Southern Israelite

The Philosophy of Aristotle; The Flat Earth History of Science Chapter 8

The Soul and Sensation

Aristotle defines soul as the form of a natural body that has the potential to possess life. This body then must be furnished with organs: lungs, stomach etc. Life then is the process of growth and nutrition. The organs of perception, i.e. the eyes, the ear etc, exist in potentiality and sensation is defined as the change from potential to actual. He explains sensation as the reception of the form without the matter. An analogy of this would be like a king pressing his signet ring into the wax on a letter to prove the authenticity of the letter. The objects of knowledge are concepts whereas the objects of sensation are individual things. Aristotle would say that the sense object is not the object of knowledge, however, the sense objects contains the object of knowledge and that object is intellectual and not material. The task of the person sensing then, is to abstract the form from the sense object. Abstraction occurs even after the sensation as an image in the mind. Out of a complex of these images the active intellect produces concepts in the passive intellect. When these concepts are combined thinking occurs. These combinations are chosen and not given and they can be either true or false.

Sensation requires an external stimulus, to move the potentiality to an actuality. In this case, the perceptive organ, i.e. the eye, is potentially what the object is actually. When having a sensation, the eye, which is only logically distinct from the "seeing" of the eye, is one in quality with the object of sight. So when looking at a green wall, the eye becomes qualitatively green. With respect to the number of senses Aristotle suggests that the sense of touch relates to several pairs of opposites, namely, hot-cold, moist-dry, hard-soft. In essence he posits touch as a summary for several sensations. True, there are variations of sensations even in sound such as timbre, volume and pitch, but these all relate to one common substratum, namely, sound. The key to touch is that hot-cold, moist-dry, hard-soft, do not relate to a common substratum.

Respecting perception, Aristotle posits two types of perception: *per accidens* and *per se*. By *per se* he refers to the necessary properties of a thing. By *per accidens* he refers to the accidental properties of a thing. A doctor is a human *per se*, but a doctor is a *musician* accidentally. That is, according to definition a doctor to be a doctor must be a human first, but he does not have to be a musician to be a doctor. His love of music is merely accidental to him being a doctor. If you were walking down the street and saw a jet black Camaro, Aristotle would say that you perceived the Camaro *per accidens*. You saw a black object *per se*. However, it is not necessary that all black objects be Camaros so, the Camaro-ness of this black object is accidental. Aristotle admits that sensation *per accidens* may be mistaken as it is an intellectual construction and not pure sensation. Aristotle goes even further. Within the realm of perception *per se*, there are two categories: proper sensibles and common sensibles. Proper sensibles

are those sensibles which only one sense can perceive. The ears cannot perceive color, etc. A common sensible would be something that more than one sense can perceive. Shapes can be perceived by the eye or by touch, i.e. Braille. Moreover, Aristotle posits the idea of a sixth sense called "common sense." This sense is required to conjoin two sense experiences into one in the consciousness. An example may be a certain dessert that was so memorable that every time you see the beige color of New York Cheesecake, other sensations of sweet and soft textures are conjoined with it by the common sense.

Aristotle denies that men come into existence with *apriori* structures. Aristotle asserted that the mind is nothing before it thinks. If the mind was preprogrammed with *apriori* structures it would have a form of its own. If it had a Form of its own the Form would distort all experiences and remove the possibility of objective experience. Therefore, the mind is a blank before experience. Plato said that this destroys any possibility of learning.

Physics and Metaphysics

Aristotelian philosophy begins with the axiom of sensation. Being so he then only admits individual sense objects to be the true realties. Being then the true realities individuals are individuated from each other by their matter. One shoe is not another because one shoe is one substance and the other another blob of substance. However, language operates on classes of things. To admit only individuals is to make communication impossible. If it cannot be talked about it is unknowable.

Aristotle did not accept Plato's theory if Ideas. Aristotle posited the Forms as substitutes for the Ideas. To obtain an object of knowledge, there must be something that does not change in the midst of change. All existing objects are either *natural* (Stones, water) or *artificial*(Beds, coats, statues). The distinguishing property is that natural objects have *nature*, and artificial objects do not. Nature is defined by, "a principle and cause of motion and rest in that body in which it is immanent *per se* and not *per accidens*"(*Physics).*[1] Therefore, when the cause of a body's action/motion is necessarily in it (*per se*) that body is a natural body. Therefore, he who has nature *per se* has free will. Therefore, when a man who has the nature of health within himself, and he is a doctor, he is a doctor, *per se*. Yet when a man who does not have this nature is a doctor, he is a doctor accidentally (*per accidens*). In Aristotle's philosophy natural objects are the primary realities, the real essences. One would think the Forms would be the real essences, seeing they are the substitute for Plato's Ideas, but they are not.

