

1.1 What is Reality?

The question of reality has been a philosophical football for a long time. To the rational realist though, it is not so difficult.

Reality: *that which **exists** independent of whatever we might think about it, say about it, or try to represent it. In short, reality **is**.*

For our purposes we will not accept the ideas that reality exists only in our minds, or because we are there to observe it...or other wildly unprovable concepts.

To most, reality might be thought of as that which is tangible; but that would leave out some obvious intangible realities, such as radio waves, human consciousness, intelligence content of printed symbols, etc. Yet these things exist.

What does it mean, “to exist”?

First Principles:

The First Principles are held to be the most basic units of *truth and existence*, which prove themselves intuitively, and which cannot be reduced any further. They are known innately to be true, without need for, or possibility of, further proof. Also called “axioms”. (A detailed discussion of “intuition” follows later, in Chapter 4).

First Principles of Existence:

The First Principles of philosophy and logic say, in terms of the *state of being*, that,

1. If a thing exists, then it exists (tautology; identity).
2. If a thing exists, it cannot NOT exist (principle of non-contradiction).
3. If a thing exists, it cannot somewhat exist, somewhat not exist (law of the excluded middle).

First Principles of Cause and Effect:

1. Every effect has a cause. (Every effect is *contingent* upon a *necessary and sufficient* cause).
2. An effect cannot cause itself (i.e. something cannot come from nothing; an effect cannot pre-exist itself in order to cause itself).
3. An effect cannot be greater than the cause (second law of thermodynamics).
4. Something must be assumed to self-exist: either creation, or creator. (Percy)

Law of Rationality:

We ought to justify our conclusions by adequate (necessary and sufficient) evidence.

So “to exist” refers to the most basic phase of being: “to be”. If it exists, then it is. Reality then refers to that which exists, that which *is*. How does reality relate to “fact” and “truth”?

1.2 What is Fact?

A fact is that which “is”; that which exists in reality. A fact is also independent of whatever we might choose to think or say about it. For example, if we know there is a vehicle in the parking lot, we might “think” that it is a Honda. The fact might be different than our thought, for example if the vehicle were really a Ford truck, or not there at all.

So a fact is that which “is”, independent of what we think or say about it.

This basic definition is frequently abused and misused by both layman and scientist, not to mention the media. Yet it is one of the most fundamental principles of logic.

“Facts do not cease to exist because they are ignored.”
Aldous Huxley [Atheist] (attributed: source unknown)

1.3 What is Truth?

If we misuse “fact”, we’ll never get to “truth”. Yet “truth” as a concept is very simple. Truth occurs when that which we “think” or “say” about a subject corresponds correctly with the “fact” of that subject. For example if I think there is a 1996 Honda Civic parked in the parking lot, and there is, *in fact*, a 1996 Honda Civic parked there, then my thought is “true”, because it correctly corresponds to (that is, accurately reflects, is congruent with) the fact.

First Principles of Truth:

The First Principles also can be stated in terms of truth as follows:

1. If it is true, then it is true (tautology; identity).
2. If it is false it cannot also be true (non-contradiction principle).
3. It cannot be somewhat true and somewhat false (excluded middle).

So, if reality exists, then truth exists...absolutely.

First Principle #3 can be a roadblock in today’s relativist world. The concept of “somewhat true” will seem OK to some folks. But not in the pursuit of real truth. Here’s a test for relative truth:

I say, “Truth is relative”. You say, “Is that an *absolutely* true statement?”

It is immediately apparent that a violation of the principle of non-contradiction (paradox) is created by the concept of “relative” truth. It cannot exist by any stretch of Western logic. (“Eastern logic” is addressed in the “Both / And” Paradox section of the Appendix; we’ll stick with Western logic for now).

Fact, Truth, and Evidence:

The path to the possession of complete truth about a given fact is through evidence. If there is no evidence of an existing fact, there is no path to truth concerning that fact. So the path to truth is dependent on the evidence, its quality: completeness, and validity. So it can be said that:

The truth of a statement depends on the validity and completeness (necessity and sufficiency) of evidence supporting it.

Thus, given that a concept cannot be just “somewhat true”, the validity of the evidence is actually paramount in pursuing truth.

Theory of Evidence:

Evidence can be categorized. First-hand, direct observation might be called “Primary”. This includes direct personal observations, such as “that pain on the skin of my arm is due to the ant that I see which is biting me at that location.” However, when someone else tells me that that pain on the skin of their arm is due to the ant that is biting them at that location, it becomes second-hand, “Secondary” evidence from my perspective.

