

## A. Introduction

This presentation is the result of my many years of thinking about the nature of the concept called truth, the recent discovery of a philosophical approach to this concept called Fictionalism, and some comments about scientific method by Richard Feynman.

But first, let us consider the phrase "to search for the truth" and the possible implications of this phrase. I suspect that this phrase and some form of a concept of truth can be found in every language and culture in the world. In almost all of these languages & cultures this phrase seems to imply that, something thought of as a fixed eternal truth, is lying about out there waiting to be discovered. This idea of truth, as a real fixed eternal entity, is a very old idea with much support in almost every culture, especially when thinking about properties of things we call natural.

So the word 'truth' is often used as a property of some statements about things. The statement about X is either the truth or not the truth, where X can be many different things. The application of the word to so many different Xs further supports the idea that truth is an independent existing thing. But this thing called truth seems to be binary. It is either true or not true.

Tonight I will try to describe an approach for deciding if or how ideas and beliefs might deserve the attribute 'truth.' It is not my purpose to eliminate the idea of truth but to eliminate the binaryness of the idea in some cases. I hope to convince you to at least consider the idea that the concept bearing the attribute 'truth' might, in some cases, be a variable, the magnitude of which is continuously being adjusted by our experiences.

I have also recently acquired a Book titled **The Half life of Facts** which introduces a fact that I suspect will have a very long life, which is that most 'facts' don't remain 'true' forever. This title illustrates one of the many associations between the word 'fact' and the word 'true'. We use the word 'fact' to emphasize that we think something is true.

Before we start with a brief tour of some of the philosophical theories about the concept of truth, Wikipedia has this paragraph:

"Various theories and views of truth continue to be debated among scholars, philosophers, and others. There are differing claims on such questions as to what constitutes truth: what things are -- capable of being true or false; how to define and identify truth; the roles that faith-based and empirically based knowledge play; and whether truth is subjective or objective, relative or absolute."

Wikipedia also tells us that the word 'truth' has implications about the quality of "faithfulness, fidelity, loyalty, sincerity, veracity" and about an "agreement with fact or reality." I have tried to limit this talk to the veracity of the objective "agreement with fact or reality" part of the word use. I believe most of us decide what we will accept as true or not true based on our experiences with the subject of interest and our trust of authorities on the subject.

Our courts currently seem to use this truth concept in a binary fashion, although they seem to admit that different people will see the presented evidence in different ways so we need a collection of people, a jury, to come to a decision. Many people seem to believe that the resulting decision represents the truth. It is indeed the local current version of the truth. The statement of the decision may, in actual fact, be true or not true.

Disagreeing on what constitutes reality or fact makes these decisions difficult. One reason is that religions have utilized the word with their versions of reality for a long time and encouraged the absolute and even divine nature of truth. In response to this long history, Friedrich Nietzsche(1884-1900) suggested that the ancient, metaphysical belief in

the divinity of Truth is the basis of Western intellectual tradition. That it is still a metaphysical faith on which "our faith in science rests-- the flame lit by the thousand-year old faith, --- which was also Plato's faith, that God is Truth; that Truth is 'Divine'..." But Nietzsche also said, "God is dead", and implied that the major job of mankind was to recover from this delusion about the existence of God and truth. This paper is an attempt to remind us of other ways to think about the concept of truth.

Martin Heidegger(1889-1976) claimed "the original meaning and essence of "Truth" in Ancient Greece was unconcealment, or the revealing or bringing of what was previously hidden into the open. He also claimed that the "conception of truth as correctness", the "agreement with fact or reality" part, can be traced to the Latin word Veritas."

I find it useful to introduce my concept of 'absolute truth' at this point. For a statement to be considered as stating the 'absolute truth' it must properly describe every possible aspect of the thing it is about. Since I believe this is unlikely to ever be achieved in whatever reality is, I accept very few truths as even near absolute.

## **B. Historical Theories about the nature of truth.**

The most popular Substantive theories of truth, as described by me, are listed below, as are my comments about some of the theories.

### **1. Correspondence theory of truth.**

Correspondence theories emphasize that true beliefs and statements correspond to the actual state of affairs. This type of theory stresses a relationship between thoughts or statements on one hand, and things or objects on the other. This model traces its origins to Greek philosophers such as Socrates, Plato, and Aristotle. An example is the statement by the philosopher/theologian Thomas Aquinas: stated the theory as: "A judgment is said to be true when it conforms to the external reality".

Critics claim that the exactness of the thoughts and/or statements can never completely conform for many reasons. It was Plato who answered this criticism by proposing that perfect forms of everything existed somewhere and that what we experienced were shabby copies. Other critics point out that the things or objects about which the thoughts or statements are made are not limited in any way. They can be physical or metaphysical.

