Daniel Mehus

Prof. Macbeth

Phil 110

Final Paper

Things aren't Always as they Seem: Aristotelian, Cartesian, and Kantian Ideas of the Nature of Sense Perception and its Role in Knowledge.

Aristotle, Descartes, and Kant all formulated extensive analyses of sense perception and its role in knowledge. Aristotle articulated the idea of potentialities and actualities of perception and believed that acquiring knowledge was derived from experience and could be done using accurate sensory perception. Descartes believes that knowledge does not come from sensory perception, but that objects are made intelligible by one's intellect prior to perception. Descartes' beliefs stem from his idea that sensory perception cannot be trusted, and that stages of doubt about existence must be overcome in order to use sense perception accurately. Nearly one hundred years later, Hume rejects the ability to acquire knowledge about the world at all, disregarding notions set forth both by Aristotle and Descartes. In light of this, Kant asserts the idea that the world can only be known through the way it appears to us, but not as the world is in itself. Kant lays out the blueprints for the cognitive apparatus that he calls the mind and argues that sense perception can be used to acquire knowledge, but only about things as they appear to us.

According to Aristotle, the soul (not by the modern definition) could be dissected into multiple parts. The Aristotelian model includes the nutritive and reproductive, perceptive, locomotive, and rational parts of the soul. The soul is defined by physiological characteristics.

Aristotle claims, “if the eye, for instance, were an animal, sight would be its soul” (412b 20). For animals, the perceptive soul is synonymous with sensory form, but for rational beings such as humans, it is synonymous with intelligible form. For example, a dog might sense the presence of water with the perceptive part of its soul, but to a human, water is intelligible and can be identified as water, not just by sensation. This clarifies that Aristotle is discussing perception with intelligibility in mind, and not merely reaction to stimuli.

Aristotle believes that perception is involuntary, and supports with the claim, “...it is up to us to think whenever we want to, but it is not up to us to perceive whenever we want to, since perception requires the presence of its object” (417b 25)[1]. Aristotle also believes that perception is done with sensory organs. Perception can occur with the singular use of one sense or a multitude of senses. When discussing objects, he proposes two different types of objects: common and proper. Proper objects of perception are perceived with one sense, which is either taste, smell, sight, touch, or hearing, while common objects of perception, such as motion, rest, shape, size, and number, are perceived with multiple senses. Furthermore, Aristotle believes sense perception occurs when there is a capable object of perception and a perceiver actively perceiving simultaneously. This is explained in his model for potentialities and actualities.

In his study of change, Aristotle determined that change occurs in stages which are: 1st potentiality, 2nd potentiality/1st actuality, and 2nd actuality. For example, assume there’s a man who wants to learn french. The first potentiality is the man who is capable of learning french. The stage between first potentiality and second potentiality is the man learning french. The second potentiality occurs once the man knows how to speak french, but does not exercise this

---

[1] Irwin, Terence. *Aristotle: Introductory Readings*. Indianapolis, Ind.: Hackett Pub., 1996. Print.
*All quotations for Aristotle are cited by section number.

by speaking french. The second actuality occurs when the man exercises his french speaking skill. In this way, actualities can be navigated depending on whether a trait or skill is being exercised, while potentialities can only be navigated if one learns or forgets a skill.

This can be translated into sense perception. For example, a human embryo lies within the first potentiality because it has not fully developed the organs necessary for sense perception. A human with developed sense organs (eyes, ears, mouth, skin, nose, for seeing, hearing, tasting, feeling, and smelling, respectively) who is not exercising said sense organs lies within the second potentiality/first actuality. For example, a sleeping man lies within the second potentiality/first actuality. A man who is awake and actually perceiving is in the second actuality. Because there are always objects to be perceived when one is awake, one is always exercising their sense perception.

Conversely, objects may also be in these stages of sense perception. Take a set of wind chimes for example. The chimes are in first potentiality if they are existing, but not emitting a sound. They achieve second potentiality/first actuality when a wind blows and the chimes generate sound. However, the chimes do not achieve second actuality unless there is a perceiver to perceive and actualize the sound. In summation, the capability of a perceiver as well as perceptible objects have different stages of perception.

This model for perception directly affects how Aristotle believes one acquires knowledge. For example, a man may desire to study squirrels. In order to do so, he must be in a position to actively perceive while a squirrel is actualizing its own life. When these two events occur, the man can achieve second actuality by actively studying squirrel life.

When one gains knowledge, Aristotle argues that judgement, unlike perception, is a voluntary action, and that understanding is a tool to be implemented in order to do so. Under this model, rational beings gain knowledge of things as they truly are unless the perception or judgement is incorrect.

Aristotle does flirt with one relatively Kantian idea when he speaks of things knowable to (humans) and things knowable to nature. For example, humans know and perceive clearly that ice floats on water, but nature knows ice is simply less dense than water.

