

Class #3 - Illusion
Descartes, from *Meditations on First Philosophy*
Descartes, "The Story of the Wax"
Descartes, "The Story of the Sun"

I. Descartes

Descartes provides three reasons to doubt that the world is as we perceive it. His larger project is to use these doubts to rid ourselves of preconceptions. He wants to remove our false beliefs, and replace them with only true ones. We will not pursue Descartes's larger project in detail here. But, we will look at several aspects of it through the term.

Descartes's first reason for doubt is called the illusion argument. Consider [optical](#), or other sensory, [illusions](#), or hallucinations. Such experiences undermine our sensory beliefs. They are particularly effective in impugning beliefs about distant or ill-perceived objects, and perhaps very small ones. The square building may look round from afar. We may have difficulty discerning the properties of very small objects, like quarks, and very large ones, like our galaxy. But our knowledge of close, medium-sized objects, like our own bodies, resists doubts deriving from illusions.

Indeed, among the most difficult beliefs to abandon are those which we grasp with our senses. What we see, and even more so what we touch, we take as most real. In the third paragraph of Meditation One, Descartes says that everything he has taken as most true has come either from the senses or through the senses.

What could he mean?
Are all of our beliefs derived from the sense?

Some philosophers, called empiricists, claim that all knowledge is derived from sense experience. Empiricism is difficult to reconcile with our knowledge of mathematics, since we never sense mathematical objects like circles or numbers. Also, some sentences, like 'Bachelors are unmarried', do not seem to depend on sense experience for their justification. We need only to know the meanings of the words to know that it is true; we need not see any bachelors. Locke and Berkeley, whose work we will read next week, both held varieties of empiricism.

In contrast, rationalists believe that some knowledge comes from our ability to reason, independently of the senses. Knowledge based on reason is sometimes called *a priori* knowledge. Logical and mathematical beliefs are often taken to be acquired *a priori*. So are our beliefs in sentences like the one about the bachelors. Descartes is a rationalist.

The question which divides the empiricist from the rationalist is whether all knowledge comes from experience.

For now, we are interested in whether our sense experience ever gives us knowledge.

Descartes first worried about illusions.

Our senses sometimes deceive us.

But we have other sensory ways of discovering the truth.

While we might see a mirage, we can also approach it, and discover that it is not real.

Illusion may allow us to doubt some specific properties of physical objects, but that's about all.

In the fourth and fifth paragraphs of the First Meditation, Descartes develops the stronger argument, called the dream argument, against the veracity of the senses.

In the dream argument, Descartes wonders if there is a way to know whether he is dreaming.

The dream argument elicits three distinct questions.

- A. Is there any way of distinguishing waking from dreaming experience?
- B. What beliefs does the possibility of our dreaming eliminate?
- C. Is there anything of which we can be sure, even if we are dreaming?

Regarding A, there is no obvious mark to distinguish waking from dreaming.

We can dream of things that do not exist, or that things which do exist have different properties than they actually do.

Anything we can do when we are awake, we can dream we are doing.

So, the answer to B will be long and detailed.

We can fantasize entirely novel objects, so we can not be sure that the objects in our dreams exist.

There need not even be any Earth, or any people.

We could be sentient machines, dreaming about people, in the way that we, supposing our ordinary views of the world, can dream of sentient machines.

Machines need designers and constructors, of course, but these need not be people.

We can even doubt that any objects exist, since we could be just disembodied minds.

We might be able to know that some state was a dream.

But we can not be sure that our current state, if it has no obvious dream-like qualities, is a waking state.

If we can not be sure that we are not dreaming, then we can not be sure of anything our senses tell us.

The answer to B leads to a way to approach C.

If we can not be sure that our sense experience is veridical, perhaps there is non-sensory knowledge that resists the dream doubt.

Even if we are dreaming, our beliefs in mathematical claims, like '2+2=4' or 'the tangent to a circle intersects the radius of that circle at right angles' may survive.

Descartes also claims that the universals from which objects are constructed, the properties of objects, remain, as well.

Properties are what he calls simple and universal.

For example, consider color, shape, quantity, place, time.

Even if no object has these properties, the properties remain, insofar as they are in our minds.

Descartes calls these the 'building blocks' of the empirical world.

"It is from these components, as if from true colors, that all those images of things that are in our thought are fashioned, be they true or false" (AW42).

The idea is not that the objects are made of their properties, in the way that water is made of hydrogen and oxygen.