Nature then is the form of constituted objects. Constituted objects are a combination of matter and form. The matter is not the nature; neither is the combination of matter and

form the nature. The form is the nature. The form is the end and the purpose of something lower than form. Natural forms are also the means of something higher. Aristotle's matter and form is understood as being potentiality, actuality, agent and patient. The patient is the "unqualified matter"[2] The agent is the form or the "informing reason inherent in the matter…the divine being or God"[3] . Two books or two stones could have precisely the same color, shape, odor, and so on; they would be two things because there were two substances. Aristotle says, "I define matter as that which is in itself neither a thing, nor a quantity, nor any other of the categories of being." Aristotle (*Metaphysics*, VII, 3, 1029a 20-21) This potential matter can be known by neither sensation nor reason but only by analogy (Which, by the way, requires information; It does not furnish information).

What is the difference between artificial objects and natural objects? What is the property common to both and on the contrary what is the principle of individuation? In Aristotle a stone may be understood as a natural object while a small statue that has had human hands chisel out its form may be understood as an artificial object. If a stone falls off a cliff into a lake it first falls through the air and sinks in the water and finally rests in the mud at the bottom of the lake. This is understood as natural motion; that is to say nature caused this motion. Now a stone statue if it is thrown out of a window into a lake it also falls through the air, and sinks in the water and finally rests in the mud. Here the distinction seems to fail but Aristotle replies that the statue sinks because it is a stone not because it is a statue. Its statue-ness is simply accidental. That is to say, a statue can be made out of something other than a stone, so the stone-ness is arbitrary or accidental to statue-ness. But how does one explain why things move in general? Democritus could explain why things in the present move but he could not explain motion in general because his explanation produced an infinite regress. One thing moves because another moved it and on to infinity. Aristotle, to avoid an explanation based on an infinite regress posits nature as the original principle. But he must argue for this principle. An assertion proves nothing.

Logic

The primary laws of logic laid down by Aristotle are primarily two. The Law of Contradiction and the Law of Excluded Middle. 1.) Law of Contradiction: A is never non-A; 2.) Law of Excluded Middle: A is something or it is not. A cannot be true and false at the same time. A is itself or nothing else. Speaking of logic and the law of contradiction in an exposition of Aristotle, Clark says, "This principle, be it noted again, is stated not merely as a law of thought, but primarily as a law of being. The ontological form is basic; the purely logical is derivative: It becomes a law of thought because it is first a law of being."[4]

Causation

First Cause-Material Cause: Is that out of which something is made. The material cause is that which exists before the constitution of a thing and remains inherent in it, i.e. the stone of a statue, the wood of a chair, etc.

Second Cause-Formal Cause: the formal cause is the pattern or certain definition of a thing. The formal cause of a statue is the form of it: the shape of the head, arms, torso, etc.

Third Cause-Efficient Cause: The beginning of either motion or rest; the agent. The efficient cause of a statue is the sculptor.

Fourth Cause-Final Cause: This is the purpose of a thing. Scissors are made for cutting things.

Aristotle was not a mechanist, and admitted exceptions to these laws. In Aristotle's construction, the start of a thing was its matter/substance. To this attaches the form/nature and then accidental qualities attach to the form/nature. This has application to causation. If indeed accidental properties are subsequent to essential qualities. The issue is that an accidental cause cannot precede a real cause. If so, luck and chance are subsequent to and dependent on real thought. This is the exact opposite of the atheist mechanists who say that chance is the cause of the universe. Aristotle along with Plato posited a teleological interpretation of nature. On Aristotle's construction natural things that move according to an internal principle arrive at an end (the form). The end is determined and is not arbitrary. So the end is the cause of the matter and not the matter the cause of the end. On the atheist evolutionary theory, there are no natural objects. The end of objects must be arbitrary for this theory to work and therefore no evolutionist can be an Aristotelian.

Motion/Potentiality and Actuality

Potentiality:

> *"Potency' means (1) a source of movement or change, which is in another thing than the thing moved or in the same thing qua other; e.g. the art of building is a potency which is not in the thing built, while the art of healing, which is a potency, may be in the man healed, but not in him qua healed. 'Potency' then means the source, in general, of change*

> *or movement in another thing or in the same thing qua other, and also (2) the source of a thing's being moved by another thing or by itself qua other. For in virtue of that principle, in virtue of which a patient suffers anything, we call it 'capable' of suffering; and this we do sometimes if it suffers anything at all, sometimes not in respect of everything it suffers, but only if it suffers a change for the better–(3) The capacity of performing this well or according to intention; for sometimes we say of those who merely can walk or speak but not well or not as they intend, that they cannot speak or walk. So too (4) in the case of passivity–(5) The states in virtue of which things are absolutely impassive or unchangeable, or not easily changed for the worse, are called potencies; for things are broken and crushed and bent and in general destroyed not by having a potency but by not having one and by lacking something, and things are impassive with respect to such processes if they are scarcely and slightly affected by them, because of a 'potency' and because they 'can' do something and are in some positive state."[5]*

