

Aristotle contends that there are four types of causes that explain the nature of things. This idea of causation focuses on the concept of “why” that lies behind the production of events in the natural world. These “why” explanations correspond to (1) the characteristics of a thing, (2) things that result in some motion, (3) things that deal with the sake of a motion, and (4) things which explain the matter of a substance [198a].

Aristotle groups the final three kinds of causes as explanation for temporal events. He argues that these “motion causes” often coincide with each other since the conditions and goals of temporal events operate in conjunction. The second and third types of causes can be seen in his warring campground example, since the “why” of a military attack can be explained by the (2) conditions that launched the fighting (i.e. the army was previously raided) and (3) the goal of the soldiers (i.e. to rule the enemy).

Aristotle then examines motion causes to explain the teleological structure of nature. He argues that there are only two “principles which cause motion in a physical way,” (1) the primary reality and (2) the forms. Motion is directed by its final cause (i.e. its form), so natural processes can be seen to teleologically tend towards their end goal. Thus by understanding “that for the sake of which” a thing happens, one can understand why the process itself happens.

Next, Aristotle concludes that all ends of natural processes can’t possibly be the “result of chance or spontaneity” [199a]. Since Aristotle believes that things are exclusively either the result of coincidence or for some end, he uses the regularity of natural processes to rule out spontaneity as their cause. He argues that it is foolish to observe things that always come about in a very similar way (e.g. frequent rain in the winter, heat waves in the summer, and the organized structure of teeth), and conclude that they are spontaneous incidental causes. Like how a man’s going to the market can have an infinite number of possible outcomes, incidental causes are those which can have an innumerable number of effects [196a] and are governed by spontaneity. Thus, natural processes must be *per se* causes, which are understood in the sense of “that for the sake of which,” since the forms provide a specific purpose and end result.

Teeth grow for the sake of chewing, as their purpose is to emulate the form of teeth. The final purpose of teeth is a set of well-designed, exactly numbered rows of bones with incisors designed to tear up food for the molars to grind [198b]. Fulfillment of the purpose of the form of teeth is the end which provides the direction and purpose for teeth to grow.

The two objections brought up concerning rain and imperfection are quelled by tendency towards the forms. Although one might state that the purpose of rain is to nourish crops, this is not the true form of rain, as it can occur separately from this particular result (i.e. rain doesn’t just fall to water crops). Aristotle redirects towards the forms by showing the purpose of rain is more fully understood by a scientific view of a natural process in which water evaporates and cools. Aristotle also addresses the argument that imperfect results of natural processes point away from the forms. Although impediments can hinder a natural processes from completion, the tendency of the principle towards its end is the same [199b]. Imperfect results arise from later corruption of the perfectly designed seed; all seeds are intended to embody their forms, but not all will make it to perfection.