The Hylomorphism of Aristotle and Aquinas
• Aristotle was born in the Greek colony of Stagirus in 384 B.C., so he was over 80 years younger than Socrates and over 40 years younger than Plato.
• He wrote on logic, metaphysics, mathematics, physics, biology, ethics, politics, medicine, and the fine arts.
• He is Plato’s most famous student and is known for having contradicted many of Plato’s core doctrines, such as the doctrine of forms.
• Aristotle is certainly one of the greatest and most influential philosophers in history, along with Plato, his teacher.

• Born in 1225 A.D. in what is now Italy, St. Thomas Aquinas was a Dominican friar and priest who is one of the most influential philosophers in the Catholic tradition.
• He was known for bringing together Christian doctrine and Aristotelian philosophy, at a time when Christianity had previously relied more on Plato than Aristotle.
• He also made extensive use of the thought of other philosophers including Plato and St. Augustine, as well as Jewish and Arab philosophers such as Moses Maimonides and Ibn Sina (aka. Avicenna).
What is Hylomorphism?

• The word “hylomorphism” comes from the Greek words ὕλη (hyle) and μορφή (morphē). These words are often translated into English as “matter” and “form”.

• Hylomorphism is a philosophical view that says everything in nature is made up of two parts: “matter” and “form”.

• Hylomorphism was first proposed by Aristotle. That means it comes on the scene later than dualism (which can be traced at least to Plato) and physicalism (which originates with Leucippus and Democritus: pre-Socratic philosophers).

• Plato’s dualism was a response to the various kinds of physicalism that came before him. Hylomorphism was a response to both physicalism and dualism. And it tries to improve on both.
What is Hylomorphism?

• Hylomorphism is even more a johnny-come-lately in the western world because most of Aristotle’s writings were lost sometime after his death in 322 B.C. and not discovered again by western thinkers for over 1400 years.

• This is why Thomas Aquinas is one of the most important interpreters of Aristotle’s hylomorphism: he lived during the time shortly after many of Aristotle’s writings were rediscovered.

• Hylomorphism (in different versions) was almost universally accepted in western philosophy for over four hundred years, from shortly before the time of Aquinas up until Descartes in the 1600’s. It was Descartes, the “Father of Modern Philosophy” whose writings began the shift away from hylomorphism.

• Within a century of Descartes’ time, hylomorphism had nearly disappeared from the historical mainstream of philosophy. Today it is making a bit of a comeback, partially due to the problems of physicalism and dualism.
What is Hylomorphism?

Hylomorphism is a subtle view that is more difficult to explain in a “sound bite” than physicalism or dualism. So before we get into the details of what hylomorphism is, let’s start by looking at how it agrees and disagrees with physicalism and dualism about several important questions:

<table>
<thead>
<tr>
<th></th>
<th>Physicalism</th>
<th>Dualism</th>
<th>Hylomorphism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Am I identical to my body?</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Do I have a soul?</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Am I identical to my disembodied soul?</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Is a corpse a human body?</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Is a human being an animal?</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Is my body a physical object?</td>
<td>Yes</td>
<td>Yes</td>
<td>Depends…</td>
</tr>
<tr>
<td>Do non-human animals have souls?</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Does my soul continue to exist after the death of my body?</td>
<td>No</td>
<td>Yes</td>
<td>Yes, but my soul is not me.</td>
</tr>
</tbody>
</table>
What is a “thing”?  

A pile of rocks is a pile of things.  

But is the pile a “thing” too? Is the pile a thing in addition to the rocks themselves?  

Now we know that a squirrel is a kind of “pile” of things as well. It is a precisely arranged pile of cells, and of atoms.  

But is the squirrel a “thing” too? Is it a thing in addition to the smaller things that make it up?
What is a “thing”?  

According to Aristotle and Aquinas, there is an important difference between a squirrel and a pile of rocks.

The squirrel has a special kind of unity that a pile of rocks doesn’t have.

Aquinas and Aristotle mark this difference by saying that the squirrel is a “substance” and the pile of rocks is not. The squirrel is something over and above the particles that make it up.

A substance is a thing that is unified in a strong sense. It is “one thing” in a way that non-substances are not.
What is a “thing”?

Living things like squirrels, trees and human beings are the most obvious examples of substances. They exist through time and their parts behave in a coordinated way.

You might think that a single rock has a kind of unity that a pile of rocks doesn’t have. Is it a substance? Does it behave in a way that is unified, like a squirrel does?

What about a ship? Or, more generally, what about “artifacts” (objects made by human beings for some purpose)?
What is a change?

Aristotle’s hylomorphism begins by trying to explain change.

Here’s an observation: It seems that anytime something changes, it changes from something, into something.

And when it does that, there is always some part of it that is different after the change from before. But there is also something that stays the same.

