things from the One. And as the former represents all things as participating in demiurgic providence, so the other exhibits beings participating of a uniform essence.*

But at this stage, the good Craftsman is only planning; the labour is not yet begun. He is like those craftsmen who plan every move meticulously and who understand fully all the elements involved. It is this planning (prônoia) that is skill and wisdom. It is just of this that one may give an account, as I argued in the first chapter. Here in the Timaeus the good Craftsman plans his unifications and
combinations. At each move Plato gives an account of the possibilities at the Craftsman's disposal, the different ways open to him, and his reasons for choosing in each case as he does. We are given an account of his aim and of the ideas available to him for its achievement. His work is the work of a copyist such as a carpenter with his idea of a bed, like a painter with his model. But in this case the artist is sitting for himself as model to his own self-portrait. The good Craftsman is thinking, its ideas are common to us all, and our common world is made in their likeness.

In this passage of the Timaeus Plato is accounting for the way in which we construe our perceptions. It is the work of an intelligence whose effect may be seen in our use of a common order but whose existence we may doubt, unless we have climbed beyond our personal differences to the common system and function behind. For Plato intelligence is a pro-human faculty and our humanity derives from it as one mode of its self-expression in the natural world. Plato in his Genesis of visible order describes a process continuously operative within the thinking of all of us. In this way the good Craftsman, we ourselves, chooses the furniture of our Cave.

Timaeus supposes that the physical world is not only intelligent and complete, but also solitary (31 a.3.) and self-sufficient (33 c.4.); it is also globular, equidistant in every direction from the centre (33 b.3.), not liable to old age and disease (33 a.5.), and perfect (33 a.7.). For all these properties Timaeus has an argument: the physical world must be so because it is best so, and its Demiurge is good.
No one who reads this list of attributes and at the same time bears in mind the eighth fragment of Parmenides' 'Way of the Truth' can fail to be struck by their extraordinary similarity. Timaeus here ascribes to the physical world precisely those attributes which Parmenides ascribed to being. The difference is that Timaeus describes the world so on the grounds that it is best so while Parmenides argues that being must be so. I argue in this chapter that Parmenidean being and Plato's Idea of the Good are essentially the same. Parmenides showed how being had to be: Plato saw that, being so, being is perfect in every way, that being is the supreme Good.

Timaeus argues that the physical world must have the properties which he ascribes to it because it is best so. He also says that the physical world is a copy of some intelligent original, God. If we suppose that for Timaeus as for Socrates that original is being and that being is the Idea of the Good then Timaeus' argument makes some kind of sense. The physical world is best because most like the Idea of the Good; the Idea of the Good is being and so the physical world is as good as its representation of the nature and attributes of being. And so to say that the Craftsman makes the physical world as good as he can is only to say that the physical world represents being as well as it can, and that being is the supreme Good. And these two propositions are the purport, as I have argued, of Socrates' account of the Line and Cave in the Republic. To assume that the Craftsman makes the world as well as he can is to assume the truth of the Line. And from this assumption may be derived precisely those attributes of the
physical world which Timaeus lists in this part of his exposition. And so the methodologies of the Timaeus and the Republic are concordant and complementary in this way also. Even time, we are told, is an image of eternity. (37 d.5-7.)

Imagine two super-powers at or near war. Let us call them Redland and Blueland. Redland is making a weapon of the greatest destructive power. The Government of Blueland hears of this and wishes to make an equivalent weapon if only to maintain the balance of power. To make such a weapon the scientists of Blueland must first know what it does.

Let us suppose that the effect of the weapon is to be an explosion the equivalent of the explosion of X megatons of TNT. Let us suppose further that there is in principle only one way of producing this effect. For the production of this effect requires the best possible use of the only material capable of producing it. For the weapon is as efficient as it can be.

If then Redland had indeed discovered how to make this weapon, they must have discovered the unique means of producing that effect. And if the scientists of Blueland by themselves and with no more information, also discover how to make such a weapon, they too must discover the unique means of producing that effect.

