"To say of what is that it is not, or of what is not that it is, is false, while to say of what is that it is, and of what is not that it is not, is true" -Aristotle (Metaphysics 1011b25)

1. What is truth?

Definition 1. Truth is that which corresponds to its object

This definition is commonly rephrased as "that which corresponds to reality," or "that which describes an actual state of affairs."¹ The statement "the Earth is round," is false if the Earth is flat (or square, or rectangular), but true if the the Earth is in fact round. This definition accords with intuition, and alternative definitions easily prove insufficient since they all rely on this conception of truth.²

Definition 2. To say something is *false* is to say that something is not true.

The Law of Non-Contradiction (A is not non-A): a statement cannot be both true and false at the same time and in the same respect

This is a basic law of logic. As an example, this statement would say that a table cannot be both made entirely of wood and not made entirely of wood. A commonly proposed counter-example is the statement "light is both a particle and a wave." However, this is not valid since for physicists, light is only considered to be a wave or a particle depending on the nature (i.e. "respect") of the problem to be solved. Furthermore, light is not considered to be both a particle and a wave at the same time.

Example. Evaluate the truth of the statement: "There is no such thing as truth, and the law of non-contradiction (LNC) is meaningless." This statement actually does 2 things. To affirm this, one must first assume that his view is true as opposed to false, and thus use the LNC (which of course implies that the LNC has meaning, because this statement is assumed to be meaningful). Second, it violates the LNC by suggesting that there is no such thing as truth while at the same time and in the same sense affirming that there is such a thing as truth: the truth of this very statement. By doing so, one automatically validates the LNC.

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¹Although alternative definitions will be considered in more depth in the next section, one can note here that all "non-correspondence" views of truth imply correspondence, even as they attempt to deny it. For example the claim: "truth does not correspond with reality" implies that this view corresponds to reality. So this view cannot even express itself without using a correspondence frame of reference. If one's factual statements need not correspond to the facts in order to be true, then any factually incorrect statement can be true, which is obviously unacceptable. It would be impossible to lie. Furthermore, without this definition of truth, all communication would break down.

 $^{^{2}}$ This is not to say that if something is true, it must be known. The question of the knowability of truth has not yet been addressed.

Self Refutation: Self-refuting statements are statements which invalidate themselves. There are a couple types of statements that can be called "self-refuting:"

- (1) Logical contradictions, such as "Socrates is mortal and Socrates is not mortal." If the two occurrences of mortal in this sentence are predicated of Socrates at the same time and in the same respect, then the sentence cannot be true. The first clause refutes the second, and vice versa.
- (2) Some self-referential statements, that is, statements that refer to themselves, are self-refuting, such as "All statements are false." If that statement is true, then it is false.
- (3) Some statements refute themselves, not because of their explicit content, but because of the one who utters them. An example is "I am lying now." Generally, there is no contradiction involved in saying that someone is lying. Replace the first person with the third, "He is lying now," and the contradiction disappears. But in the first person the statement is self-refuting, because the very act of asserting something involves a claim to be telling the truth. So "I am lying now" means, in effect, "I am telling the truth, and I am also lying now," which is a contradiction.
- (4) There are other "practical" forms of self-refutation that pertain more to the speaker than to the actual words he utters. If a person says that he hates beans, but he gorges himself with large helpings of them, observers may well claim that his behavior refutes his statement. His statement itself is not self-refuting, but in an important sense the person has refuted himself.
- (5) Some philosophical theories are said to be self-refuting because they set up conditions of meaning, rationality, and/or truth that they themselves are unable to meet. For example, a very popular school of thought during the twentieth century called "logical positivism" insisted that a piece of language cannot meaningfully state an empirical fact (either truly or falsely) unless it is empirically verifiable by methods akin to those of natural science. But many observed that this "verification principle" itself could not be empirically verified in that way. That argument led to the demise of logical positivism as an influential philosophical movement.

2. What Truth is Not

Truth can be understood both from what it is and from what it is not. There are many inadequate views of the nature of truth. Most of these result from a confusion between the nature (definition) of truth and a test (defense) of truth, or from not distinguishing the result from the rule. In choosing the above definitions, one implicitly rules out alternative definitions. While these cannot be proved or disproved in the mathematical sense, a simple exposition of some alternatives shows how those definitions are inadequate.

(1) *Truth is not "what works.*" To claim that truth is what works, one asserts that a statement is true if it brings the right results. This definition confuses cause and effect. Of course, if something is true, it will "work" in the long run. But this is not an accurate definition of truth. It is easy to see

that false statements can bring "the right results." However, that does not make them true. (Consider myths about the origins of the four seasons. They give the right result, but they are clearly false.)

