

Notes on Aristotle's Four Causes

In *Physics* II: 3, Aristotle introduces the doctrine of four "causes" or explanatory factors. A "cause" answers a "why?" question. Aristotle claims that there are four basic types of "why?" question, and corresponding to these there are four basic types of cause. The four causes are:

FINAL CAUSE: (goal, end, aim, function, telos): Why does he walk? To stay fit.

FORMAL CAUSE: (essence, structure, form, arrangement): Why is this body alive? Because it has a soul (the soul being the form of the body). Why does the ball roll? Because it is a sphere.

MATERIAL CAUSE: (constituent, that of which something is composed, or from which (as substratum) it comes to be): Why is this statue green? Because it is made of copper.

EFFICIENT CAUSE: (the primary source of change/motion and rest): Why is he fit? Because he walks.

Notice that in the examples given above, fitness is the final cause of walking (i.e., it is the goal or aim of walking) and walking is the efficient cause of fitness (walking is what causes the bodily changes that constitute fitness). Aristotle also believes that in many cases the final and formal causes coincide: the (ideal) form of human being is both that which makes humans what they are, and is the goal of human development.

The doctrine of the four causes applies best to biological objects. In the case of explaining biological objects (their natural states, behavior, activities, development), one can typically give all four causes. This is connected to Aristotle's idea of a biological object for he believes that such objects should be understood as sets of *material components* (ultimately, earth, air, fire and water) that are structured or *formed* in such a way as to *move towards self-determined goals*. This is true, for example, of human beings.

Given that human beings are made up of matter, there will sometimes be questions about us that must be answered in terms of the kind of material to which humans are composed, e.g., a human body will fall through the air to the surface of the earth because it contains a great deal of earth. So if I were to fall out of a window, my falling would have to be explained in terms of my material components. Yet, earth, air, fire, and water, are not of such a nature that by themselves they would shape up into human beings. The simple mechanical principles governing these elements can in no way explain how it is, or why, masses of material get shaped up into living organisms. In order to explain this, Aristotle believes that we need a new level of explanation, i.e., FORMAL explanation. It is the form which is responsible for the particular materials shaping themselves into a living organism. Further, many of the things humans do can be explained only by the fact that they are human. For instance, I am capable of making moral choices and contemplating truth. This is something that cannot be explained by pointing out that I'm made of certain material components; one must turn to considerations such as what kind of thing I am, e.g., my form.