Definitions: Aristotle's Categories

I. Lesson

[Activity]: Look at the piece of paper in front of you. Based on what we have discussed so far about terms, answer the following question with a partner: Is "the paper" a term? Next, imagine that the paper was cut in half. Would "half of the paper" be a term? How about if it were cut again: would "quarter of the paper" be a term? How about examples like "10 o'clock," "being hugged," or "in New York City?"

> "Expressions...signify substance, quantity, quality, relation, place, time, position, state, action, or affection."
>
> -Aristotle, *Categories* (Ross transl.)

Most of the terms that we have studied thus far are easy-to-understand and straightforward examples. However, Aristotle famously categorizes terms and things into 10 groups. We will focus on how his categories can relate to *terms*:

Substance: This is the essence of something, and in its primary sense cannot be either a predicate, nor can it be "contained within" something else. (Aristotle's examples: the individual man or horse) This is a very complicated notion, and will not be further discussed in this lesson.

Quantity: This is how much an object extends or endures. (examples: 10 minutes long, 5 feet wide, etc.)

Quality: This is the nature of the characteristics of an object. (examples: flat, red, bitter, loud, etc.)

Relation: This is the way one thing or term relates to another thing or term. (Examples: double, half, greater, lesser, etc.)

Place: This is the location of something. (Examples: on top of Mount Everest, In the American Museum of Natural History, in Kentucky, etc.)

Time: This is the location of a thing in a sequence of events (its temporal location). (Examples: three years ago, tomorrow, last year, etc.)

Posture: This is how something is situated (examples: crumpled up, standing, lying down, etc.)

Possession: This is the condition something *has* (examples: armed, shod, strung, etc.)

Action: This is the event of some change in another object (examples: to roast, to build, to hit, etc.)

Passion: This is to undergo an action (examples: to be roasted, to be built, to be hit, etc.)

II. Examples

Let's look at examples for some of the *categories* that were mentioned above:

(1) Quantity: We think in terms of examples of quantity all the time. Perhaps you thought to yourself: "It will take 15 minutes to get to school today." The term "15 minutes" is an example of a quantity. It is a quantity of a duration of time. Another example might be a weight. Someone might think "my book is 2 pounds." In this sentence, "2 pounds" is a term which signifies a quantity. Finally, numbers are terms that signify quantities. Take, for instance, the sentence: "The number of people in this room is 20." In this case, "20" is a term which signifies a quantity.

(2) Quality: Sometimes these terms can be described as descriptions. Aristotle uses the term "grammatical" as an example. This is an adjective that describes something else. "Grammatical" is used to say that something has a function pertaining to grammar. Aristotle also uses an example of color. To say that something is red is to describe the quality of that thing. For instance, in the sentence, "Grass is green," "green" is a term that signifies a quality.

(3) Relation: It is important to remember that terms which signify relation must represent something in relation *to something else*. For instance, "double," is an example of a term which is a relation, because "double" signifies twice the quantity of some other thing. In the same way, "half" signifies a relation, because it signifies ½ of the quantity of some other thing. One example Aristotle uses is "superior."

(4) Place/Time: Generally, we think of things as existing in some place at some time. For instance, you might say that the Empire State Building exists *in New York City* and exists *at the present moment*. Both "in New York City" and "at the present moment" are terms. The former is a term that specifies a place, and the latter is a term which specifies a time.

(5) Posture: This simply refers to the fashion in which something is situated. Perhaps you've been told to "have a better posture" before when you were *slumped over*. "Slumped over" here is a term that refers to the posture of something or someone. Terms of posture can also refer to things that are not humans: for instance, one might say, "that piece of paper is *flattened out*" or "that computer is *opened up*."

