Welcome to our second lecture on personhood and identity. We’re going to begin today what will be two lectures on Rene Descartes’ thoughts on this subject. The position that is attributed to him is known as mind/body dualism. Sometimes it’s simply called the dualism for short. We need to be careful, however, because the word *dualism* covers a number of different philosophical positions, not always dualisms of mind and body. In other words, there are other forms of dualism that historically have been expressed. And so I will refer to his position as mind/body dualism or as Cartesian dualism as it’s sometimes also called.

I said last time that Descartes is not going to talk primarily about persons. He’s going to talk about minds as opposed to bodies. But I think that as we start getting into his view, you will see where his notion of personhood arises. Clearly, Descartes is going to identify the person, the self, with the mind as opposed to with the body. This is something that I hoped you picked up in your reading and certainly that you will pick up once you read the material again after the lecture.

Since I’ve already introduced Descartes’ position, let’s define it and then I’ll say a few things about Descartes himself to give you a little bit of a sense of the man and of his times. The position mind/body that’s known as mind/body dualism is defined as follows: It’s the view that the body is a physical substance — a machine, if you will — while the mind is a non-physical thinking entity which inhabits the body and is responsible for its voluntary movements.

If you want to think about the relationship between the mind and the body on this view, it’s a lot like the relationship in traditional religions between the soul and the body. Although perhaps on the Cartesian view, the mind does a bit more work. I think for most people who think about — most people with a religious bent who believe that there are souls as well as bodies, they probably would have a third element which would be the mind and the mind would be responsible for thinking. Descartes, in a sense,
collapses what we ordinarily call the soul and the mind together. For Descartes the mind is the thinking entity that inhabits the body, is what makes us who we are, and is what is responsible for our voluntary movements. That is, our movements that are as a result of our will and not as the result of involuntary muscle spasms or the like.

Indeed, Descartes gives the metaphor of a captain of a ship or a sailor on a ship in order to try and describe the relationship between mind and body. The point being that it’s like the relationship between a sailor and a ship but even more intimate; that the mind and the body are even more intimately connected than a sailor is to his ship. I’m gonna read a little quotation from your reading selections. This is on page 26 and I am quoting Descartes:

I am not merely present in my body as a sailor is present in a ship, but I am very closely joined and, as it were, intermingled with it so that I and the body form a unit. If this were not so, I, who am nothing but a thinking thing, would not feel pain when the body was hurt but would perceive the damage just as a sailor perceives by sight if his ship is broken.

So you see there that Descartes is thinking of the mind as kind of the pilot of the body, but a pilot who’s connected to his body in a much more intimate way than a pilot is connected to a plane or that a sailor is connected to a ship. When something happens to the body, we actually feel it. We don’t perceive as it were from a distance the way that a pilot would perceive damage to his plane or a sailor would perceive damage to her ship. So this is the position that we call mind/body dualism. It is the view that the body is a physical substance, a kind of machine. The mind is a non-physical thinking entity which inhabits the body, is responsible for its voluntary movements, and is the essence or core of our being. Who we are as persons, Descartes identifies with our minds.

Let me say a couple of things about Rene Descartes. He was born in 1596, he
died in 1650. He was a French philosopher and part of what I will call the vanguard of the scientific revolution. There are a number of people — of course, the scientific revolution is not a single event. It doesn’t happen in a single day. In that sense it’s a revolution in name only. It’s a revolution in thinking, not a revolution on the ground. There are a number of key figures in the early stages of the scientific revolution who are responsible for its development. Revolution is most identified with Isaac Newton. But Isaac Newton, understand, only produced the calculus for modern science, specifically for modern physics. Much of the underlying conceptual work had already been done by people like Copernicus, Galileo, Descartes, and others. Descartes wrote treatises on physics as well as on philosophy. He developed many of the principles of early modern mechanics. He was a pioneer in the field of optics. Perhaps what he’s most famous for outside of philosophy is analytic or coordinate geometry of which he is the inventor.

It is important to understand that Descartes’ mind/body dualism is not motivated primarily by religious or ethical concerns. That is, Descartes is not a mind/body dualist for some of the traditional reasons that we talked about last time. It’s not because of his beliefs in the immortality of the soul, beliefs about which we don’t have any evidence or any information. It’s not because of concerns about freedom of the will, although you certainly can see the way in which his view makes possible a very strong notion of freedom of the will. That’s not what primarily motivates him.