In principle there are two ways open to Blueland of discovering how to produce the weapon. The first is to steal the plans of Redland's weapon; the second is to develop an equivalent weapon for themselves. Let us suppose that Blueland's spies succeed in stealing what they think are the plans of
Redland's weapon and send them to Blueland before her scientists have developed the weapon for themselves. In this case the scientists of Blueland could not be sure of these plans, of the rightness of the method in the plans. If these were indeed the plans, they would if they used them have right opinion, but they could be persuaded to drop this method and try another.

On the other hand, let us suppose that the scientists of Blueland attempt to develop the weapon by themselves. First, they must discover what the weapon is to do. Let us suppose that they somehow find this out. In that case, and with no more information at their disposal, they could theoretically come to understand how to make such a weapon simply by learning as much of the physical principles utilised by the weapon as have the scientists of Redland. If they acquired more information about Redland's weapon that would be a bonus but they could do without it. And if they succeeded in discovering the principles, the only way of employing them, and that this was the only way, they would then be in a position to assess the accuracy of reports about Redland's weapon.

The Timaeus shows exactly what that effect is which the Craftsman produces. It therefore provides the original of one of the images in my war-story - the original of the weapon's effect. Timaeus is quite clear that the Craftsman frames the physical world as he does in order to produce one effect above all - that the physical world be as like being as it can be. Timaeus goes through several of the attributes of being
as Parmenides described it and shows how the Craftsman made the world accordingly. In the case of the weapon it was necessary for the scientists of Blueland to know at least what effect they were to produce. And so also the Platonic scientist becomes aware of what it is that the Craftsman makes of the world through his experience of the being which Parmenides describes.

Passages in the Timaeus correspond to my war-story at other points. The Craftsman is limited in his material which must be corporeal and visible and tangible. (31 b.4.) Likewise in our story we may imagine that the scientists of Blueland know that only certain materials are available to Redland. Again, Redland's weapon makes optimal use of the material available, and the best use of those physical principles necessary to the production of the effect. Likewise the Platonic scientist works on *a priori* assumption that the Craftsman makes the best use both of his material and the possibilities available to him. And again the Platonic scientist hopes that his knowledge of the material, the possibilities, and the intended effect will enable him to construct in the imagination a universe which is in all respects the same as the universe in which we live. And like the scientists of Blueland, the Platonic scientist, if successful, will end at the knowledge not only of the actual dispositions and arrangements of our physical universe. He will know also exactly why it is as it is, a knowledge which mere observation of those dispositions and arrangements can
never convey. And he may think himself in a position to query
the theories if not the observations of others, as Plato did
in his attempt to 'save the appearances' of the planets.
(e.g. Laws 822 a.)
1. 'Skills and Sciences'.
   Socrates and his companions use the word commonly translated 'skill' (techne) and the word translated 'science' (episteme) interchangeably in the same arguments of the same things and without distinguishing between them, (e.g. Republic 342 c.9. - d.1.). I shall do the same in English.

2. 'The good and wise man does not wish to have more than...'
   I have translated Plato's 'pleonectein' in this literal way, because though it is inelegant English it is closest to the words from which Plato's compound is formed. Plato does not always use 'pleonectein' in this passage pejoratively, as 'to want more than one's due', since the good and wise man in certain cases also 'wants more'.

3. '...the skilled man does or should 'want more'.'
   In The Statesman (299) the stranger depicts a state where the politicians determine how doctors and captains should operate. Young Socrates replies that this would destroy skills and that they would be impossible to redevelop 'because of the law preventing inquiry'. Hence Plato too argues here that inquiry, 'wanting more', is essential to the development of skill, that one man may well 'want more' than another as medicine develops.

4. '.....always comes up with the goods'.
   Meno makes this point at 97 c.6. for example and Socrates accepts it though he goes on to point out that right opinion does the same and that Meno has not thereby distinguished between them.

