Philosophy and Critical Thinking Prof. Gyan Prakash Department of Humanities & Social Sciences IIT (ISM), Dhanbad Week-02 Lecture 06: Pre Socrates-Philosopher

So, welcome in lecture 6. In this class, we will be discussing Pre-Socratic Philosopher. However, in the last class, we have discussed the Pre-Socratic philosophers and we have seen that many philosophers have talked about the reality and the cause of the reality. If you have gone through the last session, we have discussed the many philosophers, they talked about the main cause of this world. So, this is how they started their philosophy. We have discussed the idea of Thales. This is how tales talked about the main cause of this world and this idea how it developed from Thales to the many different philosophers. In last class, we have discussed that how the philosopher even had talked about one object, one thing as a cause of this world and at the same time, there are many other philosophers who talked about the idea of change. Today, we are going to talk about again pre-Socratic Philosophers. Today, I have taken only three philosophers and they are very unique philosophers. These philosophers in the sense that they have talked about the same problem, they have addressed same problem but the way they have addressed, I have concluded their conclusion, they have claimed, come up with the idea that is very important. So, first philosopher is Anaxagoras. So, Anaxagoras is 500 BC from 428 BC, those are his timing and he was an Ionian philosopher. He came from the west coast of what today we know as Turkey and he went to the Athens for study of philosophy. However, he was from the very wealthy family and he abandoned all his inheritance just to study philosophy. So, he went to the Athens to study philosophy and later on, he made a very important claim which we are going to talk about. Anaxagoras also helped the Athens to make a centre of philosophical activities. He was not interested in the morality and religions. However, Anaxagoras philosophy is important in the sense that before Anaxagoras, there was a philosophy of Empedocles who talked about the four substances of fire, water and air and earth which considered this whole universe. So, this is the same idea if you see in Indian system, we have an idea of the *Pancha-Mahābhūta* and this world is made of these five elements and in Indian philosophy, there is an idea of the *Pancikaran* where we have talked about how this world is made of five elements. Similarly, the philosophers in western world, they also talked about the four substances, the fire, water, air, and earth. Against this philosophy, what Anaxagoras did, Anaxagoras maintained that there are countless elements differing from one another. So now what this Anaxagoras is doing, he is claiming that the cause of this world is just not four elements, it is a countless element and each element is in a different form each other. So, if you have gone through the last session, the philosopher who is saying that there is water or there is air, it is just a cause of this world, this universe. They are giving a proper reason that how and why this only one element is cause of everything and even there was a lot of discussion about that how the one object is changing in a different other object. So, they are also talking about that okay, there is one object is changing in a different other object. There is also an argument that this change is not possible. So how quality of one object can change in the quality of another object. Now this philosopher, Anaxagoras has a very different idea. He is saying that this world, this universe is caused by a countless element. Now each countless element is different from each other. Now, it is different from the sense that it is different in form of size, color, and taste. There is another very important argument by Anaxagoras is that this every element in this world is mix of this all the element. So, for example, if you take any element X, Y, Z, he is saying that if you divide this, you will find all different elements. So, all the elements included in one element. So, if even there is a very smallest part and you divide this one, you will find all the elements here in element. So, for example, now the question is for example, if I am saying there is an object called X or this is called gold, right? So now this is called gold. Now this is gold because the gold element is dominating into this element. Therefore this is X, this is Y, this is Z and so on. So, the X element is dominating. So, we are saying X. Then Y is dominating then say Y. Like for example, there is a hot object, right. Now the question is if you going with this Anaxagoras argument, what does it mean? It means that even in this hot object, even there is a cold element, right. Let us say the element. So even something is hot in cold is there. Hot, we are saying is hot or we are at least this is appearing as a hot or let us say for us this is a hot because this is dominating, right? This is in more number. So therefore, we are saying that this is hot, this is X, right. But in every element, all the elements are there. If you in Indian philosophy, we will be discussing the same thing, the theory of the *Pancikaran* that how Panchamahabhoot has created this world and this world is made of the Panch-Mahābhūta and they also talked about a similar kind of theory, right. So, Anaxagoras has a same idea saying that this each element found in mixed form and no matter how we divide each mixed form, each element still contains all other elements. Now there are another argument that if this philosophy or Anaxagoras argument is arguing that this world is made of countless element, right? Now the question is if the countless element is coming together, is it a creation of this universe? Anaxagoras was surprised to see the stars and then their harmony, right, again this world is very beautiful. Now if the one argument is if the countless element is coming together, they can only produce the chaos but this world is in a very different form, right. So, what he talked about the idea of Nous and that is a very important contribution from this philosopher. He said that there is something called Nous. There are philosophers who is saying this Nous is like mind or intelligence and Nous is what is doing is basically is bringing everything in order, right. Now the idea is let us understand what is Nous, right? So, there are two kinds. However, it is not addressed by an Anaxagoras. So, I am just giving you an idea. So there are two kind of later on or maybe in Indian system we'll be discussing that there are two kind of thing which we are like two different way to discuss this idea. First is something which is not material and controlling this world and creating this world and so on, right? We can name that thing as an X and Y and Z or something else. Nous has a very different concept. So, Anaxagoras what he did that he argued that Nous is pure, thin and unmixed and simple. It is lightest and most mobile entity. It alone is self-moved and can communicate motion to mixed corporeal elements. So, Nous is a stuff or substance. Substance and corporeal entity. It only means that it exists in space. Again, it is an unproduced, and it diffused throughout the whole universe. So Nous is the reason, I mean at least, Nous is bringing everything, the countless element in order.

