

Lecture from *Aristotle, The Power of Perception*, by Deborah K.W. Modrak, (1-80)

^{4a}Aristotle's solution to the mind body problem is not dualist or materialist. He does not appeal to a non-physical mind as that which gives rise to experiential phenomena or a physical body as that which gives rise to these phenomena.

Instead, Aristotle uses the idea of "form" which can be defined as "made such to accomplish certain things." For Aristotle, the soul can be defined as the form of the body rather than some special non physical entity. The soul in this case is integral to the body, and upon the bodies death is extinguished. A more complete description of the soul would be "...the capacity to carry out all the physiological and psychological functions that constitute living for a particular kind of creature."(Modrak page 27)

Plants are capable of nutrition, growth and reproduction. Animals have further capabilities, for they can perceive and move. Humans have the further capability of Reasoning. If the soul embodies the capacity to do certain things, then it is the reason why living things are alive.

Aristotle uses the term "Psychophysical" to refer both to the form and the body. His theory is, then, a psychophysical one. Psycho refers to form.

Aristotle bases his theory on five principles,

"1) **Psychophysical Principle:** Many states, if not all, that are ordinarily assigned to the soul are psychophysical states, namely, psychical states with physical realizations.

2) **Actuality Principle:** A cognitive faculty is potentially what its object is actually. {Does not mean sense organ becomes the same thing as that which it perceives like "eye becomes red," instead sense organ becomes same thing as "object of perception" and this is an awareness.}

3) **Sensory Representation Principle:** If a cognitive activity has a sense object as its focal object, the psychic faculty involved is a perceptual faculty.....

4) **Analytic Principle:** A psychological explanation should begin with an account of the constituent parts of the phenomenon under consideration and then make this account the basis for extending the explanation to cover more complex phenomena of the same sort.

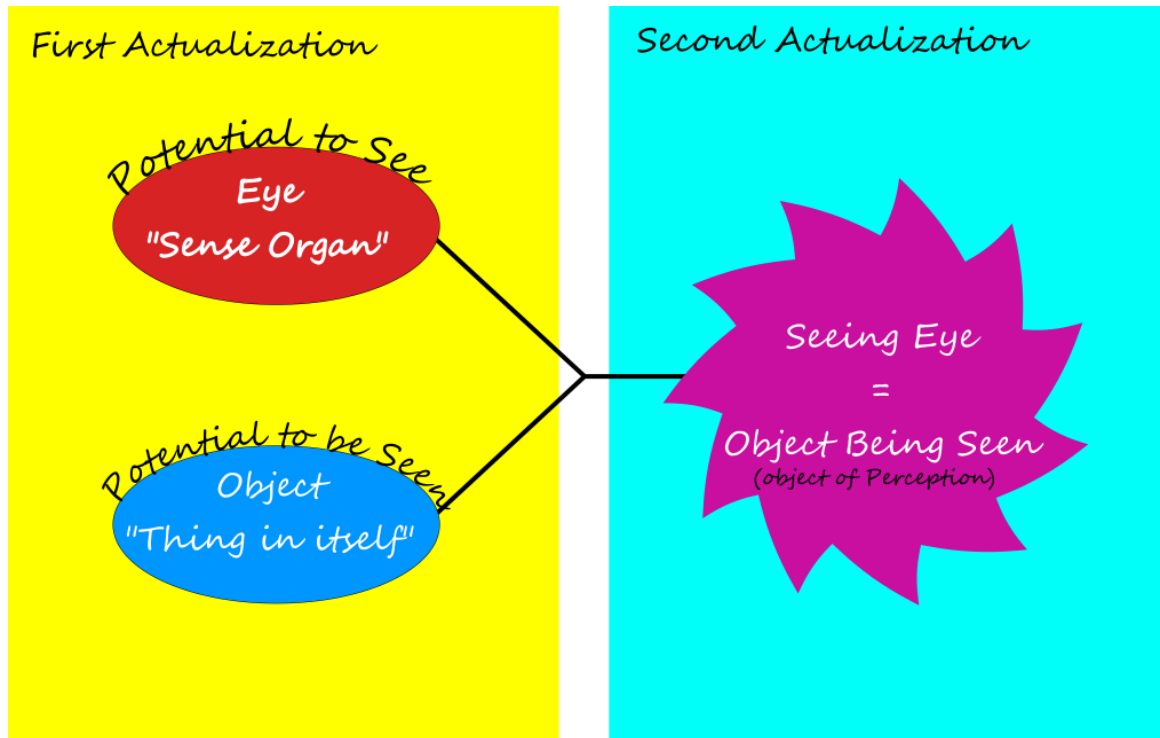
5) **Normative Psychophysical Principle:** Psychological explanation at its most complete will take the psychophysical character of psychological states into account."(Modrak page 24)

^{5a}The form of a House is that "it provides shelter" and its materials are "the bricks, cement etc" it is made up of. Even though the Material description and the formal description refer to the same thing, the form is not the same thing as the composite of materials, for the house can be made of many different things but the form remains the same. We can say that the house exists "as the object of the architect's art" (Modrak page 26) An example given by Aristotle is anger. The formal cause of anger is "a desire for retaliation," and the material description for this state is "blood boiling around the heart."