Actuality:

> *"Actuality, then, is the existence of a thing not in the way which we express by 'potentially'; we say that potentially, for instance, a statue of Hermes is in the block of wood and the half-line is in the whole, because it might be separated out, and we call even the man who is not studying a man of science, if he is capable of studying; the thing that stands in contrast to each of these exists actually.* Our meaning can be seen in the particular cases by induction, and we must not seek a definition of everything but be content to grasp the analogy*, that it is as that which is building is to that which is capable of building, and the waking to the sleeping, and that which is seeing to that which has its eyes shut but has sight, and that which has been shaped out of the matter to the matter, and that which has been wrought up to the unwrought. Let actuality be defined by one member of this antithesis, and the potential by the other.* But all things are not said in the same sense to exist actually, but

> only by analogy-*as A is in B or to B, C is in D or to D; for some are as movement to potency, and the others as substance to some sort of matter."*[6]

Aristotle's definition that is posited for motion in *Physics* Book 3 part 1 is

> *"the actualization of the potential as such is motion".*

But he gives no definition of potential and actual aside from analogies. Here is his explanation from *Physics* Book 3 part 1:

> *"It is the fulfilment of what is potential when it is already fully real and operates not as itself but as movable, that is motion. What I mean by 'as' is this: Bronze is potentially a statue. But it is not the fulfilment of bronze as bronze which is motion. For 'to be bronze' and 'to be a certain potentiality' are not the same.*
>
> *If they were identical without qualification, i.e. in definition, the fulfilment of bronze as bronze would have been motion. But they are not the same, as has been said. (This is obvious in contraries. 'To be capable of health' and 'to be capable of illness' are not the same, for if they were there would be no difference between being ill and being well. Yet the subject both of health and of sickness-whether it is humour or blood-is one and the same.)"*[7]

Dr Clark summarizes the problem:

> *"But to explain why bronze can become a statue, the statement that bronze has such a potentiality does not increase our knowledge. To assert that a certain matter is potentially a certain form* means only that similar matter in the past has become that form. This is a statement of fact; it is not an explanation of the fact*."*[8]

Asserting that something has happened in the past therefore it is a potentiality does not explain how the potential became actual. Democritus was right and motion cannot be explained and must be merely used as an axiom.

Regarding the initial definitions of potentiality and actuality, the difficult point surfaces that motion cannot be defined as either pure potentiality or pure actuality. To assert that a certain thing is capable of becoming a certain size does not mean that it is in motion, but merely capable of motion. Moreover, if a certain thing actually is a certain size it is not in motion either, for it is not becoming something, it is something. For example, the actualization of the buildable house is not a house, because a house is not buildable, the house is built. Therefore, the actualization of something must be a combination of the two in a process. Therefore, motion is an attribute of a thing when in this process. Again, this cannot be defined but only described by induction and analogy.

Aristotle objects that.

> *"all motion, therefore requires a subject that remains unchanged during the motion."[9]*

Yet, how does he know that reality is not like a cartoon film, where motion is an illusion of many still images being presented and taken away very quickly? Dr. Clark says,

> *"Motion no doubt, presupposes an unchanged substratum, but how do we know there is such a substratum and how do we know there is motion?"[10]*

Essence and Energies Distinction

In Aristotle, the growth of a tree is as real as the tree itself. The sight of the eye is as real as the eye itself. However, as Dr Clark says,

> *"Aristotle opposed doubling the number of existing things in the universe, fearing perhaps the wild consequences of unrestrained hypostatization…The action of a tree growing is neither a thing, nor a reality in the strict sense. Such actions are not nature; neither do they*

> *have a nature; but, rather, they are by nature or conformed to nature."[11]*

See Prof. Dr. David Bradshaw's *Aristotle East and West*.

Space-The Void

Contrary to Democritus, Aristotle rejects his notion of empty space or the void. To cater to the idea of change and motion Democritus and others had posited an empty space wherein this change was to occur. Aristotle rejected this notion, pointing out that not all change requires empty space. An example would be qualitative change and he even said that a change of place does not require a void. Aristotle asserted that a void makes motion impossible. If the void is infinite there can be no reason to travel one direction rather than another, if even "direction" has meaning in such a construction. This removes the idea of purpose in Aristotle's Forms. Moreover, the speed of a body's motion is determined by the density of whatever medium it moves through. If bodies did move through a void they would move through them at an infinite speed and require no time to travel from point A to point B. Yet motion requires time, therefore there is no void. How then does Aristotle explain motion? Aristotle posits his eternal first mover; and thus the *Cosmological Argument* for God.