Interestingly enough, Descartes’ reasons for being a mind/body dualist are primarily the result of his scientific views. In short, Descartes is part of this vanguard of the scientific revolution part, one of the originators and conceptualizers of modern mechanics. It is because of his views on physics, it’s because of his understanding of the physical universe and of the laws that govern it, that he sees no choice but to be a mind/body dualist. In a sense, he’s driven to mind/body dualism by his views that
come from his scientific work. And that is what I’m gonna spend most of today talking about, is giving you a sense of the way in which Descartes’ scientific views lead him to the mind/body dualism that we’ve already defined.

So I’m gonna talk today about his what I’m gonna call scientific arguments for dualism. He also has some other reasons for being a mind/body dualist, reasons having to do with what we can know and what we can’t know, and what we can know with certainty and what we can’t know with certainty which I will leave until next time.

Descartes’ scientific arguments for dualism break down into two categories. On the one hand, there are considerations from Descartes' understanding of the nature of the physical universe that lead him to be a dualist about mind and body. On the other hand, there are similarities and differences between human beings, animals, and machines that also lead Descartes to dualistic conclusions about mind and body.

And so the first cluster of arguments I’m going to address are what I call the arguments from the nature of matter and the second type of arguments I’m going to address are going to be arguments from the comparison with animals and machines. I will do the stuff on the nature of matter today and I will do the stuff on animals and machines next time.

In order to understand why Descartes is driven to dualistic conclusions about mind and body from his conception of the physical universe, we have to talk a little bit about the modern conception of physicality. And in order to understand the modern conception of physicality, we need to talk a little bit about the premodern view, the view that went back all the way to ancient Greece and to the philosophy and science of Aristotle, the Greek philosopher Aristotle.

The ancient Greeks had what I’m going to call a qualitative view of the physical universe. That is, they described and understood physical reality in qualitative terms. Now, you might think, well, what other terms would they think of it in. Well, I’m thinking
about the difference between understanding nature in qualitative terms versus understanding nature in quantitative terms. That is, in terms of qualities versus quantities. And it’s characteristic of the premodern view of nature that nature is to be fundamentally understood in terms of qualities. It is characteristic of the modern view of nature that nature is to be understood in terms of quantities. This will become clearer as we discuss it in more detail.

So first let me talk a little bit about the ancient Greek view. This is going to be a very simple overview or gloss. Please don’t go to your physics instructor and tell them that this is the ancient Greek view of nature because he’ll ask you where you got that from. This is just for the sake of setting the modern view in its relative place.

The ancient Greeks had what we would call an elemental view of nature. They believed that physical substances were ultimately made up of a number of simple elements. I’m sure you’ve heard this before. This is part of — sort of the folklore. The basic elements for the ancient Greeks were earth, water, fire, and air. The idea was that every physical object, every physical substance, was made of some kind of — some collection of these elements in varying degrees or amounts.

Now, this tied directly — this elemental view of nature, this qualitative view of nature — tied directly to a theory of motion that we call today natural rest theory. You see, in the ancient Greek cosmology, each of these basic elements has its natural place. That is, each of these elements comes from an original place which is the repository of those elements. And so the natural place of earth is, of course, down below. The natural place of air is up above. The natural place of water is sort of floating in the middle, in the way that water sort of floats on the surface of the earth. The natural place of fire is between the earth and water and the air — because, of course, when you light a fire it goes up.

Now, the idea of these natural places was that they provided a principle of
motion. That is, if you wanted to explain why a physical object behaves the way it does, you would refer to its predominant element and that predominant element’s natural place. So to give you an example, the explanation as to why a rock falls when you drop it would go something like this. The predominant element that makes up the rock is earth. The natural place of earth is down. Thus, when a rock is left unrestrained, it will go down. It will seek its natural place. Similarly, the reason why a hot-air balloon when you let it go goes up is because its predominant element is air. Air’s natural place is up and when unrestrained the balloon will seek its natural place, which is up.

And on this view, on this way of looking at nature, you do have an explanation of sorts. The explanation is somewhat adequate. That is, it roughly will predict correctly given a limited range of circumstances. Obviously, it won’t predict accurately in a vacuum. Obviously, it won’t predict accurately under extreme conditions of one kind or another. But, of course, the ancient Greeks were not aware of any such contexts.

