Hylomorphism (Aristotle)

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Review

3 main theories in the philosophy of mind literature:

1. **Substance dualism** — Plato, Descartes: there are two kinds of substances: spiritual and physical (soul and body), and one can exist without the other.

2. **Physicalism** — especially in the 20th century: everything can be exhaustively described and explained by physics.

3. **Hylomorphism** — Aristotle, Middle Ages
A Few Words about Aristotle

- 384–322, BC
- Born in Stagira (Greece) ("the Stagirite")
- Studies in Plato’s Academy
- Teacher of Alexander the Great
- Establishes his own school, the Lyceum (Peripatetics): biology, logic, music, mathematics, astronomy, medicine, physics, the history of philosophy, metaphysics, psychology, ethics, etc.
Surviving writings: quite hard to read; technical terminology, sentences are long, badly written, the treatises are not very well organized.

But, cf. Cicero: if Plato’s prose was silver, Aristotle’s was a “flowing river of gold.”

Thus, probably: the surviving works are lecture notes / student notes; we do know that Aristotle wrote dialogues as well, but they are lost.
The Aristotelian Corpus

- The surviving works are usually categorized according to subject:
  1. Organon (logic): *Categories*, *On Interpretation*, *Prior and Posterior Analytics*, etc.
  4. Productive sciences (art): *Rhetorics*, *Poetics*
The Problem of Parmenides

Parmenides’s argument against change:

\[ P_1 \] Non-being cannot exist.
\[ P_2 \] Generation is only possible if there is non-being.
\[ C_1 \] Thus, generation is not possible. \([\text{MT: } P_1, P_2]\)
\[ P_4 \] Change is only possible if generation is possible.

\[ \therefore \] Therefore, change is impossible. \([\text{MT, } C_1, P_4]\)

- The argument is valid.
- Justification for the premises:
  
  \[ P_1 \]: Self-evident; if something exists, it is not a non-being.
  
  \[ P_2 \]: Generation = coming to be \textit{from non-being}.
  
  \[ P_4 \]: Change is a kind of generation.
Aristotle’s Reply: 2 Kinds of Change

Aristotle thinks that Parmenides’s argument is unsound: $P_4$ is false, and $P_1$ requires some clarification.

1. **$P_4$ is false:** It reduces change to one kind. Instead, we need to distinguish between **generation** and **qualitative change**.

**Qualitative change:** the quality of something existing changes
Aristotle’s Reply: 2 Meanings of ‘To Be’

2 Clarification of \( P_1 \): We also need to distinguish between two senses of ‘to be’: the existential sense, and the predicative sense.

- When something is generated, it comes in to existence; this is the first sense of ‘to be’.
- When something undergoes qualitative change, then it acquires or lose a property; it comes to be something.
- A similar distinction applies to non-being: it can be understood simpliciter (existential sense), or in the predicative sense (when something is not such-and-such).
- Thus, \( P_1 \): While it is true that non-being cannot exist in the first sense (a non-existent oak tree really does not exist), it is false in the second sense: an apple can become red from being non-red (= green).
Thus, according to Aristotle, change is possible, but both kinds involve complexity.

1. **Qualitative change:** We need an underlying object (e.g., an apple), which can take on various properties while remaining the same.

   - Aristotle calls these properties **accidental forms**.
   - An accidental form is, thus, a property gained or lost through qualitative change.
   - E.g.: greenness, redness, roundness, being black-haired, etc.
   - When something loses an accidental form, it still remains the same object (or person).
Matter and Form

Thus, according to Aristotle, change *is* possible, but both kinds involve complexity.

2 **Substantial change:** We also need something underlying, and something to make the change happen.

- The underlying thing is **matter** (οὐλη)
- In generation, matter takes on a new **substantial form** (μόρφη)
- E.g.: bronze taking on the form of a statue:
Matter and Form

A few notes about matter and substantial form:

- The general argument for the matter/form distinction:
  
  \[ P_1 \] Change is only possible if there is matter and form.
  
  \[ P_2 \] Change is possible.
  
  \[ \therefore \] There is matter and form.