Now there was a next philosopher which is Leucippus. In western world or especially in the Greek tradition, it is regarded as a founder of atomism. Now the main claim of Leucippus was the reality of empty space or void first, and second the plurality of things and their motion. Now before discussing these points, let me tell you we have no idea about Leucippus in the sense that there is no, he has not written anything or there is no direct text or information about the Leucippus. So even there is an argument that there was no person called Leucippus or some of the philosopher has rejected his existence. But there are many philosophers who has argued that there was a person called Leucippus. Even his disciple which we will be discussing in the next slide, has also talked about this person, this philosopher. So, this is how our knowledge is just limited to the secondary sources, right. Now important point is this person, philosopher's first time is accepted the reality of empty space and plurality of things and their motion. Now how this is an important or significant claim? In the last session, we have discussed that there are many philosophers, they rejected the idea of void. So, suppose there is an X and one element and there are Y. So in between there is a space, right. So, philosopher argued that this space is not real, right? Because and this space is not real, it means that there is no motion. I hope I am clear. I mean like for example, maybe I am using the same. For example, there is an object called A or let us say B, right. And A and B, there is a space. Philosophers arguing that being and non-being. This is called being and non-being. So, A is being, and B is non-being. Now the existence of this void, they are rejecting. They are saying that they have argued that it is not real. Now as I have discussed that if you are going to talk about the space, then you have to say that the space is in a space, right. And then again the space is in this space and this is what infinite regress. And therefore, there is no possibility of the void. Now Leucippus, what he did, he argued that the reality of this empty space. Again, if you are going to accept the motion, we need a space. Otherwise, it will be difficult to talk about the motion. So now Leucippus did not recognize the reality of quality alone. For him, qualities can be explained with the help of quantity alone. So, there are countless realities and each of them is eternal, right. We cannot destruct that element, entity. We cannot divide that entity and it is invisible. So, Leucippus argued that this entity is called atom, what cannot be further cut and divided. Now atoms are stated to be inherently mobile and he grants that original motion will continue till it stopped by the movement of the other atoms. So, for him, it is like the atom is moving, they are coming together in cluster and then there is an entity. So, this is how he talked about the Leucippus. Again, Leucippus argued that atom keeps on darting about because their inherent motion in infinite space. As a result of movements, atoms clash with one another and some fit together and form aggregation.