Notice also that the principle of explanation — that is, the explanation of motion — is in terms of — well, I don’t want to call them intentions, but let’s call them purposes or functions. Notice the rock falls down because it is made of earth, earth’s natural place is down, and it seeks its natural place. This is almost to ascribe a kind of intention to the rock or to the hot-air balloon.

And such explanations are known in general as teleological explanations. The word telos in Greek means purpose or function and a teleological explanation is an explanation in terms of purposes or functions. Notice that on this view, while you can get some rather rough predictions — where something is going to go, where something is not going to go, what it’s going to do, what it’s not going to do — you can get very precise predictions this way. Because this is an essentially qualitative view of the world — that is, we define objects in terms of their qualities and describe their motions in
terms of their quasi-intentions — there’s no way to attach mathematics to this. And so your predictions are going to be very crude, rough, and imprecise. Now, one of the massive changes that occurs with the scientific revolution is a complete revision in the basic conception of physicality and thus in the basic principles of motion.

On the modern view — that is, the view that arises out of the scientific revolution which takes place slowly over the course starting in the late 16th century all the way up through the 17th — there’s a complete overhaul in the way that philosophers and scientists think about the physical universe and about the principles of its emotion. The most startling change is the replacement of the elemental view with a qualitative view of nature with a purely quantitative view, a mechanical view. Physical objects and physical processes are defined in terms of entirely measurable characteristics. That is, characteristics to which you can assign numbers. The word — the technical word for this is physical objects are defined in modern science in terms of mathematically quantifiable magnitudes. If you want to impress people you can whip that out at a party.

Now, the advantages to this view are, of course, precision of description and prediction. You can attach a calculus to a science which conceives of nature in this way. And all of this sort of engineering and technology and industry that’s come out of modern science is the result of this major paradigm shift and the understanding of nature and of the motion of physical bodies. So you have a conception of physical objects which is entirely quantifiable — that is in mathematical terms — and you have a notion of the motions of physical bodies which sees those motions as governed by a set of mathematically describable general laws.

And so now, using mathematics, you can not only say what an object was going to do, you can say how fast it’s going to do it. You can say when it’s going to do it and you can say what it doesn’t do it under these conditions or under those conditions. It is simply a much more powerful view of nature and of the universe, and of physical
I’m gonna talk about three primary qualities which make up a physical object as it is understood by modern physics. Again, by modern, we mean the physics of the scientific revolution of the 17th and 18th centuries. Indeed, scientists and philosophers conceived of physical objects as simply collections of these primary qualities, and there are essential ones. The first is mass. That is an object’s actual substantiability. Then there’s volume which is the amount of space that a physical object takes up. And then there is motion, the fact that a physical object when acted upon will react, will move.

Now, one of the problems that arises from this new view of physicality, this new view of physical objects and of physical motion, is that by defining physicality in this way it makes it difficult to see how the mind and how thoughts enter the picture. And this is really what leads Descartes initially to his dualism about mind and body. Descartes doesn’t see how, given this view of the physical universe, given this view of what it is to be a physical thing, how the mind and thoughts can be considered as physical things and as physical processes. In other words, the mind and its thoughts don’t seem to have these characteristics. Indeed, they seem to have characteristics which defy the understanding of physicality that prevailed in Descartes’ time. And so Descartes is gonna offer a number of what I call arguments from the nature of matter, in a sense which argue from the disparity or the differences between mental — the properties of the mind and the properties of thoughts, on the one hand, and the properties of physical bodies on the other.

The first I’ve given the name the argument from divisibility. Descartes is going to make certain observations about the divisibility of physical object and make a case that the mind and thoughts are not similarly divisible, and uses as a point of differentiation to argue that minds and bodies are very different kinds of things. So let me read you the relevant quotation and then we’ll talk about it a little bit. This is on
The body is by its very nature always divisible while the mind is utterly indivisible. When I consider the mind or myself insofar as I am a thinking thing, I am unable to distinguish any parts within myself. By contrast, there is no corporeal or extended thing that I can think of which in my thought I cannot easily divide into parts. This one argument would be enough to show me that the mind is completely different from the body.

Descartes' idea is something like this. Every physical object takes up space. Every physical object has volume. Anything which takes up space can be divided into parts. So imagine, you know, a ruling stick, any physical object. A piece of chalk or this piece of paper. As a physical thing which takes up space, it can be divided into smaller segments and those segments can be further divided into smaller segments. So divisibility is a consequence of taking up space. It's a consequence of being something which has volume. And being something which has volume, being something which takes up space, is definitive of what it is to be a physical object.

