

[Untitled lecture transcript on Greek philosophy, Oct. 1974 at Geneva College]

G.H.C:

There are 92 elements up to uranium, all the natural elements. Artificial elements as plutonium (94) go up to 103. Some existing only a billionth of a second. H.L.

I understand that you have come to the end of the first presocratic material and are about ready to begin the next chapter. Perhaps I should just say one or two things about what you have gone over at least to make sure that you've noticed this. In the early section on the Milesians there are certain ideas that are important, not only for the early periods but the problems that followed out of them constitute the rest of the history.

The Milesians, that is, the beginning of Greek philosophy, had one main problem that of course took several forms. But they were chiefly interested in cosmology. They wanted to know what the universe was made of. Perhaps I should outline the history rather briefly. The first period goes from 585 B. C. to a nice date we can call 400, I guess it's back to really 399 when Socrates was executed. And in this section the subject matter you could call science and the question that science had to answer was what? What is the universe made of?

Now then, the great period of Greek philosophy is approximately 385, which is roughly the date of Plato's first dialogue, to 323. This is the death of Aristotle. And here, because of the difficulties in answering the question what, here the question became how, in the sense of how do you know? If you answer, what, you give certain scientific information and then a person will say, well how do you know that? So the subject matter is epistemology and the question is how do you know the knowledge and act you've pointed out. The emphasis is on knowledge.

Now after the death of Aristotle the next development began about the year 300 B. C. and it continued until A. D. 529. A very long period of time, I won't say a completely unimportant period of time but the importance is diluted by the number of years and these people were interested a little in science and some epistemology and I don't want you to get the idea that those things were forgotten but the chief interest was in ethics and you might say, "well what should we do about?" And that is the history of Greek philosophy in three parts. 529 is the year in which Justinian closed the schools of philosophy in the East. Of course, the East had become moribund and the West had been conquered by the invading barbarians, and civilization was extinguished for about 1,000 years. Now that's a little outline.

Now for the early period of Greek philosophy say up through Heraclitus, I would like to mention five things to summarize them and I hope you noticed them as you were going through but we'll take this minute to sort of get started. They were interested in finding the one stuff out of which the universe was made. They thought it would be irrational for the universe to consist of 94 or 152 elements or some other definite number. Can you in the next minute and a half or 30 seconds figure out a reason why the universe should consist of precisely 94 or 16 or 132 elements? You see there is no reason that can justify one such number rather than another. And hence, they thought that if the universe were rational as they assumed it was, it would have to be constituted of one stuff. They didn't agree on the stuff but they agreed on the fact that it was one. And that of course is the important point, not just what they _____.

The second of these five points is that this one stuff is everlasting. It was never created, it would never be destroyed it is the eternal substance. In a moment, I'll give you some reasons for this. But let's go through the five points first.

The third point is that in contrast with the universe as a whole the cosmos is limited. Now the word cosmos is a word that is known by all ladies for another. One of the most important words of the English language is derived from the word cosmos, what is it? Cosmetics. Having come from a wedding ceremony what is uppermost in your mind? It's the word cosmetics. Can any of your guess why there is a connection between cosmos and cosmetics? Oh it's not so hard as all that. Cosmos and cosmetics. Well, the opposite of cosmos I suppose is what the young ladies would describe before they use their cosmetics. Chaos.

Cosmos means an orderly arrangement and the Milesians were Ionians who seemed to think that the universe was infinite in extent, that isn't absolutely certain, but, you see, the evidence for these early Greek philosophers is a little scanty and you can't answer every question about them. If you would look in a book called *Readings in Early Greek Philosophy*, I think this is mentioned in the bibliography in the back of the textbook, on page 536, she mentions from early Greek philosophy, edited by Milton Knobb. And you may be surprised to see how little remains of the early Greeks in writing, their writings. There are only two or three sentences from Thales. Heraclitus is a bit better off with 150 quotations, but there is no complete philosophic treatise before the time of Plato. Plato's works are the first philosophic works of which we have manuscripts. And this earlier period has to be reconstructed from quotations made by other writers. Plato would quote something from Heraclitus and Aristotle would quote something from Thales. And then later writers would quote. And it is from these quotations that we have to reconstruct early Greek philosophy and there are some questions that are a little difficult to answer because of the falsification of material.