The Cosmological Argument

This is the first empirical proof of God's existence. The argument can be found in Aristotle's *Physics* Book VIII.4-6,

> *"5 "From what has been said, then, it is evident that that which primarily imparts motion is unmoved: for, whether the series is closed at once by that which is in motion but moved by something else deriving its motion directly from the first unmoved, or whether the motion is derived from what is in motion but moves itself and stops its own motion, on both suppositions we have the result that in all cases of things being in motion that which primarily imparts motion is unmoved."*
>
> *6 "The eternity and continuity of the process cannot be caused either by any one of them singly or by the sum of them, because this causal*

> *relation must be eternal and necessary, whereas the sum of these movements is infinite and they do not all exist together.” [12]*

Here then is Aristotle’s argument: 1. A mover is needed to explain motion; 2. This mover is eternal and one; 3. This mover is the first mover; 4. The mover has no finite size and is therefore infinite; 5. The mover is in the center or on the circumference of the universe.

This argument was used by Aquinas in his *Cosmological* argument:

> *“It is certain and evident to our senses, that in the world some things are in motion. Now whatever is moved is moved by another…But this cannot go on to infinity, because then there would be no first mover… Therefore it is necessary to arrive at a first mover, moved by no other, and this everyone understands to be God.”[13]*

First, the reader will see clearly that he bases his argument on sensation and motion. Certainly, when Aquinas says that “Now whatever is moved is moved by another” this cannot go on infinitely because then there would be no first mover”: he asserts that there must be a first mover. The problem is, this assertion functions as the reason to reject the infinite regress and the conclusion. This is a fallacy. I have also been struck by Hume’s rejection of the cosmological argument. He saw that observations of the effect would be the only basis for understanding the cause. Hume gave an example, that if we heard the symphonies of Beethoven, we would understand his logical, structured and mathematical genius as well as his artistry and creativity, but this would tell us nothing of the fact that he loved sports and was the quarterback of Bonn University. Therefore, our knowledge of the symphony would leave us with spurious conclusions about Beethoven.

Now, is the motion of the Prime Mover accidental or essential? If accidental, there is no necessity for it to always move and could, in theory, stop moving. Yet Aristotle proved that the motion was eternal. If the motion is essential, a question must be answered: is the motion of the mover of the same species as that which it causes to move? An eye on a stovetop heats a pan and at the same time is getting hot. In this case the essence of motion is the same in both. Yet this is the problem with empiricism. One particular does not prove a law or a universal truth. Does the Geometry teacher who teaches a Geometry lesson learn the Geometry lesson? No, the teacher already knows the lesson.

Therefore, the motion of the Prime Mover can neither be proven accidental or essential. Therefore, a self moving mover does not explain motion.

[1] Gordon Clark, *Ancient Philosophy* (The Trinity Foundation, 1997), 148

[2] Gordon H. Clark, *Thales to Dewey (Unicoi, Tennesse.: The Trinity Foundation, 1957, Fourth edition 2000)*, 132

[3] Ibid., 132

[4] Gordon H. Clark, *Thales to Dewey (Unicoi, Tennesse: The Trinity Foundation, 1957, Fourth edition 2000)*, 88

[5] Aristotle, Metaphysics 5.12, Translated by W. D. Ross, The Internet Classics Archive Site; accessed June 2010; available at: http://classics.mit.edu/Aristotle/metaphysics.5.v.html

[6] Aristotle, *Metaphysics*, Book 9.6, Translated by W. D. Ross, The Internet Classics Archive Site; accessed June 2010; available at: http://classics.mit.edu/Aristotle/metaphysics.9.ix.html

[7] Aristotle, *Physics 3.1*, Translated by R.P. Hardie and R.K. Gaye, The Internet Classics Archive Site; accessed June 2010; available at: http://classics.mit.edu/Aristotle/physics.3.iii.html

[8] *Thales to Dewey*, 117

[9] Gordon H. Clark, *The Philosophy of Science and Belief in God (Jefferson, Maryland.: The Trinity Foundation, 1964, Second edition 1987)*, 10

[10] Ibid

[11] *Ancient Philosophy*, 149

[12] Aristotle, *Physics Book 8.4-6* Translated by R. P. Hardie and R. K. Gaye, The Internet Classics Archive Site; accessed June 2010; available at: http://classics.mit.edu/Aristotle/physics.8.viii.html

[13] Gordon H. Clark, *Three Types of Religious Philosophy, (Jefferson, Maryland: The Trinity Foundation, 1989), 60*

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