Well, Descartes makes the following observation or argument. He says, “Look, the mind doesn't take up any space. How do we know this? Well, the mind doesn't have any parts. Look inside yourself. Reflect, introspect. Look within,” Descartes says. “All you will ever find when you look within yourself is your unified self, the I.” The letter I, not eye like you look with. All that you find inside is the I, a single thinking entity. You don’t discover something with parts the way that you discover if you look at your body, that you’re made of pieces and parts. My body consists of a torso, arms and legs and fingers and hands. Each of those parts has smaller parts. Descartes says, “The mind is nothing like this. What we’re confronted with in the mind is a single, thinking entity without parts or pieces.”

Now, if something does not have parts or pieces, that means it does not take up
space. That’s because it does not take up space. And if something does not take up space, Descartes says, it can’t be a physical object. Because taking up space is one of the characteristics of a physical object. It’s one of those primary qualities. And so the argument here is a straightforward argument from this analogy. On the one hand we have physical objects which are divisible because they are extended. On the other hand you have minds which are indivisible because they’re not extended. And he concludes from this that minds and bodies must be very different sorts of things, specifically that minds are not physical things while bodies are.

Now, one can produce variations on this argument. A variation on it that I call the argument from extension — this is not an argument that Descartes actually gives, but it’s an argument that you could sort of offer on his behalf. It’s an argument that’s consistent with the argument that he gives and also proceeds from the quality — from the characteristic of volume which is the characteristic, of course, that he’s working with here. Incidentally, the word volume — our word volume in Descartes’ day was referred to as extension. When Descartes talks about the extension of a thing, he’s talking about the amount of space that it takes up which is, of course, its volume.

So here’s another argument for mind/body dualism along the same lines as the argument from divisibility, and I’m just calling it for ease of reference, ease of remembering it, the argument from extension. It goes something like this. All physical objects take up space. And so in any finite space there’s a finite number of physical objects that you can put in that space. So take, for example, a room. I’m standing in a room giving this lecture. The room has a certain amount of space in it. And thus, the number of physical objects that I can bring in is limited. Why? Because the physical objects take up space. Eventually, if I keep bringing in physical objects, they will fill up the room. There’ll be no space left.

But now think about your mind as a kind of room, and think of thoughts as kind of
mental objects. If minds and thoughts were physical things, then one would expect that there would be a limit to the number of thoughts you could have at any one time. If thoughts are like the physical objects in this room and if the mind is like the room itself, then that would mean that after a while if I keep adding thoughts I'll run out of space. But, of course, your mind doesn't run out of space. There's no limit to the number of things you can think at one time. And remember, once you add the idea of unconscious or subconscious thoughts, the number of thoughts one might have at any one given time are limitless.

But if that's true, that would seem to suggest that thoughts don't take up space, that minds aren't like physical rooms. In short, that thoughts and minds are not part of the physical universe and don't have the basic properties that physical objects have. Again, this is an argument from this analogy and it's an argument that's very much in keeping with the argument from divisibility which Descartes himself offers.

Let me say a few things now about the weakness of these arguments. Because, of course, these arguments are dated. They're not arguments that would be compelling today. And indeed I want to, by doing this, indicate sort of a general weakness in this entire approach to the mind/body question. In other words, Descartes' reasons for being a dualist are in many instances reasons that are now dated. They are reasons that are no longer compelling because our scientific understanding has evolved beyond his.

Notice something essential to all of these arguments and that is an essentially materialist conception of physicality. That is, for Descartes physical means material. When you're talking about a physical object, you're talking about something that has mass and that has volume. And of course this is the prevailing notion of physicality in the scientific revolution. It is, after all, the mechanical revolution in physics. What we call the scientific revolution in general is more specifically known as the mechanical
revolution in physics. So when you study physics today, one portion of what you study is what’s called mechanics. Well, in Descartes’ day that was the whole of physics.

But, of course, today we would never identify physicality with materiality. We know today that matter is convertible into energy and vice versa. This is the famous Einstein equation, \( e = mc^2 \). That matter and energy are intraconvertible. And, of course, energy doesn’t take up space and doesn’t have mass. In other words, the primary qualities that Descartes talks about — indeed, that all the philosophers and scientists of this period will talk about as the ultimate essence of physical reality — are only the essential properties of matter. They are not the essential properties of energy. In matter, of course, the material manifestation of physicality does not exhaust its possible manifestations. Physicality can manifest itself as matter, it can manifest itself as energy.