But it seems that, oh, no doubt about the fact that the cosmos is limitless, there's no question about that, but presumably the stuff is infinite in extent and inexhaustible in quantity. And this point can be filled out a little bit more by the fourth of these 5 points. That there are numerous cosmoi, cosmoi is the plural of cosmos, and you might say there are many solar systems although they didn't think of them as solar systems but they didn't have that sort of astronomy and they held that there were many such.

One again, it is not absolutely certain that they thought these cosmoi all existed at the same time or that many of them existed at the same time. It is quite certain that they held that one cosmos comes into being, decays, collapses and then after a while another cosmos comes into being. So many cosmoi in the temporal stream of affairs, it is logical to suppose that there are many cosmoi at the same time also in this vast extent.

Now the fifth and this perhaps is about as important as the first, the first very important fundamental and it is this. The earth on which we live or the solar system in which the earth is a part are changing. You can see the planets go around at night, you can see the leaves drop off the trees at this time of year and nature exhibits change. Now then, these early philosophers insisted that change is spontaneous. It is a characteristic of nature. It doesn't need any further explanation. It just is. It's the nature of nature to change. And so it keeps changing. Now these are the five main points upon which the first part of Greek philosophy agrees, up through Heraclitus. Do you have any questions you want to raise before I rush over the next part? This is all familiar to you, you had it in the last two days. Very well.

Parmenides discovered a contradiction in this. He saw that the idea of motion and the idea of a unitary substance are inconsistent. And he took the position that if your senses contradict your reason you must follow your reason and not your senses. And it is never permissible to talk nonsense. And when you say, "being changes," you are talking nonsense. Let me read over one page or two pages of the textbook because I think this is very important. And the problem of unity is not simply and ancient Greek problem. The members of my profession get into discussion about it today, or at least next week.

At the top of page 27, the being is one. If being were not one but were many; that is, if there were several beings, these several beings would have to differ from each other. It's obvious isn't it. If they're different, they are different. It's so easy. Philosophy is one of the easiest things there is you know. If they're different, they're different. But if they're not different they would be the same being and wouldn't be several, naturally. But if they are several and different, they will differ in one of two respects. They will differ with respect to being or with respect to non-being and there isn't any other respect in which they could differ, is their? Well, it just goes without saying.

But they cannot differ with respect to being for this is the assumed point of similarity. They're all supposed to be being, so they can't differ with respect to being. Yet it is less possible that they should differ with respect to non-being for non-being does not exist, is nothing, and cannot support differences. It follows inexorable, therefore, that the several beings are not, in reality, different so there are not many of you in class this morning, there is just one. It's quite obvious isn't it? There aren't many people here. There couldn't possible be. That's nonsense isn't it to think that there are several people in this room. Sure, it's nonsense. And you mustn't think nonsense.

Consistently with this, being cannot have originate. Anything that originates must come from something else or from the same thing. Being cannot come from something else for anything else is non-being and if non-being does not exist, where did it come from? But being cannot come from the same thing, for being already is and no coming is needed. It follows that origin is inconceivable and all these charming young ladies are not 20 years old but a few million or more. Isn't that discouraging? But there is something to be said for this paper, you're not going to grow any older. You can't change. We're all one.

Now I don't suppose I need to read about modern college students who don't like Parmenides, that's too bad for modern college students. They say there must be something wrong somewhere and Parmenides says, oh yes there is something wrong somewhere, but its necessary to indicate where. The objections of common sense rely on sensation. The argument has relied on reason. Irrespective of what we imagine we see, there's no justification for talking nonsense. Any theory that says the non-existent exists must be false; and the fact that the theory may be nicely phrased and agrees with sensory experience doesn't make it less absurd. When you see rabbits jumping out of a hat or a man climbing a rope hanging from nothing, you know it is no so. When reason and sensation conflict, sensation must give way.

Now I don't want to bore you by reading what you can read yourself but this is very important and it would be well to read it over several times because there have been, since Parmenides' day, types of monism, where being is one, but I guess there has never been such an absolute monism as that of Parmenides. From this point on, those who had been monists had always tried to smuggle in a little plurality and we shall see that later on.