- (2) Truth is not "that which coheres." This claims that truth is what is internally consistent (i.e. coheres). Again, there is some confusion here about the difference between a definition of truth and a test for truth. At best, this is a test for truth: statements are false if they are inconsistent, but not necessarily true if they are consistent. False statements can cohere. As an example, consider a number of witnesses who collaborate to tell a lie in order to cover up the truth. In this case, there statements would presumably all cohere, but nevertheless still be false.
- (3) Truth is not "that which is comprehensive." Again, this is a test for truth but not a definition. The underlying affirmation must still correspond with the real state of affairs. In fact, for this view to make sense, it must assume that truth is what corresponds to reality. If not, then "comprehensive" just amounts to the longest. I could give a very comprehensive presentation on how the earth is flat, but that does not mean that it is true, just as a brief presentation on how the earth is round can be true.
- (4) Truth is not "what is existentially relevant." This one is also easy to dismiss. What is true will be relevant, but what is relevant will not necessarily be true. A violin is relevant to a violinist, and a gun is relevant to a murderer, but it is nonsensical to say that a violin or a gun is true. Thus, such a definition of truth is not adequate.
- (5) *Truth is not "what feels good.*" Clearly, bad news can be true. So this is inadequate as well.

After considering these alternatives, it is easier to see that truth must be defined in terms of correspondence with the actual state of affairs.

3. Absolute Nature of Truth

Definition 3. Absolute truth is something that is true for all people, at all times, and in all places

Often this is pitted against "relative" or "subjective" truth, which is typically explained to mean a truth which is not true for all people at all times and in all places, but instead only applies to the holder of that truth. To keep with the above example, one may argue that many people once believed that the Earth was flat, but that since we now know that statement to be false, the truth has somehow changed over time. Thus, truth appears to be relative. However, it is easy to see that the Earth did not change from being flat to being round; rather, it was people's beliefs that changed. There was a change from a false belief to a true belief.

Claim. All truth is absolute truth

This claim takes a little thinking, but once it is properly understood, it's not that hard. The easiest way to see why is through an example.

Example. If two people are in a room and one says it feels cold and one says it feels warm, that does not mean truth is relative. In this case, it is absolutely true that the room feels cold to person 1 and that the room feels cold to person 2. Each of these is an absolute truth.

A number of other examples could be considered, but the basic point is the same. Every true statement is absolutely true for all people at all times in all places, even if it doesn't *apply* to all people. Again, it's important to note here that even though truth is absolute, that does not mean that our grasp of it is absolute.

4. CAN WE KNOW TRUTH?

It is usually self-evident that to make any statement about anything, we must know at least something about it. If I want to say something about an elephant, I need to know what an elephant is. To say mathematics is difficult only makes sense if I know what mathematics is in principle. To further demonstrate the point, it makes no sense to say anything about "Plantigmatornation," especially whether we can know anything about it. In particular, if truth is unknowable, we know at least that truth has the attribute of unknowability.

The most famous positive argument for the knowability of truth (in particular the truth of one's own existence) comes from the French philosopher René Descartes:

"I have convinced myself that there is absolutely nothing in the world, no sky, no earth, no minds, no bodies. Does it now follow that I too do not exist? No: if I convinced myself of something then I certainly existed. But there is a deceiver of supreme power and cunning who is deliberately and constantly deceiving me. In that case I too undoubtedly exist, if he is deceiving me; and let him deceive me as much as he can, he will never bring it about that I am nothing so long as I think that I am something. So after considering everything very thoroughly, I must finally conclude that this proposition, I am, I exist, is necessarily true whenever it is put forward by me or conceived in my mind." – *René Descartes (Meditations)*

5. Tests For Truth

Given that truth is knowable, but that our grasp of truth can be incomplete, how can we test whether certain claims are indeed true or false. The following three tests are not exhaustive, but represent three broad categories of consideration when undertaking this task.³

- (1) Logical Consistency: Is there a logical consistency in what is being stated, or are there obvious contradictions? Many statements or systems of thought are actually blatantly contradictory and therefore cannot be true.
- (2) Empirical Adequacy: Is there evidence that supports what is being asserted? This would include observations of data, as in the natural sciences.

³Indeed, other particular tests have been discussed in passing above under section two. The tests presented here will be more general in nature.

(3) Livability: Can one live consistently with the belief?⁴

In addition to these three tests, some philosophers add a couple more technical tests which are worthy of note:

- (1) Undeniability Test: Is it impossible to deny the truth of the statement? Take, for example, the issue of one's own existence. While one's own existence cannot be logically proved, it is nevertheless undeniable. The moment that one denies his own existence, he affirms it at the same time, for it is he that is denying that he exists in order to be able to deny anything. Some things cannot be logically proved but yet cannot be denied without affirmation and therefore establish themselves as truth.
- (2) Unaffirmability Test: Is it impossible to affirm the statement? (Actually a test for falsehood) This simply means that just because something can be stated, it doesn't necessarily mean that it is true. "I cannot speak a word of English," may be stated emphatically, but it cannot be affirmed. For while saying, "I cannot speak a word of English," one must actually speak English. Therefore, the statement is false.

While each test alone cannot definitively establish something as true, these tests used *in concert* can allow for a good assessment of any particular truth claims. It is nevertheless important to remember that these are *tests* for truth.

 $^{^{4}}$ This is what may be called "a pragmatic criteria." It practical rather than theoretical. For example, some assertion bay be logically consistent but can be discredited by the proponent contradicting the assertion in real life. (Consider me uttering the claim: "I do not feel pain." While not theoretically invalid, this claim would be shown to be false were I to become injured and demonstrate that I am in pain, by crying out, etc.)