Rather, our ideas are made of general images, and those general images can remain impervious to doubt even when we are doubting that they are properties of objects outside of us.

So, some beliefs resist doubt on the basis of illusion and dreams.

Even if I am dreaming, colors, as perceptions, exist, bachelors, if there are any, are unmarried, and $2+2=4$.

So, we needed a stronger doubt to finish the job of providing reasons to doubt all of our beliefs.

For the third doubt, Descartes wonders about the status of his beliefs if there is a powerful deceiver who can place thoughts directly into Descartes's mind.

We need not worry about whether this deceiver is God, or a demigod, or a demon.

Neither need we assert the existence of a deceiver or a God.

All we need is to imagine the possibility of a deceiver, which is easy enough to do.

Compare the deceiver hypothesis to a brain-in-a-vat hypothesis.

The brain-in-the-vat hypothesis is to imagine that we have been kidnaped, and our brain removed from our body.

Our bodies discarded, our brains have been hooked to computers which simulate the continuation of our lives.

According to the thought experiment, we don't notice the difference.

According to such examples, our thoughts really happen in brains.

But the brains are being fed misleading information.

There is a physical reality, but it is unlike the one we perceive.

In contrast, the deceiver hypothesis is consistent with the non-existence of the physical world.

We could be disembodied minds, whose thoughts are directly controlled by an independent source.

The certainty which convinces us not to doubt those claims that remain under the dream doubt could itself be implanted by a demon deceiver.

When we apply the deceiver hypothesis to our beliefs, we notice that just about all of them can be called into question.

Nothing, it seems, is certain.

The world may be very different than it appears.

Descartes's goal is not to defend skepticism.

His goal is to provide a new foundation for knowledge.

To that end, he seeks a single, unassailable truth, one that resists all reason for doubt.

Archimedes asked only for one fixed and immovable point so as to move the whole earth from its place; so I may have great hopes if I find even the least thing that is unshakably certain (66).

The one belief which resists doubt is called the cogito.

Whenever I am thinking, even if I am doubting, I must exist.

'Cogito' is Latin for 'I think'.

In a section of the *Discourse on the Method*, another of Descartes's writings, Descartes formulates the first piece of knowledge as "I think; therefore I am."

This formulation is misleading, and the version in the *Meditations* is more careful.

'I think; therefore I am' looks like a logical inference.

A logical deduction, though, would require previous knowledge of premises, and that the conclusion follows from the premises.

But Descartes eliminated logical knowledge on the basis of the deceiver doubt.

Thus, the Cogito must not be a logical deduction according to prescribed rules from prior premises.

Descartes calls it a pure intuition.

The cogito establishes the existence of a thinker, as long as the thinker thinks.

But, it does not give us a whole lot more.

Our thoughts, may not tell us anything true about the world; the doubts about the content of thought remain.

But even if our thoughts are false, even if they misrepresent the world, they still appear to us.

Even if there is no table, we still seem to sense the table.

The doubts lead us to wonder if we are living in a dream-like world.

But that dream world consists of appearances, with certain characteristics.

I have direct access to my thoughts in a way that I seem to lack access to thoughts of others, if there are any others; my access to my thoughts is privileged.

Also, the doubts infect only my claims about what those thoughts represent.

They are indefeasible, as long as we take them to be just thoughts.

Ideas can not be false, considered only as images in our minds.

We can get certainty about our beliefs, as they exist inside our minds.

Beyond that, the doubts seem to have some force.

We seem to be stuck in a solipsistic muddle.

We will wallow in that muck for a little longer, after watching *Inception*, and then we will proceed into the details of a few different attempts to solve the problem of knowledge of the external world.

II. Why Do You Believe?

C1. You exist.

C2. You are taking a philosophy class.

C3. Your best friend likes you.

C4. Miley Cyrus has gone a little crazy.

C5. Shakespeare wrote *The Tragedy of Macbeth*.

C6. The sun will rise tomorrow.

C7. An object in motion will remain in motion, an object at rest will remain at rest, unless acted upon by an unbalanced force.

Look for general principles.

Are these things that we know?

How do we know what we know?

III. Sense Experience and the Story of the Wax

The question that divides empiricists from rationalists is whether sense experience is sufficient for knowledge.

It might be useful to look more closely at sense experience itself.

Notice to start that what seems categorical in our sense experience may not be.

For instance, I look outside the window, in bright daylight, and I see a tree.

I can imagine that anyone else standing next to me will see the same tree.

But, our experiences, strictly speaking, differ.

The angle from which we see the tree is different, so the retinal image we have will differ.

