

# Aristotle: Matter and Form

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# Overview

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# Metaphysical Parts

We said metaphysics is trying to figure out the basic structure of the world.

- Aristotle: substance-based ontology (“the common wisdom of the folk is not to be despised.”)
- What are substances composed of?
  - of course: elements = **integral parts**. But what if we can show that something about a substance can change independently of its integral parts? E.g., integral parts remain while the substance changes or vice versa?
  - **metaphysical parts**: parts that aren't integral parts.
- tendency: to reject metaphysical parts in favour of integral parts (mechanism, corpuscularianism)

What are these metaphysical parts? How many of them are there?

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# Reminder: 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. [MT:  $P_1, P_2$ ]

$P_4$  Change is only possible if generation is possible.

$\therefore$  Therefore, change is impossible. [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 *from non-being*.
  - $P_4$ : Change is a kind of generation.

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## *Physics* I.7, 190a7–16

“Of what we call the simple coming-to-be things, one remains when it comes to be, and the other does not. . . . In all cases of coming to be. . . there must always be something underlying which is the coming-to-be thing, and this, even if it is one in number, is not one in form.”

## *Physics* I.7, 190b10–13

“[I]t is clear that that which comes to be is always composite, and there is one thing which comes to be, and another which comes to be this, and the latter is twofold: either the underlying thing, or the thing which is opposed. By that which is opposed, I mean the ignorant of music, by that which underlies, the man; and shapelessness, formlessness, disarray are opposed, and the bronze, the stone, the gold underlie.”

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## *Physics* I.7, 191a8–13

“As for the underlying nature, it must be grasped by analogy. As bronze stands to a statue, or wood to a bed, or the formless before it acquires a form to anything else which has a definite form, so this stands to a reality, to a this thing here, to what is.”

## *Physics* I.8, 191a23–191b7

“[T]his is the only way of resolving the difficulty felt by thinkers of earlier times. . . . So clearly to say that something comes to be out of what is not is to say that it does so out of what is not *as something which is not.*”

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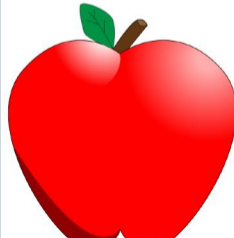
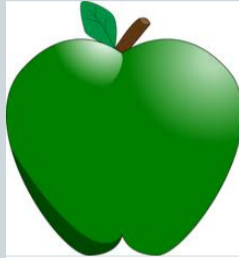
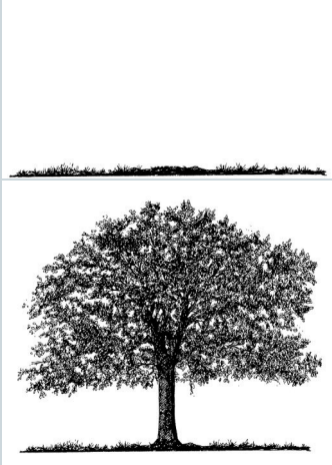
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# Matter and Form: 2 Kinds of Change

① We need to distinguish between **generation** and **qualitative change**.



# Aristotle's Reply: 2 Meanings of 'To Be'

② **Clarification of  $P_1$ :** We also need to understand 'non-being' in the right way:

**existential sense**, and the **predicative sense**.

- While it is true that non-being cannot exist in the first sense, it is false in the second sense – in which case non-being is a *lack* of something (the lack of the relevant form).

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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).

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# 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** (ὕλη)
  - In generation, matter takes on a new **substantial form** (μόρφη)
  - E.g.: bronze taking on the form of a statue:



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# Matter and Form in the 2 Kinds of Change

- generation



- matter + substantial form
- E.g.: a new oak-tree; a statue

- qualitative change



- substance + accidental form
- E.g.: an apple changing color

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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.

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- In every change, there is something (matter) that survives the change. But is there *one single underlying substrate* that survives *every* change? = is there such a thing as 'prime matter'?
- The substantial form makes a thing what it is. But: does this mean we have 1 substantial form per substance? If that's the case, then after the substantial change nothing remains?
- What do accidents inhere in?

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# How Does This Apply to Human Beings?

- These metaphysical parts are present in everything. When we want to properly *explain* something, we need to identify them, as well as their efficient and final causes.
- 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?

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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**.
  - “if an axe were a natural body, then its substance would be what it is to be an axe, and this would be its soul. . . . If the eye were an animal, sight would be its soul” (412b13–22).
- This same applies to all animals and plants too (they are living beings); however, they have different kinds of souls.

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The soul is responsible for all kinds of living functions.

## 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 must, then, be a substance *qua* form of a natural body which has life potentially.” (412a19–22)

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But what does this mean?

- is the soul something physical? – NO.
- is it separable from the body? – NO.

Aristotle (arguably) is neither a physicalist nor a dualist.

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# Aristotle Against Physicalism

- We cannot explain everything by matter alone.

## *De anima* II.4, 416a19–19

“Some think that it is the nature of fire which is the cause quite simply of nourishment and growth. . . . It is in a way a contributory cause, but not the cause simply; rather it is the soul which is this. For the growth of fire is unlimited while there is something to be burnt, but in all things which are naturally constituted there is a limit and a proportion both for size and for growth.”

- 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.

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# Aristotle Against Dualism

- Dualism: the two kinds of substances ('matter' and 'form') can exist apart from one another. But Aristotle denies that.

## *De anima* II.1, 412b7–9

“Hence too we should not ask whether the soul and body are one, any more than whether the wax and the impression are one, or in general whether the matter of each thing and that of which it is the matter are one.”



- 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)

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- Can the soul be immortal if it is a substantial form? If so, how?
- Is the soul as SF responsible for *all* functions of a human body?
- How is the soul related to its powers like intellect and will?

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