Now the next philosopher which we are going to discuss is Democritus. So, this philosopher is, Democritus was a disciple of Leucippus and he gave all the information about the Leucippus idea of atom. He accepted the theory of atoms and of void and examined his theory and explained the epistemology, ethics and metaphysics. Now an atom is indivisible or infinite in number and varies in size and shape, perfectly solid with no internal gaps. Now this Democritus is arguing about the idea of atom and he is arguing that atom is the smallest part which is indivisible, we cannot divide. If you remember there was a philosopher in last class, we discussed in Zeno and then he said that if you divide any part, it can be divided into infinite parts. Suppose there is a decisive part X and if you start dividing this part, it have infinite parts. Now this philosopher is what is doing, he is arguing that it is not possible because there is something called atom and it is indivisible. So, if you start dividing this object, finally we will reach to the atom which is indivisible. So, this is how he is answering the Zeno problem. Now again he argued that all changes in the visible object of the world of appearance are brought about the relocation of these atoms. So as the Leucippus argued, similarly Democritus also is arguing that all the atoms are coming together in cluster and there is an object and he also is arguing that for us there is a change in the quality and then some object is growing is because the atom is arranging and rearranging and maybe in adding in the same cluster. So, for us there is a change but this change is by something which is unchanged that element that atom does not change that is eternal. So, this change is cause of this movement of this atom. Again, as I have discussed that the void space is important otherwise if you are rejecting this idea of void space then motion ideally, we may not be able to explain. So, this is how Democritus has accepted that there is a void space. This philosopher again argued about the soul and they have an idea that the soul is nothing but the aggregates of atom. However the soul consists of those atoms which have essence of fire. So, the difference between man and all other animate objects is that the soul of man is constituted of fire atoms in for greater quantity than what they are all in are in all other animate objects. Again, he argued about the perception and the thought. So, he said that there is a difference between a perception and a thought. So, you need to understand that perception when we are like we are receiving the information through the senses. So, for example there is an object X and we perceived the X let us say a table let us say a bottle. So we perceived so there is a bottle and now the thought we are thinking applying a reason now. So, he argued that the perception gives us the information about the world of becoming but thoughts give us the knowledge of being. The knowledge given by the sense concerning color, song, smell, taste in the changing things of the world and wholly dependent on the senses. In contrast thought gives us knowledge of the true atom forms which consist of shape, size and position. And this is the famous distinction between the secondary qualities of color, taste, etc. and then primary qualities of shape,

size and position. Now I would like to conclude with this argument that in last class there is a philosopher called Zeno and he argued that the motion is not possible. Motion is not possible in the sense that for example there is an A or suppose A is there is a person and agent in A point and B point there is a grocery shop. And he wants to buy a thing from this grocery shop. So, he has to travel this much distance to buy anything from B point. Right? Zeno argued that this person cannot travel this space. Even suppose this space is like 100 meter or 500 meter whatever this person cannot travel this distance. Now look at his argument. His argument is because this distance if you start dividing it can be divided in the infinite parts. Now it goes so look at this point so there is an A and there is a B. He argued that if you are going to divide this distance so you have distance first half and then half and then so on. So, he said that it can be divided in the infinite parts and to travel the infinite parts you need infinite time and therefore this person from A X cannot travel from point A to point B. So, this is what he argued that this motion is not possible. Now this philosopher Democritus if you take it his argument, he is arguing that this is not even this is a distance you cannot divide in infinite parts because there is something called atom which is the smallest part. And this is how answered his paradox and said this person can travel point A to point B.

This philosophy of Democritus and Leucippus this is very important in the sense that they are like they laid a foundation of the modern idea of the atoms. So this is how the important contribution of the Pre-Socrates philosophers. So, for this talk was basically based on this two book Critical History of Western Philosophy and History of Philosophy by Frank Thilly. So, thank you so much for your kind attention. Thank you.