I interpret my retinal image as that of a tree; someone else might see the same object as *quercus rubra*, or red oak.

These aren't inconsistent impressions, but they are different.

Even more upsetting to the categoricity of sense experience, consider the Molyneux problem, made famous by John Locke.

Suppose a man born blind, and now adult, and taught by his touch to distinguish between a cube and a sphere of the same metal, and nearly of the same bigness, so as to tell, when he felt one and the other, which is the cube, which the sphere. Suppose then the cube and sphere placed on a table, and the blind man be made to see. Quære, whether by his sight, before he touched them, he could now distinguish and tell which is the globe, which the cube (II.IX.8)?

Locke denies that the blind person could tell which was the sphere and which was the cube without touching the objects.

In other words, our sense of touch is independent of our vision.

There is experimental research supporting Locke's solution, but the question [has not been resolved completely](#).

It turns out that blind people, if given the ability to see, can not discriminate among objects.

All they get are splotches of color.

If such a person were to stand beside me gazing at the tree, she would not see a tree at all.

In the later portions of the Second Meditation, Descartes presents a worry about experience.

Consider a ball of wax in two distinct states.

First, it is cold, hard, yellow, honey-flavored, and flower-scented.

Then, we bring the wax near a fire.

After it is melted, the wax becomes hot and liquid, and loses its color, taste, and odor.

In short, all of its sensory properties have changed.

We have images of the wax, in several incompatible states.

But we do not have an image of what the wax is, independent of these mutable appearances: the essence of the wax, or wax in general.

Such an image would have to represent to us all the possible states of the wax.

Our knowledge of bodies, as they truly are, must therefore be distinct from our sensory images of them.

I grasp that the wax is capable of innumerable changes of this sort, even though I am incapable of running through these innumerable changes by using my imagination... The perception of the wax is neither a seeing, nor a touching, nor an imagining...even though it previously seemed so; rather it is an inspection on the part of the mind alone (AW 46a).

According to the new science, the wax is just a body which can take various manifestations, hot or cold, sweet or tasteless, etc., but is identified with none of these particular sensory qualities.

Perhaps the wax was what I now think it is: namely that the wax itself never really was the sweetness of the honey, nor the fragrance of the flowers, nor the whiteness, nor the shape, nor the sound, but instead was a body that a short time ago manifested itself to me in these ways, and now does so in other ways... Let us focus our attention on this and see what remains after we

have removed everything that does not belong to the wax: only that it is something extended, flexible, and mutable (46a).

Bodies are things that can have sensory qualities, but which need not have any particular ones.

The same object may have many different appearances.

The moral of Descartes's claim is that sense experience does not lead to knowledge.

IV. The Resemblance Hypothesis and the Story of the Sun

The story of the wax supports Descartes's claim that the world is not as it appears.

Our senses may be misleading, either in small ways, as when we perceive an illusion, or in larger, systematic ways, if we are dreaming or deceived.

More importantly, the wax example shows that physical objects are essentially none of their sense characteristics.

The world out there is unlike the world as it appears to us.

The claim that our sensory ideas are like the world may be called the resemblance hypothesis.

Aristotle had defended the resemblance hypothesis, taking sensory qualities to be real properties of external objects.

The redness and sweetness of an apple are real properties of the apple itself.

Our senses are attuned to the external environment.

For example, color vision occurs when a person's eyes are changed to be like the color of an external object.

I see the apple as red because my eye itself is able to change to red.

The eye's changing to match the environment is perception.

On Aristotle's view, our ideas resemble their causes, and objects really have the properties that we perceive them to have.

Descartes rejects the resemblance hypothesis.

He provides an example of the sun.

The senses tell us that the sun is very small.

We reason that the sun is very large.

Both ideas surely cannot resemble the same sun existing outside me; and reason convinces me that the idea that seems to have emanated from the sun itself from so close is the very one that least resembles the sun (Third Meditation).

Descartes's view, as we discussed, is that our knowledge of physical objects does not come from the senses.

Knowledge of objects comes from the mind alone.

Descartes claims that our most secure knowledge, like that of mathematics, is innate, built into our minds.

Our knowledge of the physical world is really just knowledge of physics, since the sense properties of objects aren't really the sorts that can be known.

What can be known about the world is its mathematical properties.

And the mathematical properties are innate, built into our minds by the goodness of God.

Descartes's view is odd.

In response, some philosophers defended the veracity of sense experience.

We will look at two such empiricists: Locke and Berkeley.