^{6a}Aristotle's theory of perception is based on the Actuality Principle: A cognitive faculty is potentially ("awareness" or "object of perception") what its object is actually—its object of perception, or realized potential to be sensed, "in fact, a faculty is known and defined in relation to its object." (Modrak page 30)

Let us see how this works for the event of a person seeing a colored object. There is the eye that has the potential to see and the object that has the potential to be seen as having a particular color. In the act of perception, "the seeing eye comes into existence simultaneously with the colored object"(Modrak page 30) In other words, the seeing eye is realized and the colored object is realized.

The eye that has the potential to see is the "first actualization of sight" and the object that has the potential to be seen as having a particular color is the "first actualization of colored object." **For Aristotle, "seeing" (second actualization of sight and "color that is being seen" (second actualization) are the same thing.** Seeing is to describe this process in relation to the perceiving person and "the object is red" is to describe this process in relation to the object seen. Perception of an object of experience for Aristotle is this process of second Actualization.



Here, the "Seeing Eye" is the same thing as the "Object Seen" because all that is included in the *Second Actualization* is taking place inside the sense organ, and the **object in itself** is certainly not being changed in any way by this process.

^{7a}In order for this process of perception to take place, there needs to be what we might call a transitive property of sensation, a is like b, b is like c--so a is like c. The object perceived has certain characteristics-" potentially perceivable characteristics-in common with the medium through which the act of perception takes place and the organ of perception. In the case of sight, transparency is the characteristic held in common by the object seen, the air through which it is seen and the eye jelly that sees.

Perceiving is a change in the sense organ, or alteration. Usually change, or alteration in something, implies the destruction of such and such qualities, but the alteration in a sense organ preserves the potential characteristic by actualizing it. And what is interesting about this is that this actualization of a given characteristic of perception can remain afterwards as part of the perceiving being, and that is what Aristotle means by the preservation of the characteristics of perception.

Such characteristics taken as a whole are called phantasmata and are the source of such things as memory, dreams and the imagination. Put another way "sensible characters are properties that physical objects possess in relation to percipient beings; sensible characters are actualized as the objects of perception and are preserved as the objects of phantasia.

^{8a}Phantasia works the same way for animals as it does for humans. Like humans, animals use the objects of phantasia to remember things and imagine plans of action in order to survive. But humans have the additional capacity of Rationality, or abstract thought, which mostly employs language rather than sensible representations like an phantasmal image of something.

^{9a}We have a built in capacity of knowledge in the form of our sense organs. Awareness is built into the act of perceiving, for the moment that a character of perception is actualized, awareness has taken place, and objects of phantasia have been produced—each actualized characteristic of perception is immediately an awareness of something. Perceiving is to be conscious.

Questions for the class:

- 1) How does Aristotle define the soul? (the soul can be defined as the form of the body)
- 2) What is the form?
- 3) Does the soul live on after the body has died?
- 4) What are the five basic senses?
- 5) What does Aristotle mean by term "Psychophysical?" (refers to both the form and the body)
- 6) What are phantasmata?
- 7) What capacity do human being have that animals do not?
- 8) What is the form of a car?
- 9) What is the first actualization of sight?
- 10) What is the second actualization of sight?
- 11) What is the transitive property of perception? (The object perceived has certain characteristics—" potentially perceivable characteristics—in common with the medium through which the act of perception takes place and the organ of perception)
- 12) Does Aristotle mean that when an eye sees the color red, that this eye itself becomes red?
- 13) What is awareness for Aristotle? (A capacity to perceive, a second actualization of perception).

Second Part:

^{10a}Aristotle maintains that we have five "special senses" defined "in relation to a particular type of sensible quality: the sense of sight is of color; the sense of hearing, of sound: the sense of smell, of odor; the sense of taste, of flavor, and the sense of touch, of the tactile qualities." (Modrak page 55)

The "**proper objects**" of perception are the target perceptual objects of the five special senses-namely color, hearing, sound, smell, taste, and tactile qualities. To account for the perceptions that we have which do not derive uniquely from one of the five special senses, he posits the existence of an additional sense, the common sense.