III. Exercises

Exercise 1

With a partner, explain the difference between the following categories:

1.) Passion and Action

2.) Relation and Quality
3.) Relation and Quantity
4.) Posture and Possession

Exercise 2

Write which category the following terms fall into:

1.) in New Zealand
2.) in the neighborhood
3.) to run
4.) 5 days ago
5.) Inferior
6.) 20 pounds
7.) 4 times as much
8.) closed up
9.) strung (ex. The violin is strung)
10.) philosophical
11.) 100 meters
12.) to be trained
13.) to practice
14.) soft
15.) spicy
16.) in the classroom
17.) on the soccer field
18.) crushed (ex. The crackers are crushed)
19.) higher
20.) smaller

Exercise 3

Aristotle says there are a special type of opposites that apply to relational terms. For instance, "lesser" is the opposite of "greater." For each of the following relational terms, state its opposite.

1.) superior
2.) double
3.) lower
4.) faster
5.) darker
6.) heavier

7.) lighter (hint: what's the difficulty with this term? Think of the earlier lesson on equivocal terms)

Exercise 4

Try to think of your own examples of terms that fit into Aristotle's system of categories. Think of three terms that pertain to your day and have not yet been used this lesson for the following categories:

1.) quality
2.) quantity
3.) place
4.) time
5.) action

Exercise 5

(Challenge): Try to explain why some terms that fall into the category of *substance* cannot be predicated of anything else. (Why does it not make much sense to say "_____ is that individual horse" or "_____ is Aristotle?")

IV. Conclusion

Aristotle's 10 Categories for expressions is one of the most cited and famous logical tools in the history of philosophy. It has been the topic of much controversy. We can use it as a helpful system to better understand what terms are and how exactly to categorize them. This will also be important moving forward in our journey learning logic, especially when we begin to identify terms within propositions and syllogisms.

V. Learning Goals

- Learn the meaning of Aristotle's 10 Categories
- Grasp the Significance of the Categories in the study of terms in logic
- Distinguish between examples of terms conforming to different categories
- Distinguish between the Categories themselves, especially relation from quality/quantity, action from passion, and space from time.

Answer Key:

Exercise 1

1.) Passion refers to terms that designate some action happening to an object, while action refers to terms that designate an object taking some action (ex. to throw versus to be thrown).
2.) Relation refers to terms that "stand in some relation" to other terms, or they derive their meaning to an extent relative to other terms. Quality, on the other hand, refers to simply descriptive terms, that have their meaning regardless of other terms. (ex. brighter versus bright, more red versus red, etc.)
3.) Quantity refers to how much an object extends on some metric (could be mass, weight, length, volume, time interval, etc.) Thus, we might contrast relation and quantity with examples like longer versus 10 meters long, taller versus one mile tall, or shorter versus 10 seconds long.
4.) Posture refers to the way that an object is situated (not spatiotemporal) that an object is in, while possession refers to the state/condition that something has. (ex. bent over versus loaded, jumbled versus wound – as in a clock, etc.)

Exercise 2

1.) Place
2.) Place
3.) Action
4.) Time
5.) Relation
6.) Quantity
7.) Relation/Quantity
8.) Posture
9.) Possession/Passion/Posture
10.) Quality
11.) Quantity
12.) Passion
13.) Action
14.) Quality
15.) Quality
16.) Place
17.) Place
18.) Posture/Passion

19.) Relation
20.) Relation

Exercise 3

1.) Inferior
2.) Half
3.) Higher
4.) Slower
5.) Brighter/lighter
6.) Lighter
7.) Darker or heavier (this is an example of "lighter" being an equivocal term)

Exercise 4

Answers may vary drastically

Exercise 5

What Aristotle calls "primary substances" cannot be predicated of anything (other than saying some statement of identity) because primary substances only refer to one thing. When I say "That car is red" and "That book is red," I am able to do so because multiple things are (or could be) red! However, I can't say "_____ is Aristotle" and "_____ is Aristotle," because there is only one "thing" that is Aristotle, and there only could be one thing that is Aristotle! (There could be multiple people named Aristotle, but the term is intended to refer to a specific one – the one whose logic we're studying). Thus, I can only say "Aristotle is Aristotle," which is an identity. If I say "There is Aristotle" or "Here is Aristotle," I am not really predicating Aristotle. Rather, I am actually saying "Aristotle is there" or "Aristotle is here." If I say "The tutor of Alexander the Great is Aristotle", I am really predicating "the tutor of Alexander the Great" of "Aristotle".