This is true of the present time too. Last century there was _____ who got as near to monism as anybody can. And then there are pluralists like William James and his descendants like John Dewey,

they are pluralists. And someone has remarked, and this is really discouraging, that if you being with unity you can never explain plurality. And if you being with plurality, you can never explain unity. So you're a loser both ways. All you have to do is to choose which way you want to lose. The immediate followers of Parmenides choose pluralism. Now there are exactly three types of pluralism and the Greek tried them all and there hasn't been anything new since.

The first trial was made by Empedocles and he came up with the 19th century theory of chemistry that I was supposed to have learned in high school but I found chemistry no more interested than manufacturing explosives and setting them off in class with a loud bang. At any rate, the 19th century chemistry was that the universe consist of, well the 19th century chemistry differed in one little particular from Empedocles. Empedocles said the universe consists of four elements and chemistry that I studied in high school said it consists of 94 elements. But the addition of a 9 in front of the 4 doesn't alter the theory at all. And he had these four elements. And he had chemical formulas, the way we used to learn, you will find one of them at the top of page 31, $W_2F_4E_2$ and that's the formula for bone. You can try that in your chemistry lab, mix them together and see if you get bone.

Now these pluralists could not simply ignore Parmenides. They had to take some account of unity. So they made each of the elements a unit. And with the exception of the ability to move through space each of these elements is essentially a Parmenidean being. It's eternal, it's never come into being, it will never be destroyed, it can not possibly change in any way except in place. It can go from one place to another but there's no internal change.

There is a difficulty, however. If these beings are as immutable as Parmenides. They had to take some account of unity. So they made each of the elements a unit. And with the exception of the ability to move through space each of these elements is essentially a Parmenidean being. It's eternal, it's never come into being, it will never be destroyed, it can not possibly change in any way except in place. It can go from one place to another but there's no internal change.

There is a difficulty, however. If these beings are as immutable as Parmenides said that his being was, then they really couldn't change in place either. And you cannot have spontaneous motion in a Parmenidian animal and so Empedocles got hold of another very recent 20th century ideal, love. And he had the atoms loving each other, also hating each other which goes along with it. And the love was the cause of combinations and the hate was the cause of dissolutions. And these two forces, if you will call them forces, Empedocles argued for _____ them. He got the atoms moving around and making the combinations and so you see the combinations of, the bones are compounded of two parts of water, four parts of fire and two parts earth.

Well, that didn't suit the historical development. And two changes were made. One change is very obvious. You don't have two principles of motion. Because anytime you combine things together you must have separated them from something else. If you take a cup full of flour out of the flour bin and put it into a bowl and mix it with other things you have taken the flour out of the flour bin to begin with and so you only need one principle of motion, not two. It combines and dissolves.

But there's another point that's most important. Anaxagoras didn't think that four qualities to begin with, earth, air, fire and water, were sufficient to account for all the differences that we see everyday. I see a hundred shades of color out through the window on those trees and there are quite a number of shades of color in this room and of course there are all sorts of tastes and sounds and motors and Anaxagoras didn't think he'd get them all from just four original stuffs.

So he said, well the thing to do and since you can't have a finite number of atoms, a finite number of qualitatively different atoms, because there's no reason for one number rather than another, there must be an infinite number of qualitatively different atoms. And so he constructed the world with an infinite number of qualitatively different atoms and that should supply us quite enough qualities for us to enjoy for the rest of our lives. And instead of love and hate he had a mind which was supposed to put them in motion and do things with them although they seem to have relied more on a vortex than on a mind, at any rate he said mind.

Now finally, another man came along and said, "This is too complicated." There is, to be sure, an infinite number of atoms but there are no qualitative differences. For every atom is qualitatively the same as every other one. That is it has no qualities at all unless you call extension in space a quality. And so you have atoms that have all shapes and sizes but no qualities and furthermore to take care of the principle of motion, Democritus said motion never began, but motion is not spontaneous either. One atom hits another atom and the second atom moves. Of course, the first atoms hadn't move but the first atom had been hit by a previous atom and this is an infinite series and hence, there is no particular principle of motion. The motion is everlasting and one particular motion sets another particular motion going. Like one atom bumping another.