Such perceptual objects that are not covered by the five senses are "**common objects**", "such as shapes and motions and "**incidental objects**", such as people and buildings." (Modrak page 55) The common sense permits the functions of "reflective awareness, complex perceptual judgments and memory" (Modrak page 56) for it is composed of all the five special senses.

The common sense, then, is the place where the perceptual information of the five senses converge so that it can be compared, manipulated and judgments can be made. For Aristotle, the common sense is analogous to what we call the brain.

^{11a}The proper objects of perception are the vehicles of perception for the common objects and the incidental objects. We see color (a proper objects), so then we can see colored shapes (common objects), and because we can see a colored shape, we can see someone's face (incidental object).

^{12a}Each of the five senses is what Aristotle calls a Logos, a "capacity possessed by a bodily organ to respond to a range of sensible features, the range being determined by a pair of opposite qualities." (Modrak page 56) Each proper object "is defined by a pair of opposite sensible qualities." (Modrak page 56)

The logos for taste would be sweet to bitter, the logoses for touch would be such things as hard to soft, wet to dry, cold to hot etc.(56) Aristotle also uses the concept of logos when talking about the proper objects themselves. So Aristotle, when referring to the perceptual quality of a proper object of color, says that it is "a logos" of white to black.

What he means is that particular color picks out a particular place in the continuum between white and black, thus you could have a red logos, or a green logos etc.

And when a sense is exercised, it is actualized and becomes one with its object and so is an actualized logos. So both the sense and the object to be sensed are potential logos until they become actualized logos during an act of perception.

The "description of the sense makes no reference to the sense's embodiment. It is the purely formal description of the sense required by Aristotle's psychophysicalism. The actualization of the logos is the reception of the sensible form without its matter."(Modrak page 57)

^{13a}The physical properties of an external object are such that it has two dispositional properties, "the power to bring about a temporary change in the medium and the organ and the power to bring about a perception in the percipient (the perceiver)." (Modrak page 58)

For example, if you are looking at the color red, the object of perception affects the medium-the air between you and it temporarily-and this in turn affects your eye temporarily in that you now have an actualized logos of red. This logos then becomes awareness of red, or phantasmata of red which the common sense can use to derive judgments.

^{14a}Common sensibles for Aristotle, are common objects of perception such as " motion, rest, number, figure, size: for such qualities are not the proper objects of any single sense but are common to all"(Modrak page 62) We can think of a particular motion being heard, touched and seen.

The proper objects of perception like color, texture, flavor, sound etc can be described as logos, that is in terms of opposing sensible qualities, but the common sensibles cannot. "

A shape perceived through sight and touch cannot be represented either as a logos of dark to light, or of hard and soft; yet its perception seems to be just as immediate as the perception of color or solidity"(Modrak page 63) Aristotle maintains that the common objects are perceived in themselves, that is that they act directly on the senses {you can sense them immediately & without the need of experience}.

^{15a}Next we turn to the subject of "incidental objects" of perception. An incidental object is perceived, not by combining proper objects as in the case of common objects, but is perceived through different proper objects from whose presence can be deduced the presence of the proper object of the incidental object.

This requires learning or past experience. For example, you were not born with the ability to recognize honey. Without prior knowledge, you can immediately sense that yellow, sticky, sweet stuff. Once you have learned what honey is, when you again encounter that yellow sticky stuff, you will be able to deduce that it is honey and that it is sweet (one of its proper objects) without the need to taste it first.

Such things as buildings, people, cars your neighbor's cat etc are all incidental objects of perception. In contrast, common objects such as size, shape, and movement to not need any prior learning to be perceived, they are perceived immediately.

^{16a}Reflexive self awareness for Aristotle is something that takes place in the common sense. As previously mentioned, any act of perception will result in an awareness of something, for the actualization of some characteristic of perception is an awareness and acts of perception produce phantasmata which persist and can be used by the common sense latter on.

These phantasmata can be thought as little packages of individual awarnesses, and they serve as our memory. But these phantasmata are, taken individually, are low grades of awareness, for they are just awarnesses that something is red, or that something is hard or that something is sweet etc.

To get true reflexive self awareness, something needs to coble these little packages of self awareness together to make more complex accounts of self awareness such as "I am looking at my friend's car which is red." This job, of course, is performed by the common sense which is where all the five senses converge.

^{17a}Now where did Aristotle think that the organ of the common sense was physically located? He had in mind some central organ that would have some type of connection to the five special sense organs. He noted that the five sense organs are filled with blood vessels and that these are in turn connected to the **heart**. So he thought that the heart was the seat of consciousness and that the five sense organs transmitted their data to it through the blood. For him, the brain was the heart.