Given that Descartes’ arguments for the dualism of mind and body all presume this materialist notion of physicality, they are dated by that assumption, by that notion. Notice we don’t have any difficulty today imagining how minds and thoughts could be part of the physical universe. As a matter of fact, we know that thoughts are essentially electrical impulses going between the neurons and axons in your brain. We are understand thought to be essentially a form of electricity, a form of energy.

And so for us today, there’s no difficulty in understanding how something as seemingly different as a table and a mind, or as a physical process like running and a mental process like thinking, could both be within the umbrella of physical reality and physical processes. Because our conception of the physical is broader than Descartes. Our conception of the physical is not tied entirely to the material but includes the non-material in the form of energy.

And so at least these arguments for the dualism of mind and body that Descartes presents, these arguments which proceed from certain assumptions about the essential
materiality of physical things and processes, these are not arguments we would want to make today. These are arguments that would not be compelling today. And there’s an important general lesson here, simply to do with reading and understanding works written a long time ago, works from previous eras. We have to always put ourselves in the minds of the people that we are learning. It’s no good bringing our assumptions and understandings to bear and trying to understand the thought of someone writing as long ago as Descartes did. If we proceed from the things that we know and that we understand, if we proceed from our understanding of physics, we will dismiss Descartes’ arguments out of hand. We’ll say, “Oh, well, that’s just dated. Those are just dated notions of physicality and his entire argument for the dualism of mind and body is based on those dated notions.” We would be inclined to dismiss them right from the start.

But I would like to suggest that there is a value in understanding historical ideas, even if they are dated. Because they are, of course, the road map — they provide the road map to our contemporary ideas. Without this scientific revolution, we wouldn’t have the second scientific revolution that we had in the 20th century with relativity and with quantum mechanics. These are stepping stones along the way to greater and greater understanding. Descartes’ views — and indeed the views of the time that he represents — are a vast improvement over the views that prevailed before. Understand the Aristotelean notion of the physical universe, the elemental view of nature, the teleological view of physical motion lasted some 1500 years before it was broken by the new scientific paradigm of the 17th and the 18th centuries. And that second paradigm lasted all the way until the 20th century.

And so there’s a real value, I think, in order to understand the present and understanding how we got here. And so I would strongly discourage anyone from dismissing Descartes’ arguments out of hand, despite the fact that they are dated and based on notions of physical science that we no longer accept. They represent an
important stepping stone between the ancient world and the world that we live in now.

Now that said, these are not the only arguments that Descartes has for being a dualist. Descartes will have other reasons for his mind/body dualism. He'll have more scientific reasons which we'll talk about next time. These have to do with Descartes’ comparisons between animals on the one hand — animals and machines on the one hand and human beings on the other. He’s also going to have a whole set of arguments that proceed from scientific assumptions at all but that proceed instead from his reflections on the nature of human knowledge, and we'll get to all of those next time.

So let’s talk about next time. We will continue and complete our discussion of Descartes’ mind/body dualism next time and there’s a few things I want you to think about while you’re reading for next time. Three things. The first, in what sense does Descartes think that we are similar to animals and to machines? In what sense are we different from animals and machines? That’s one question to think about.

Second, on Descartes’ view, what is the chief indicator — what is our chief evidence that something or someone is thinking? How do you that someone else is thinking? What’s your chief evidence for someone else’s thoughts? Is that view, that view of Descartes, plausible today? In other words, Descartes is going to say, “Well, this is the primary evidence that something else is thinking or someone else is thinking.” I want you to tell me — well, what is that? What does he think that is and is that plausible today? That’s the second question.

The third question — and this is gonna sound odd but it won’t once you do the reading. You’ll know what I’m talking about. The third question is this. Descartes says that it is possible to doubt whether one has a body at all. That is, it is possible for me to doubt whether I even have a body but it is not possible to doubt that one is thinking. All right? So I’m gonna repeat that. Descartes thinks it is possible to doubt that one even has a body but it is not possible to doubt that one is thinking. What I
want you to do is try and explain his reasoning for that point. Why does Descartes think that we can doubt that we have a body but that we cannot doubt that we are thinking?

So those are your things to think about while you read. Next time we will continue our discussion of Descartes’ mind/body dualism. Thank you very much.