4a. '....of a man's repairing a watch....'
   I use this as an analogue to medicine, and the watch as an analogue of the human body. Hippocrates in 'Humours' and Plato in the Timaeus clearly think of the human body as a mechanical device and give their explanations accordingly. But there is
also in Greek medicine the notion that health is a kind of harmony, in which case a musical instrument is a better analogue than a watch. So in writing of the watch I try to say nothing which would not also be true of a musical instrument.

5. '..... may be trained to.....'
Such a man if he were trained well could be said to have 'right opinion'. So long as he kept to what he had been taught and did not meet an exceptional case he would make no mistake; but he could of course be very easily misled and made to change his method. (Meno 98 a.1.).

8. '.... if not c, then not d'.
This is the claim on which Socrates' dialectical procedure in the Laches turns. At 190 b.7. - c.2. it is repeated in the case of virtue and justifies Socrates' demand for an account of virtue from Laches.

8. 'Explicitly he does not mention physical abilities'.
In fact I can think of no passage in Plato's dialogues where he does discuss dexterity or 'knack' as a feature of skill. Throughout he deals only with those reasoning processes of which the skilful may give an account. Thus the art of carpentry for Socrates is not the knack of turning a rounded chair leg, but being able to calculate how many sixteenths of an inch the top of the leg should be modified so as to fit its socket closely, at the right angle, at the right height from the ground, and as firmly as may be.

9. '... the craftsman or doctor 'worth the name'...'
There is perhaps an interesting parallel to this in the history of Chinese philosophy. It has been suggested that the 'cheng-ming', 'the rectification of names' preached by Confucius was an attempt to tighten the criteria according to which such names as 'king' and 'father' were applied, and that Confucius thought that the State was corrupt because these names were applied to those not worthy of them. (See Analects 12:11; 13:5.)
10. 'In respect of the goodness of dogs...'
I have translated Plato's 'arete' by 'goodness' throughout the argument, since 'goodness' corresponds to 'good' somewhat as 'arete' corresponds to 'agathos'. In the Greek the argument depends on this correspondence and it is worth trying to reproduce it in the English. Of course, when Plato talks of one arete among others, 'goodness' will not do as a translation, but this problem does not, I think, arise here.

11. '... by damaging them in person, property, reputation'.
A. Adkins interprets Polemarchus' position in this way on p.269 of 'Merit and Responsibility'.

12. '... not uncommon in the early dialogues...'
Another example would be the argument with Thrasymachus about 'wanting more' which I discussed in the first section of the first chapter.

13. 'And they are put to him quite clearly'.
It has been suggested to me that in fact Polemarchus thinks that Socrates has asked him 'Is not justice a human goodness (or virtue)'. But the Greek for this would be rather different - arete tis - and since Socrates' argument would not then follow for Polemarchus it is hard to see on this suggestion why Polemarchus allows it.

15. '... as do Theognis and Aristotle...'
Theognis: frag 147; Aristotle: Nicomachean Ethics 1129 b.29.

16. 'Adkins has a different view - '
Adkins, op.cit. p.269.
17. 'It is remarkable that Robinson....'

17. 'Robinson writes....'
   Robinson, op.cit. p.15.

17. 'For example,' In fact.... know what x is'.
   Robinson, op.cit. p.51.

20. 'Thompson writes....'

23. 'Robinson however remarks....'
   Robinson, op.cit. p.8.

23. '... may require time and scribbling'.
   I do not wish to say that Socrates never knows
   that his argument will lead to a refutation;
   only that in certain cases he may not and that
   he can sincerely deny that he intends to
   refute at least some of the time.