- Matter is what underlies change in the acquisition or loss of a form.

- Substantial form: acquired by matter in generation; it makes the thing what it is.

- Thus, a thing cannot lose its substantial form — if it does, then it ceases to exist.
Hylomorphism — Summary

- generation
  \[ \downarrow \]
- existential ‘to be’
  \[ \downarrow \]
- matter + substantial form
- E.g.: a new oak-tree; a statue

- qualitative change
  \[ \downarrow \]
- predicative ‘to be’
  \[ \downarrow \]
- substance + accidental form
- E.g.: an apple changing color
The Four Causes

In order to explain something (e.g., why this chair exists), we can give several different accounts:

1. **Material cause:** the matter out of which the thing is made
2. **Formal cause:** the substantial form of the thing
3. **Efficient cause:** the agent that brought the thing about
4. **Final cause:** explains why the agent brought the thing about.

- material cause: the bricks and mortar
- formal cause: the floorplan
- efficient cause: the builder
- final cause: to provide shelter
How Does This Apply to Human Beings?

Since all this is required to explain the existence of every object, it also applies to humans.

So, what are the 4 kinds of explanation (causes) we can give of a human being?

1. The efficient cause: the parents
2. The matter: the body
3. The final cause: well-being
4. But what is the form?
The Form of a Human Being

The question: **What makes a human a human?**

- In order to be a human being, one needs to be *alive*.
- What makes something alive is its *soul*.
- This same applies to all animals and plants too (they are living beings); however, they have different kinds of souls.

The three parts of the soul:

1. Vegetative soul: nutrition — humans, animals, plants
2. Sensitive soul: sensation, movement — humans, animals
3. Rational soul: reason, will — humans

- Thus, what makes a human *a human* is his tripartite soul, which is the form of the living body. "The soul, then, must be substance as the form of a natural body that is potentially alive." (412a19–22)
Aristotle Against Physicalism

2 arguments against physicalism:

1. We cannot explain everything by matter alone.

“Some think the nature of fire is the unqualified cause of nourishment and growth... In fact, however, fire is a sort of joint cause, but not the unqualified cause; it is the soul, rather than fire, that is the unqualified cause. For while fire grows without limit, as long as there is fuel, the size and growth of everything naturally constituted has a limit and form.” (416a10–19)

- Thus, material systems have features that cannot be explained by the properties of matter alone: e.g., limited and patterned growth.
- These must be explained by reference to something else, namely the form (structure) of the thing.
Aristotle Against Physicalism

2 arguments against physicalism:

1. It would lead to a vicious infinite regress.
   - Question: if material substances are mere aggregates of material parts, then what holds these material parts together?
   - If they are held together by something immaterial, then materialism (physicalism) is false.
   - If they are held together by some material element, then how is *this* material element united to the body?
   - The only way out: the parts are united by a formal element (in case of a living body, a soul).
Aristotle Against Dualism

- Aristotle’s rejection of physicalism does not commit him to dualism: the dualist affirms that the two kinds of substances can exist apart from one another, while Aristotle denies that.

“Hence we need not ask whether the soul and body are one, any more than we need to ask this about the wax and the seal, or, in general, about the matter and the thing of which it is the matter.”

(412b7–9)

- Here: matter is the wax; form is the shape of the seal
- But the shape cannot exist separately from the wax (or similarly, the wax cannot exist separately from any shape)
- The same applies to human beings.
The Soul — Summary

• Soul : Body = Form : Matter; the composite is the human being
• Rejection of physicalism: we need some formal principle in explanation
• Rejection of dualism: the two (matter and form) cannot exist separately
• Side note: for human beings, it is a little more complicated — their rational soul can exist apart from the body, although not as a substance.