And then to conclude the presocratic section a disciple of Parmenides said that is nonsense. And he told the remarkable tale of Achilles and the tortoise which I hope you have read. Achilles, the track star of antiquity, whose IQ was not half his weight, and the philosophical tortoise, who, being a disciple of Parmenides, wasn't much on speed but he was extremely brilliant. And so he challenged Achilles to a race with the saving clause that he be given a head start and then Achilles could never catch up to him because motion is impossible. And so the tortoise won the race without having to move at all simply on the stipulation that he be given a head start. In mathematical terms, Democritus says an atom can move from here to here. But isn't it clear before the atom can move from here to here, it must go halfway. And before it gets to the halfway mark it must move a quarter of a distance. And before it gets to a quarter of a distance it must move an eighth of a distance. It has to exhaust an inexhaustible series before it ever starts and since atoms do not like to exhaust inexhaustible series it just doesn't start. So motion is compulsive.

That brings us up to page 44. Do you have any questions on what I've gone over? Well then, could we continue but don't hesitate to, and I don't mind your interrupting me if you want to interrupt me in the middle of a sentence, why that's good too. But this reputation of atomism left Greek philosophy with the Atomists. And the next movement is the movement of the Sophists. The preceding philosophy is one of the causes of Sophism. Sophism means we can't know anything and that saves you so much trouble studying because you don't have to learn because you can't learn. I'm sure this is an attractive type of philosophy for college students.

But there are some other concerns that gave rise to Sophism besides what I've just shown you. But during the presocratic period, mathematics had begun to develop and the Pythagorean's school was a mathematical school and something most disconcerting had occurred in mathematics. They couldn't make head nor tail of it. They found that there were two lines which couldn't be measured with the same ruler. Now, offhand you might say, "well, if you would make the divisions of the ruler a little smaller." make the units a little smaller so that you wouldn't have a big unified mass and then you come to the end and you find you're out here ... make the units a little smaller and you come right to the end don't you? No, you just can't do it. This is, say, a square. No matter how small you make the units of your ruler you cannot measure the side and the diagonal of a square.

This problem is discussed in Plato's *Menon* and if you want to do some outside reading that would be a good one to begin on. It gives you some Socrates ethics too but it also gives you this mathematical problem. The mathematical problem is to construct a square that is precisely twice the area of this square and in order to illustrate his theory that learning or knowledge comes out of you and it isn't something that's poured into you, Socrates used a slaveboy as his pupil and didn't tell him a thing, he only asked questions. I don't know whether I can ask fancy questions, it takes a little longer. But the slaveboy extended the square this way and the slaveboy could easily see that the big square was four times the size of the area. And then he also asked the slaveboy if he could see that if these sides were two units of length and this divided in half and then each of these halves would have two square inches or two square somethings. But of course the whole thing would have 16 square inches where this has only four square inches. This is four times the size not twice. And if you have the square of the square, say three like this, you'd have nine, you wouldn't have eight, you want to have a square make it eight square inches. Then Socrates asked the slaveboy what does this line do to that first square? Well it cuts it in half and since the square has four square inches in it obviously half of it is two. Even the slaveboy knows that one. Now then, since these are similar squares you can make these diagonals this way and

... and the reaction was, well we can't know anything. Physics is in shambles, mathematics has become irrational and then the social and political situation is so deteriorated that we all better get what we can while the getting's good and that's all that counts. This, the history and politics of it, you will find on pages 46 and 47. And then they came up with the idea of quality education. It wasn't necessary to know anything you only had to know how to teach. And so the Sophists would teach vocational subjects, they would teach lawyers or would be lawyers how to make the worst appear the better argument. And they also would teach more mundane subjects like wrestling or navigation sometimes or ordinary crafts but their fame largely depended on teaching orators. So that since you're out to get what you fend for yourself the way to do it is to sway crowds, collect a political machine, take over the government and then you can be a tyrant for the rest of your life which ends when somebody assassinates you. And so we have the account of the educators. Let me read page 49.