For primary evidence, the proof is directly immediate and personally sensate. For secondary evidence, the proof is neither, and might therefore be incorrect, incomplete, a joke or hoax, a fraud, or imaginary. For our purposes, “evidence” will from here on be referring to secondary evidence, because primary evidence has no need of a logical, rational proof.

This cannot be overemphasized: ALL evidence is probabilistic. This includes empirical evidence! As will be shown later, even empirical evidence, no matter how often it is confirmed, has a probability attached to it.

So there is a continuum of evidential probability, ranging from “absolutely not true”, to “probably true”. Here’s what that might look like:

<u>Value of Our Knowledge:</u>	<u>Value of The Evidence that is Available to us⁽¹⁾:</u>
Absolutely True	No physical evidence can <i>prove</i> absolute truth.
Probably True:	Highly verified empirical evidence; non-extrapolated, highly verified forensic evidence; “Many eyewitness” corroborated evidence.

Possibly True:	First verification of empirical evidence. Minor, rational extrapolations of forensics. Several eyewitness corroborated evidence.
Possibly False	Pre-verification of empirical evidence. Major extrapolations of forensic evidence. Single eyewitness uncorroborated evidence.
Absolutely False	Extravagant forensic extrapolations that are not directly observable (Java Man, Cardiff Giant) should be considered absolutely false until secondary verification proves otherwise. Uncorroborated evidence, false science etc.

(1) Empirical evidence is created experimentally; forensic evidence is “found” evidence.

Notice that it is not possible to prove **absolute** truth with any amount of physical evidence. There is no “Value of Evidence” that corresponds to “Absolutely True”. This concept is crucial to understanding the path to truth. Even the proverbial “smoking gun” does not provide “absolute” truth of a situation. It takes corroborating tests, and additional evidence to increase the probability of truth. An eyewitness of a smoking gun situation is still providing possibly false information. Even fingerprints, ballistics and DNA are probabilistic in nature, although the probabilities are very high, and higher with added evidence. Yet even with all of these elements of evidence available, the proof is not 100% absolute. This is the reason that courts demand evidence that is “beyond reasonable doubt”, not 100% absolutely proven.

This continuum does not mean that truth is partially true, partially not true. It means that our ability to reach the absolute truth is dependent on the quality of the evidence. It measures the quality of our knowledge of the fact, not the quality of truth, or of the fact.

1.4 What are Human Thought and Consciousness?

That consciousness and thought exist is well established. Descartes, as he doubted his own doubts, realized that he knew that he was thinking about doubting; this meant that he must exist, in order to think about doubting. This led him to conclude: “I think, therefore I am.” (Cogito ergo sum). Significantly, it is the intangible (my mind, my thoughts) that proves the tangible (my own existence).

The intangibles of thought and consciousness are measured by their secondary effects, since direct observation is difficult. For some, the mind is considered to be just a series of random firings of randomly connected neurons. If this were so, intentionality could not occur. Without intentionality, logic would not exist. But a mind can create its own mental state, and then intentionally determine the next mental state. It can even back

up state or two, then intentionally branch off to a different state altogether. So for most, I suspect that the mind is known to be both aware of itself as an autonomous thinking entity, and aware of its ability to create, to analyze, and to focus outside the internal workings of the “self”. The discovery of one’s place in the world and learning to react with it requires awareness. This awareness and ability to discover autonomously is consciousness, in my estimation.

If mere firings of neurons in a control structure constituted consciousness, then computers would be conscious. Computers fire at rates far faster than brains yet they are not self-aware. Self-awareness means more than knowing your current status, and the current status of the local environs; it means to know the fact of a future as well as a past, and to be concerned with discovering one’s place in the current and future environment, as well as to desire to influence that environment. Do computers “desire”?

Computers, in fact provide an interesting comparison to the brain / mind. A computer is actually an accumulation of circuits: wiring, gates, and components that are energized electrically. However, without software, the circuits do nothing but bind up into an incomprehensible state. In order to function, a computer requires two more intangible additions to the tangible, physical circuitry. It needs resident start-up software, permanently installed within the circuitry. And it needs functional software added after the machine has started and lands in a rational state of readiness. Without the intangibles of the two types of software, the computer is merely, as they say, good only for a boat anchor. Keep this in mind as we move through the concepts yet to come.