A change always involves “something” that is different after the change. And it also involves “something” that remains the same through the change.
What is a change?

Note that there is a difference between change and mere substitution:

Unless there is something that is common to both the "before" and the "after", it seems like we have a case of mere substitution: one thing vanished and another appeared. And that isn’t change.
What is a change?

Aristotle used “matter” to designate the feature that stays the same through a change. And he used “form” to designate the feature that is different before and after the change.

Consider a ball of clay:

Now smash it flat.

Before the change, the matter is the clay and the form is the round shape of the clay. After the change, the matter is still the clay but the form is the flat shape.
What is a change?

Before the change, the matter is the clay and the form is the round shape of the clay. After the change, the matter is still the clay but the form is the flat shape.

Note that this is a CHANGE, not a SUBSTITUTION. The clay ball did not go away and come back flat! Rather, the clay is still the same lump before and after. But it has different shapes.

Remember Descartes’s puzzle about the wax? It is the same wax, but it changes its features (shape, smell, color etc.).
What is a change?

Now notice: matter and the form *need* each other. The roundness of the clay cannot exist without something that *is* round (namely, the clay). But of course, although the clay can exist without the roundness, it cannot exist without *some shape or other*.

There is just no such thing as clay without shape!

So any piece of clay has both matter and shape. Furthermore, the shape can change without the matter changing, so the shape and the matter seem to be really distinct features of the clay.
What is a change?

Now the shape of a piece of clay is only one kind of form that it may have.

The color of the clay is another kind of form.

It’s texture is another form, etc.

Anything that describes the clay as it is can be understood as a form that the clay has.

The clay is...

- smooth, rough
- hard, soft
- wet, dry
- round, flat
- red, yellow

These are called “accidental forms.” Accidental forms are forms that make the substance to be a particular way.

A change that involves only accidental forms is called an “accidental change.”
What is a change?

But Aristotle also noticed that accidental change isn’t the only kind of change in nature. Consider a tree that burns into ashes.

It doesn’t seem like the pile of ashes is just a different kind of tree (with very different accidental forms). Rather, it seems that the tree was destroyed entirely.

Yet, the tree didn’t just disappear and the pile of ashes appear in its place! This does not seem like a case of mere substitution. It seems like a case of genuine change.
What is a change?

Aristotle calls this *substantial* change. In substantial change it is not only accidental forms that are different after the change. *Substantial forms* are different as well.

Here is a simple definition of accidental and substantial form:

An **accidental form** makes a substance to be in a particular way.

A **substantial form** makes a substance to exist as the kind of thing that it is.
So in the case of the tree burning into ashes, the tree loses its substantial form entirely. And so the tree ceases to exist.

But the tree doesn’t just vanish into thin air! The matter of the tree — the “stuff” that it is made of — is still there. But it takes on a new substantial form: the substantial form of ash.
Now we can (finally) define a “soul” according to Aristotle and Aquinas:

A soul is the substantial form of a living substance.

So anything that is alive has a soul, even trees and bacteria.

And nothing could be alive without a soul. The soul is the “principle” or source of life in the organism. It is what makes a living thing to be alive, as the kind of living thing that it is.
A soul is the substantial form of a living substance.

But now, consider what happens when someone chops down our lovely tree:

When the tree is chopped down (or shortly thereafter) it dies.

And what remains is a dead tree.

Now a dead tree, since it is not alive, has no soul.

And since a tree-soul is what makes a tree to be a tree, strictly speaking, a dead tree is not a tree.
A soul is the substantial form of a living substance.

And since a tree-soul is what makes a tree to **be** a tree, strictly speaking, a dead tree is **not** a tree.

We can see that the “dead tree” is no longer a tree because it decomposes and, over time, comes to look less and less like a tree.

When does it stop being a tree? The answer is: as soon as it dies. Its soul is gone. And the soul of the tree is what gave it its “tree-ness”.

So “dead tree” is, strictly speaking, not a tree.
So “dead tree” is, strictly speaking, not a tree.

The adjective “dead” is what is called an alienans adjective: it “alienates” the noun it modifies from the kind of thing it refers to. Other examples of alienans adjectives include “decoy” in “decoy duck” and “false” in “false teeth”.

A decoy duck is not a kind of duck, but a duck look-alike. And false teeth are not a kind of teeth, but a substitute for teeth.

Similarly, a “dead tree” is not a kind of tree, but an ex-tree.
Enough about trees. Now let’s talk about squirrels.

According to hylomorphism, Sammy the squirrel is composed of matter and form; he is composed of some physical stuff and a soul that makes the stuff to be a squirrel.

We can say then, that Sammy has a body and a soul, but it is also true that Sammy’s living body just is Sammy. Sammy’s living body includes a soul. The soul is what makes a living body to be a body.

Sammy is identical to Sammy’s body. But Sammy’s body could not be a body without a soul.