27. '... however radically they may appear to differ'.
   This belief in a common order of thought
   shared by everyone, be he slave or philosopher,
   may have justified for Plato and Socrates the
   totalitarianism of the Republic - a monolithic
   society to suit a monolithic mind. It helps
   to explain how Plato and Socrates could think
   that they were producing an analysis of
   thinking which was universal, true for everyone,
   though not universally accepted.
28. '... a recent paper by Gosling....'
   J. Gosling: 'Similarity in Phaedo 73b seq.'
   pp. 151-161.

28. '... Gosling argues against a very common
   interpretation....'

29. '... Gosling makes the following points: (1)...
   Gosling, op.cit. p.152. First paragraph.

29. '(2) If Plato has only one view....obviously
   not true!'
   Gosling, op.cit. p.152. Last paragraph
   - p.153. top.

29. 'Gosling makes two points with which I disagree:
   (1)....'

30. '(2).... when the discussion....'
   Gosling, op.cit.p.158. Last paragraph.

31. '.... 'when the discussion moves....'
   Gosling, op.cit. p.158. Last paragraph.

32. '.... 'almost an aside'....'
32. '... are no more equal than unequal'.
   This same point is often applied to the other properties which Socrates mentions from 75 c.9. to d.1. - 'greater and smaller', 'the beautiful, the good, the just, the holy etc.' For 'greater and smaller' see Phaedo 102 b.3-6. For 'the beautiful' see Hippias Major 288 b.1. - 289 d.5.

40. 'And so Bluck in his commentary....'
   R. Bluck, Plato's Phaedo p.63.

41. 'But Socrates often talks....'
   e.g. the Simile of the Cave, where, as I argue later, seeing the objects of the outside world stands for knowing the forms. See also Phaedrus 250 c.4.

43. '.... the distinctive feature of the Equals themselves'.
   It is notable that in order to make this point I have to use the plural 'the Equals themselves'. So does Plato at 74 c.1.

45. '.... as long as we wish'.
   Or rather as long as we can, before the body claims its own again and forces us back into the changing world to continue to provide for ourselves. (See Phaedo 65 c.)

46. 'Plato thought that everybody.....'
   I.M. Crombie: Plato, the Midwife's Apprentice. p.43. 'Whatever we can come to understand, we already in some sense know'.

98.
48. '... how the goddess receives him in her house...' That is, I take the gates through which rider and chariot enter to be the entrance to 'the houses of night' from which the maidens proceed to meet the chariot.

48. '... it best describes the act of love.' Parmenides' thirteenth fragment goes: 'He (she or it) devised Love, the very first of all the Gods.' The proem is just such a device. The male symbols are: the rider; his chariot; his horses; the chariot-axle; the acorn-shaped door-bolt; the hardened axes of the hinges; the rider's right hand. The female symbols are: the Goddess; her palace; the maidens with uplifted veils; the palace-doors and their opening; the sockets of the hinges; the Goddess' hand. The first of the male symbols in my list is paired with the first of the female etc. Each male symbol penetrates, moves within, or is enclosed by a female symbol. This explains the mechanical detail of the proem. The proem reaches its climax with the union of the two principals, the rider and the Goddess, at which moment the truth is revealed. For a similar treatment of some of the same symbols to the same end see John Keats' 'Ode to Psyche'.

48. '... the little we have is probably most of it'. It has been estimated that we have nine-tenths of the 'Way of Truth'. See 'The Pre-socratic Philosophers' by Kirk and Raven. p.266.

49. '... which Taran first translates...' Taran. p.41.

49. '... does not finally adopt it.' But G. Vlastos and W. Verdenius do. See Vlastos p.168; Verdenius p.35.
50. ‘... for example, William Blake’, Proverb of Hell from ‘The Marriage of Heaven and Hell’.

50. ‘... and Milarepa...’ The Hundred Thousand Songs of Milarepa, p. 34.

51. ‘Behold .... firmly’. One of the most brilliant lines in the poem. Its opening imperative commands the instant demonstration of its truth. The things absent may be so in space or time.