Renee Descartes begins his work, Meditations on First Philosophy, with three stages of doubt. First, he asserts that we (humans) can be deceived by our sense perceptions. Second, that nothing exists, and third, that we have no mathematical knowledge. In order to eliminate these doubts Descartes begins by dismissing all of his sense perceptions and attempts to prove everything from the ground up. In doing so, he realizes that he can think, and that even if he had no body, he still exists. Descartes investigates his own mental functions in order to discover what he is, and inquires, "But what then am I? A thing that thinks. What is that? A thing that doubts, understands, affirms, denies, is willing, is unwilling, and also imagines and has sensory perceptions" (p.19)[2].

The most robust example Descartes uses when he discusses sense perception is the analysis of a piece of wax. He first describes the wax using sensory properties of smell, taste, touch, sight, and sound. However, when he causes the wax to melt he notes that it has entirely different sensory properties. This leads Descartes to a series of conclusions. First, one cannot judge objects by sensory properties. Furthermore, objects aren't merely combinations of sensory

---

[2] Renee Descartes, *Meditations on First Philosophy, trans. John Cottingham.* (Cambridge: Cambridge University site, Pres. 1960.
*All quotations for Descartes are cited by page number.

perceptions. Descartes concludes his analysis when he says, "...here is the point, the perception I have of it is a case not of vision or touch or imagination - nor has it ever been, despite previous appearances - but of pure mental scrutiny" (p.21). He claims that we make sense of the world through pure intellect and not by gathering sensory information to acquire knowledge. He goes further by saying, "I now know that even bodies are not strictly perceived by the senses or the faculty of imagination but by the intellect alone, and that this perception derives not from their being touched or seen but from their being understood…" (p.21.)

Descartes believes that if we can perceive clearly and distinctly (with our minds) then we can acquire knowledge. In order to perceive clearly and distinctly, Descartes argues that an omnipotent and omnibenevolent God must exist so one can know they are not being deceived.

The Cartesian framework for perception not only suggests that sensory organs are not necessary for perception, but that they are not used for perception at all. This comes into clear contention with Aristotle's ideas of perception. Aristotle claims that sense organs are necessary for sense perception, but Descartes argues that sensory experience isn't an organ phenomena, but content of the mind. Descartes takes this argument a step further by asserting that bodies aren't even necessary for sense perception since they are separate from the mind. This notion is similar to Aristotle's idea of appearance (otherwise known as dreaming), where sense organs are not being used, but it appears that perception is occurring within the mind due to the dream.

The fundamental shift in the view of the nature of perception for Descartes is that the mind is the source of perception, and if its perceptions and judgements are inaccurate, then knowledge can't be acquired. Descartes argues that judgement is a faculty functions perfectly, and will only lead to incorrect conclusions when faulty sensory perceptions are used to judge.

Hume calls into question one's ability to perceive the world accurately, claiming that people cannot know anything truly about the world and how it works. He says that we cannot know the way the world works with observation and the Aristotelian method, nor with intellect and the Cartesian method. Both of these methods rely on observing the outside world, which Hume argues can't be relied upon. To resolve this, Hume says that people can use habit, or the repetition of observations to collect data, but that that is not true knowledge.

Hume's work is thought to be the inspiration for Immanuel Kant, who takes a radically different approach to sense perception and knowledge than Aristotle and Descartes. Instead of one's thoughts conforming to objects, Kant believes that objects conform to one's thought. He thinks that the mind is a cognitive apparatus and that its architecture dictates perception in a very specific way. To Kant, the mind is similar to a pair of rose colored glasses; both affect the way everything is seen, but the only difference is that the glasses can be removed, whereas the mind cannot. It is impossible for one to step outside of their own mind. As a result, Kant coins the term *transcendental idealism*, which is the belief that things as they are in themselves cannot be truly known. In this case, one can know how an object appears to be to them, but never know what it is in and of itself. In other words, cognitive impressions are real, but not truly real.

In light of this, Kant searches for the rules that govern how people think of objects. In order to do this, he maps out the architecture of the cognitive apparatus that is the human brain. First, Kant introduces different types of knowledge: *a priori*, *a posteriori*, analytic, and synthetic. *A priori* and *a posteriori* are counterparts, and analytic and synthetic are, respectively. *A posteriori* knowledge can be defined using the example of a man touching a hot tea kettle. Upon touching the kettle, the man will realize that it is hot, thus acquiring *a posteriori* knowledge. *A*

priori knowledge is knowledge acquired without past experiences. Analytic knowledge is knowledge in which the predicate is contained in the concept of the subject. For example, the statement, "A bachelor is male," is an analytic statement because the concept of male is already within the concept of bachelor. Synthetic knowledge is knowledge that presents new information. These types of knowledge can function in combination with one another, like synthetic *a priori* knowledge.