That means, that when Sammy dies, the little soul-less squirrel-corpse that remains is not Sammy. It is also not a squirrel-body. You might say it is an “ex-squirrel-body” or simply an “ex-squirrel”.
Now we say that Sammy’s corpse is an “ex-squirrel” but really, it probably isn’t a unified substance at all. “Ex-squirrel” is just our name for a whole bunch of substances (carbon compounds, water, lipids etc.) that are all arranged in a kind of complex “pile.”

This explains why Sammy’s corpse decomposes with time. It is not a unified thing - it has nothing holding it together. So it gradually falls apart. Unlike Sammy, the corpse has no substantial form to organize it. It is not a substance.
So Sammy is his body. But is Sammy a physical object, according to hylomorphism?

We have been operating under the following definition of “physical object”:

A **physical object** is something that can be studied and explained by the physical sciences (biology, chemistry and physics).

Hylomorphism definitely holds that Sammy and things like him can be (and are) studied and explained by the physical sciences.

However, it may be that those sciences cannot explain *all* of the behavior of Sammy in a **mechanistic** way.

The reason is that, according to hylomorphism, living things are *different* from non-living things. They have special substantial forms. Sammy’s substantial form **organizes** his matter and keeps all his bodily systems working: it keeps him alive.

So can Sammy be *fully* understood and explained by a purely mechanistic understanding physical sciences? Probably not fully. Why not?
So can sammy be *fully* understood and explained by a purely mechanistic understanding physical sciences? Probably not fully. Why not?

Well, for one thing, Sammy is conscious. And it is not clear that we can expect the physical sciences as we now understand them *ever* to be able to explain consciousness. Recall the arguments of Jackson and Nagel against physicalism.

The hylomorphist has a solution to the problem of consciousness. Sammy’s *substantial form* (his soul) is the cause of consciousness in Sammy, because the “stuff” he is made of cannot make him conscious by itself. It is his substantial form that organizes the stuff and makes it into a conscious animal.
What about the problem of Sammy’s identity through time? (Remember the Ship of Theseus?)

Since Sammy is identical to his body, can hylomorphism explain how Sammy can still be Sammy when he gains or loses parts?

Well, the parts of Sammy are whatever stuff is organized and unified by his substantial form (his soul), at any given time.

So Sammy can take in new matter, so that it becomes part of him.

And he can expel matter so that it ceases to be part of him.

And he remains the same Sammy as different parts of him come and go, because he has the same substantial form: the same soul.
Let’s sum up what we’ve said so far. According to hylomorphism:

- Sammy the Squirrel has a substantial form - his soul.
- That soul is what makes Sammy one substance.
- His soul also makes Sammy to be a squirrel.
- Sammy’s soul is the source (principle) of his squirrel life. It organizes him and makes his different bodily parts work together.
- His soul is also what makes Sammy’s parts his parts and allows him to gain and lose matter with time, while remaining Sammy.
- Sammy is identical to his body, and it is his soul that makes his (living) body to be a body.
- When Sammy dies, what remains is not Sammy’s body. Nothing can be a squirrel-body unless it has a squirrel-soul.

But this raises a question:
If Sammy’s body ceases to exist when he dies, where does his soul go?
One day, Sammy dies...

But where does Sammy’s soul go?

Well, Sammy’s soul doesn’t really go anywhere in particular. It is just gone.

Remember, his soul is a FORM. And forms need matter to exist...

Think about it, where does the round shape of the clay ball go when the ball is squashed? Where does the green color of a tree go when it burns into ash?

Green colors and round shapes cannot exist without something that is green or round.

In the same way, squirrel substantial forms cannot exist without something that IS a squirrel.
But…

**WHAT ABOUT HUMAN BEINGS?**

We know that, according to hylomorphism, Suzie’s corpse is not Suzie. In fact, it isn’t even Suzie’s body.

Remember our friend Suzie?

But where does Suzie’s soul go after she dies?

Does it just cease to exist, like Sammy the Squirrel’s soul does?
But where does Suzie’s soul go after she dies?

The easy answer would be “yes, Suzie’s soul is just gone when she dies, just like Sammy the Squirrel’s soul is.”

But this is not Aristotle’s answer. Consider the following passages from Aristotle’s “On the Soul”:

...the soul is inseparable from its body... Yet some [souls] may be separable because they are not the actualities of any body at all.

Thus that in the soul which is called mind (by mind I mean that whereby the soul thinks and judges) is, before it thinks, not actually any real thing. For this reason it cannot reasonably be regarded as blended with the body: if so, it would acquire some quality, e.g. warmth or cold, or even have an organ like the sensitive faculty: as it is, it has none...... Mind in this sense of it is separable, impassible, unmixed, since it is in its essential nature activity.