IV

53. ‘If the parts ... of a whole number’. I presented this proposition to Dr. J. Groves of the Department of Mathematics, Melbourne University, who gave me the following proof:

Let \( a, b, c, d \) be the four whole numbers such that
\[
\frac{a}{b} = \frac{c}{d} = \frac{a+b}{c+d}
\]
and \( a, b, c, d \) have no common factors.

Then \( ad = bc \); \( a (c+d) = b(a+b) \)

\( \therefore ac + bd = b (a+b) \)

\( \therefore \) since \( a+b \neq 0 \), \( c = b \)

So \( ad = b^2 \); \( a, b, d \) have no common factor.

Then if \( p/a \), \( p/d \), then \( \frac{p}{b^2} \) and so \( p/b \).

So \( a, d \) have no common factor.

Now \( b/ad \), so write \( b = b_1 b_2 \) where \( \frac{b_1}{a} \), \( \frac{b_2}{d} \) are whole numbers.

Then \( ad = b_1^2 b_2^2 \).

Since \( a, d \) have no common factor, \( a = b_1^2 \), \( d = b_2^2 \)

So \( a+b+c+d = a+2b+d = b_1^2 + 2b_1 b_2 b_2^2 = (b_1 + b_2^2)^2 \).

Note. \( x/y \) means \( x \) divides \( y \).

I have no proof, however, that Plato recognized this feature of his proportions. It may just be a remarkable coincidence.
54. 'A number equal times equal the Pythagoreans...'  
Aristotle. Magna Moralia A.1 1182 a 11.  
Quoted by Kirk and Raven. op. cit. p.246.

54. '... in the limits of great bonds.'  
Plato calls the proportions which relate fire,  
air, earth, and water by the name of 'bonds' at  
Timaeus 31 c.2-4. 'Analogy is the fairest of  
bonds.'

54. '... a complex epistemology'.  
This switch shows very clearly that Plato's subject  
in The Line is not entities, but activities. The  
same point may be made about the description of the  
two primary divisions of the Line, 'what is being  
thought' and 'what is being seen'.

54. '... geometers and mathematicians use visible diagrams...'
The diagrams of geometers are such as illustrate  
the works of Euclid. The diagrams of mathematicians  
are perhaps the pebbles which we know to have been  
used by the Pythagoreans. (See Crombie, I.M. An  
Examination of Plato's Doctrines. Vol.II p.78)

55. '... for the second and third terms, drawn squares and  
visible objects, may be the same...'
J. Adam (The Republic of Plato. Vol.II p.64.) proves  
that the two middle sections of Plato's Line must be  
equal in length. See also the first note to this  
chapter.

56. '... by some scholars .....'
e.g. I.M. Crombie. An Examination of Plato's  
 Vol.II. p.80.  
On the other hand there are scholars who hold,  
as I do, that the lower section of the  
intelligible comprises visible diagrams.  
e.g. B. Bosanquet. A Companion to Plato's Republic.  
p.254. Note to 510 e,11.  
56. 'Adam in his commentary....'

58. '.... a leap, not a climb'.
   F. Cornford (Mathematics and Dialectic in Republic
   VI-VII: Studies in Plato's Metaphysics, p.73)
   writes 'Noesis is an immediate act of vision; the
   ascent is made by one or more sudden leaps'.

61. '.... this intuition does not show the philosopher
   exactly how....'
   And so Socrates who knows the nature of the forms
   and that they interrelate is nonetheless still
   ignorant since he does not truly understand all
   their inter-connections. This explains why
   Socrates claims ignorance (506 c.2-3.) about the
   Good, even though he so clearly knows far more
   about it than anyone else.

62. '.... the only object of study'.
   Hence Socrates' demonstration with the slave in the
   Meno is a good example of diaporia, especially in
   its use of a visible diagram. In that discussion
   the real nature of the entities interrelated is
   not discussed. I would not say that geometers
   believe they are talking only of their figures
   (cf. Republic 526 a.1-7.). They may talk of 'the
   square', define it, think it intelligible only.
   But then they are interested only in its inter­
   relations with other entities and do not enquire
   into its nature as a form so as to gain noesis.