Kant is particularly interested in synthetic *a priori* knowledge because it is knowledge that reaches beyond the scope of already known facts, but is not based off of experience or past observations. One example of synthetic *a priori* knowledge is math. Take the equation, 7+5=12: this cannot be analytic knowledge because nothing about the predicate, 12, lies within the numbers and symbols of the subject, 7+5.

Kant believes that with sense perception there are intuitions. Intuitions can be called the mediums through which an object is perceived by a perceiver. The difference between concepts and intuitions for Kant is that concepts are thought and empirical while intuitions are given and pure. To clarify, one does not think of space, but only the concept of space. Space is merely the medium given in which perceptions take place (the same for time). Space and time are the two intuitions that the mind functions with. According to Kant, they are pure *a priori* intuitions because one does not experience space and time and then make observations about it; humans simply exist in it.

The table of judgements is modeled as follows (A70/B95)[3]:

---

[3] Kant, Immanuel, and Paul Guyer. *Critique of Pure Reason*. Cambridge: Cambridge UP, 1998. Print.
*All quotes from Kant are cited using Kant style citation

Quantity Universal- all S Particular- some S Singular- this S	Relation Categorical- all S is P Hypothetical- if P then Q Disjunctive- S is P or Q or R (only one)
Quality Affirmative- S is P Negative- not S is P, not S is not P. Infinitive- S is not P	Modality Problematic- possible Assertoric- actual Apodictic- necessary

The table above describes all possibilities for particular aspects of judgement. For Kant, judgements cannot be made independent of an object, and every judgement made must comply with one of the possibilities within each section. For example, the judgement, "All birds are red," falls under Universal, Affirmative, Categorical, and Assertoric. This particular table is all encompassing and accounts for all types of judgement one could think of.

The table of categories (concepts) is modeled as follows (A80/B106):

Quantity Unity- one Plurality- many Totality- number	Of Relation Objects with Properties Cause and Effect Community
Quality Reality Negation Limitation	Modality Possibility- Impossibility Existence- Nonexistence Necessity- Contingency

According to Kant, concepts are predicates of possible judgement. Like the Table of Judgements, this table accounts for any concept than man can create in his mind. This table does sculpt the parts of a concept in a way that it can be perceived easily. This table effectively synthesizes perceptions that one sees into concepts.

Kant's table of judgement and table of categories is an effective tool for capturing the synthesis of sense perception. Unlike Descartes, Kant does not think that one is constantly being impinged with perceptions of objects and then must take time to analyze them as data, then make judgements, then come to knowledge. Instead, he argues that the mind functions in a way to filter perceivable objects through the cognitive apparatus that is our mind, and then they are perceived. To make this argument more robust, Kant lays out the entire blueprint for the cognitive apparatus that is our mind through two tables: The table of judgements and the table of concepts. Through this, the mind synthesizes the multitude of sense perceptions into one perception of a distinct object. For example, when one sees a basketball they do not think, orange, black, bumpy, spherical, rubber-smell, bouncy, but instead think, basketball. The process that Descartes proposes is essentially reversed, in the Kantian model of sense perception, and the process of the mind synthesizing perceptions precedes sense perception under the Aristotelian model. Through the Kantian model, manifolds are synthesized into one accurate perception.

Kant also explores knowledge in a unique way due to the fact that previous philosophers subconsciously collapsed *a priori* and *a posteriori* knowledge. Not only does this notion of knowledge not based on experience alter the idea of rationalism and empiricism, but opposes them altogether. Kant presents an idea which he calls self correction: arguing that instead of knowledge being information that is built upon itself through observations or pure reason, knowledge is constantly refined and in flux.

Many similarities and differences arise when investigating the views of these three philosophers on sense perception. Sensory perception in all cases is an action (even if it is passive) that can be in error due to deception. In light of this, accurate sense perception leads to

accurate knowledge. Aristotle believes that sensory organs such as ears, eyes, skin, mouth, and nose are responsible for sensory perception, and that in order for perception to be actualized it must be done so through one or more of these. Furthermore, Aristotle is a proponent of the idea of potentialities and actualities in regards to sense perception. Descartes believes that the mind is responsible for sensory perception, and that all perceptions that Aristotle attributed to sensory organs can be mimicked or actually occur through the mind. Descartes is in disagreement with Aristotle because according to Descartes, sensory perceptions ought not to be trusted until one is certain that the mind is perceiving clearly and distinctly. Furthermore, Descartes believes that knowledge comes from within via mental scrutiny, or pure intellect. Kant's views differ greatly from the former two philosopher's due to his relentless dissection and analysis of the process of sense perception. Through this, Kant expands knowledge into *a priori*, *a posteriori*, analytic, and synthetic forms. By doing so, he is able to navigate issues (using tools such as the table of judgement and table of categories) that went untouched for centuries by Aristotle and Descartes. Regardless, sense perception and its role in knowledge of the world were viewed incredibly differently by these three philosophers, and ideas of how one sees the world and what one can know have been drastically changed by each.