“In these circumstances there appeared confident educators who claimed to teach ambitious young men virtue. Not the old virtue but the new – the virtue of power to succeed in the business of life. These men were not interested in actual science, nor (with the exception of Protagoras and Gorgias) in the logical and epistemological problems it raised; rather they were the modern counterparts of the wise old poets who had taught the people the sound, somewhat naive maxims of popular wisdom. The new teachers were also wise men: they called themselves Sophists.”

And that means a wise man. Sophia is wisdom, the sophist is the wise man.

“Their wisdom however, was not a matter of old fashioned adages and dignified, stuffy advice fit only for a farmer's almanac; it was up to date and that met the needs of the new day. Social effectiveness and an integrated personality was their ideal. What the young man needed was vocational training. The Sophists could instruct aspiring politicians in the tricks of the trade, the devices of oratory, the knack of swaying audiences, the secrets of gaining votes and how to make the worse appear the better argument. Education was their business. Progressive education. Education for citizenship. The study of nature dignified by the attention of impractical philosophers, had neglected life, the actual life of the city. Stars and atoms are equally remote from democratic struggle. Know then thyself; presume not God to scan; the proper study of mankind is man. Man is the measure of all things: man, not as a cold, bar, futile intellect, but as an active, living will.”

They don't use will anymore; they talk about emotions. They've forgotten about the will of the Sophists; they don't have will they have emotions.

“Life is a matter of willing a goal and success is the standard of wisdom.”

In search of student to whom to give instruction, most of the Sophists traveled from city to city. Plato later complained that this showed a lack of civic responsibility. The Sophists also boasted of how much money they made in fees; and this too was a scandal to the aristocratic tradition. But there was one “Sophist” who, though he neither traveled nor accepted fees, was considered worse than all the others. The others gave understandable lessons. Anyone with a modicum of intelligence could learn how to confuse an opponent, how to change the subject when in a tight place, how to construct a pleasing speech. Moreover, even if they were sometimes agnostic with regard to the gods, they were entirely self-confident in their own line. They may have taught the young politicians how to confuse their opponents; but they did not confuse the young politicians. This other “Sophist,” however, lacked all self-confidence; he never knew anything; and instead of answering all questions, he only asked them. His sole sim in life, so it seemed, was to confuse those who talked with him. Now this was hardly cricket. The voting public is fair game; but it is downright impolite to badger your friends in the marketplace. And Socrates did nothing else.

Now Plato is one of Socrates' disciples and he is one of two sources of our knowledge about Socrates. The other is Xenophanes. There has been some critical discussion of the two points of view concerning Socrates. One, represented by A. E. Taylor thinks that Xenophanes gave a picture of the true Socrates, well no, both of them did for A. E. Taylor, Plato also gave a true picture of Socrates, which of course ascribes to Socrates a great deal of philosophy that maybe he couldn't know of the matter. And the other view is that Xenophanes did indeed give a pretty true picture of Socrates. Perhaps not giving him enough credit for his brilliance because after all, Xenophanes was a very practical man, he was a general that led his 10,000 in retreat through a hostile country and performed logistic wonders, but he wasn't a philosopher and though he had great admiration for Socrates and repeated some of the arguments he was not a philosopher and didn't do Socrates justice. On the other hand, Plato was such a philosophic genius and, combined with a reverence for Socrates, attributed to Socrates much more than the historical Socrates had said. Particularly in his later dialogues. Whereas the earlier dialogues drew a pretty true picture of the real Socrates. But Plato's later dialogues are Plato's philosophy in which he uses Socrates as a mouthpiece because he writes them in dialogue form. So here are two views. And I think maybe A. E. Taylor's view has not won universal approval.

Hale and Burnett struggled hard with this. And they threw a great deal of light on the meaning of the philosophy that was written in the books but I rather suspect that they had a bright idea and rode is like a hobby horse and that the other view is perhaps more what we should read. It really doesn't make much difference if we want to learn what the arguments are and whether they are Socrates and Plato's is not the most important thing. If you will read the Minos, you will find some of Socrates ethics, you find this matter of the slaveboy and the square, you will also get the idea that knowledge does not come from sensory experience as the presocratics held. But there is knowledge, contrary to what the Sophists say, and how it is possible would be the subject of some discussion for a few days from now on. I think that will be enough for today.