63. '.... mathematicians seek to see those things....'
   See last note.

64. '.... Plato attacks Parmenides'.
   Perhaps it is fairer to say that Plato's proof
   of the existence of 'what is not' is an
   attack on the Sophists who misuse Parmenides.
   Certainly the Elean stranger demonstrates
   very clearly how on one interpretation 'what
   is not' is inconceivable and ineffable
   (238 c.10.), and this, I think, is enough to
   save the argument of the 'Way of Truth'.
   And after all it is the Elean stranger who
   makes the attack, which suggests a refinement
   of, not opposition to, Parmenides' views.
... the divergences in his account from Parmenides..."

The three obvious differences are these:
1. Plato calls being 'the Good'; Parmenides does not. This stems from Plato's preoccupation with skills which I study in the first chapter and return to in the last.
2. For Plato being is bright, for Parmenides dark - the sun and the palace of night. But for both it is hard to see (cf. Republic 518 a.1-3.)
3. Plato approaches being through the forms, Parmenides does not. But Parmenides too stresses the importance of seeing the forms as interconnected, as one. (Frag. VIII 53-56.)

... and which came together'.
This passage creates difficulties at least for I.M. Crombie's interpretation of the Cave, that the statues and their shadows stand for moral entities. For Socrates' stress on sequence is not appropriate to moral entities, nor indeed is his mention of the power of the sun, Crombie, I think, takes the mention of 'statues of justice' at 517 d.9. as a clue to what has gone before, but I think it an extension of the original image of the Cave to cover the moral world as well. But see Plato, The Midwife's Apprentice p.100 and An Examination of Plato's Doctrines Vol. II p.86. In any case it is a pity to have to suppose that Plato does not mean what he says by 'the world manifested through sight'.

... or Man in the Parmenides'.
I think I would include also the forms of artifacts, such as the idea of the Bed. Certainly the description of the puppets at 514 c.1. puts artifacts first, and this forms a link with Republic X. 597 b.5. ff.

... on guess-work (eikasia) rather than science'.
Hence I take the name 'eikasia' to be an early statement of the problem of induction.
75. 'I judge that *pistis* is Plato's understanding...' 
So the order of enlightenment is *eikasia, dianoia, noesis, pistis*. The text (515 c.4. - 516 c.2.) bears this out: the released prisoner is dragged out of the Cave before he can bear the dazzle of the puppets and the fire, and the first things he learns to see clearly are the reflections of natural objects (diagrams), natural objects (forms), the sun (the Good). Only after this does he return to the Cave. Of course, he cannot appreciate that the puppets imitate natural objects before seeing the natural objects.

77. 'We have seen that ... time and space'. 

79. 'This delegation ... world'. 
F.M. Cornford. op.cit. p.141.

80. '.. change places'. 
On another interpretation of the Cave, based on Republic 596 e.5. ff., the shadows stand for works of representative art and the puppets for what these represent. But the bound prisoners 'like us' see only the shadows (515 a.5. - b.5.) while we see both the works of art and what they represent. Both this interpretation and Crozbie's (see above) disregard Socrates' quite specific direction to connect the Cave image with 'what has been said before' (517 b.1.). They both read into it what is said after.

80. '.. of being, of its unity at which they aim'. 
These
'Are yet the fountain-light of all our day,
Are yet a master-light of all our seeing'.

VI

81. '.. even their being and their essence...'
I have translated *ousia* 'essence' both because Socrates often uses it in this sense and because it is an intolerable paradox to suppose the Good beyond being as it is often translated to be. (509 b.9.)

85. 'For as Timaeus ... uniform essence'.
Thomas Taylor. Plato: Timaeus - Critias. p.44.
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