According to Aristotle, the human soul is special because of the “mind”. And so he leaves open the possibility that the human soul might be capable of continuing to exist after bodily death.
Thomas Aquinas on the Immortality of the Soul

Thomas Aquinas, like Aristotle, thinks that the human soul is different from all other souls because…

It can continue to exist after the body is gone.

Of course, Aquinas had theological reasons for this view, but he also thought there were good *philosophical* arguments for it.

The key lies in a power that the human soul has, that no vegetative or sensitive soul has: the power of *abstract thinking*.

Let’s take a look at one of his arguments for this conclusion.
Thomas Aquinas on the Immortality of the Soul

Imagine that Suzie has never seen a snake.

One day, she sees a snake for the first time.

When Suzie sees the snake, without even thinking about it, she immediately recognizes it as a particular kind of animal and gains the concept ‘snake.’
Thomas Aquinas on the Immortality of the Soul

But what is this concept of ‘snake’ that Suzie has?

Well, although we have pictured it as a little black-and-white snake, in reality, it is not a picture but an idea. It is the idea of snakes in general, not a picture of some particular snake.

(Of course, Suzie will also have a picture in her memory of the particular snake she saw. But that is not the same as the concept of a snake.)

The concept of ‘snake’ is a “universal” concept. A universal concept does not represent any particular thing. It represents a kind of thing, in this case, the kind: ‘snake’.
Thomas Aquinas on the Immortality of the Soul

Now of course, since Suzie has only seen one snake so far, her concept of ‘snake’ is very imperfect.

For instance, since the snake she saw is a common garter snake, she doesn’t know that some snakes can be poisonous, and that some snakes are constrictors.

But as she sees more snakes, her universal concept of ‘snake’ will become more and more refined.
Thomas Aquinas on the Immortality of the Soul

So Suzie has in her mind this universal concept of ‘snake’. Remember, it is not the concept of any particular snake, but of snakes in general. It is not the concept of any one thing in the world that Suzie has perceived with her senses. Rather, it is a concept that she has abstracted from the world she perceives.

Aquinas would put it like this: Suzie has in her mind the substantial form of ‘snake’. She has “snakeness” in her mind.

But, Aquinas reasons, something that is purely material can only have snakeness in it in one way: by being a snake! If Suzie’s mind were purely material, the only way it could receive this “snakeness” would be by actually becoming a snake!
Thomas Aquinas on the Immortality of the Soul

And of course, Suzie has acquired many other universal concepts like this, through observation of the world....

But despite the fact that Suzie has these forms in her mind, her mind does not become a snake, or a dog, or a cupcake, or triangular!

So, Aquinas concludes, this action of abstracting universal concepts from the world is an action that must act independently from matter (it acts “without a corporeal organ”). It is an action that doesn’t depend on Suzie’s body.
And if Aquinas is right that Suzie’s soul can operate without her body, then it seems like it could exist without the body.

Note that this is a little bit like Descartes’s reasoning. However, it doesn’t rely on imagining existing without a body. Rather, the argument is that certain actions of the soul (e.g. abstraction) do not act through the body. Therefore, the soul is not totally bound up with the body, as a squirrel’s soul is.

So Suzie’s soul doesn’t depend on her body in the way a squirrel’s soul does.

It can act and exist apart from her body!
Thomas Aquinas on the Immortality of the Soul

However, without a body, Suzie’s soul will be deeply incomplete. It will be only a shadow of what Suzie once was. For example, it will not have senses, because sensation requires a body. Aquinas says that a soul without a body is in an “unnatural” state. The soul is, after all, a substantial form. And it will always be incomplete without matter.

In other words: Suzie is essentially an *animal*. And a soul by itself, is not an animal.

So Suzie’s soul is not Suzie.
Thomas Aquinas on the Immortality of the Soul

So Suzie’s soul is not Suzie.

But if (somehow) Suzie’s soul is once again joined to some physical matter, then Suzie will return!

(Aquinas thinks this explains why the Christian belief in the resurrection of the body is so important.)
Is this a good argument for the immortality of the soul?

Well, there is a good deal more to the argument than I have presented here.

But, even if Aquinas’s argument does not absolutely prove the human soul’s immortality, it at least proves that such immortality is possible.

So hylomorphism is compatible with life after death.
Thomas Aquinas on the Immortality of the Soul

So we’ve seen that there are many reasons for thinking that hylomorphism true.

- It explains the unity of living things.
- It explains how a physical substance can be the same substance through time.
- It explains how soul and body are truly united in one substance.
- It allows me to say that I am animal.
- It takes the life of other animals (and plants) seriously: they have souls too.
- It explains why a dead body falls apart, but a living body continues to live.
- It explains how a physical object could also be conscious.
- It allows for the human soul to exist after death.

Next time, we’ll look at some arguments against hylomorphism.