I can agree with this correspondence theory only if I assume the theory is about what I would see as an approach to an absolute truth. Therefor, I agree with the critics that the beliefs or statements can never be complete. So if we never have the total info for an absolute truth, what do we have? That's what this story will be about. What we have are 'useful truths.'

### **2. Coherence theory.**

Coherence theories in general, require a proper fit of elements within a whole system for the system to be considered a true. Coherence is frequently assumed to imply something more than logical consistency. Often there is a demand that the propositions in a coherent system lend mutual inferential support to each other. So the completeness and comprehensiveness of the underlying set of ideas is a critical factor in judging the validity and usefulness of a coherent system. Variants of coherence theory are claimed to describe the essential and intrinsic properties of formal systems like logic, mathematics and the various alternative geometries.

Critics of Coherence theories claim they lack justification in their application to other areas of truth, especially with respect to assertions about the natural world, empirical data in general, and about practical matters of psychology and society. I agree with the critics about the mis-application of this theory to these cases.

I appreciate this theory because it seems to be about the few things that I accept as Absolute Truths, that is a complex set of related statements directed toward a specific goal. Thus, the man made rigid systems of logic, mathematics including the various geometries, and the less rigid systems of the formal philosophical systems seem to fit into this theory. I view these abstract logic, mathematical, and philosophical systems as man-made systems. They are absolutely true because they are designed that way.

### **3. Constructivist Theory**

Constructivist holds that truth is constructed by social processes, and is, therefore, historically and culturally specific. Constructivist view all of our knowledge as "constructed. Perceptions of truth are viewed as contingent on convention, human perception, and social experience. Giambattista Vico was among the first to claim that history and culture were man-made. His world view concludes in one axiom "truth itself is constructed". Hegel and Marx were among the other early proponents of the premise that truth is, or can be, socially constructed. For Marx, scientific and true knowledge is "in accordance with the understanding of history" and ideological knowledge is "an epiphenomenal expression of the relation of material forces in a given economic arrangement."

I like this Constructivist theory because I agree with Vico that human history & culture are man-made and that all thoughts and statements about these subjects that we think are truth are constructed by us. I appreciate that Marx introduces the idea that 'scientific knowledge' may be of a different nature and closer to the Absolute truth than ideological knowledge.

### **4. Consensus theory of truth.**

Consensus theory holds that truth is whatever is agreed upon, or might come to be agreed upon, by some specified group. The philosopher Jürgen Habermas maintains that "truth is what would be agreed upon in an ideal speech situation", what ever that is.

I do not favor this theory for several reasons. First, it appears to be very like the Constructivist theory which implies that what is consensually labeled as truth has some relationship to reality. But this theory says that anything can be declared as truth, and there are many who seem to function as if they agreed. Our democratic form of government seems to malfunction in this way.

### **5. Pragmatic theory of truth.**

The most influential forms of the pragmatic theory of truth were introduced around the turn of the 20th century by Charles Peirce, William James, and John Dewey. Although there are wide differences in viewpoint among these 3 and other proponents of pragmatic theory, they seem to hold in common the idea that truth is verified and confirmed by the results of putting one's concepts into practice.

Peirce defined truth: "Truth is that concordance of an abstract statement with the ideal limit towards which endless investigation would tend to bring scientific belief, which concordance, the abstract statement may possess by virtue of the confession of its inaccuracy and one-sidedness, and this confession is an essential ingredient of truth."

I unpack this statement, which demonstrates why philosophy is not a popular subject, as follows. A usable Truth is the result of an understanding, by a prospective statement maker about some situation, that there may be some difference between the prospective truth to be uttered and the absolute truth. I appreciate Peirce's view that ideas of approximation, incompleteness, and partiality are essential to a proper conception of what I would call a useful truth. He is also quite explicit in saying that definitions of truth based on mere correspondence are no more than nominal definitions, which he accords a lower status than real definitions. I have not yet discovered what Peirce considers a 'real definition' but I suspect it is something close to the definition form Alfred Korzybski called Operational. As I recall, an operational definition is a recipe for achieving something. Peirce's definition seems like a recipe for finding a usable but possibly incomplete truth.

I appreciate Peirce's introduction of the idea that there might be, in the limit of some endless investigation, some final complete truth which I could call an Absolute Truth. For me, the implication is that, barring endless investigation, which is impossible to achieve, almost all claims of truth must be acknowledged as incomplete in some way.

William James's version of the pragmatic theory is often summarized by reviewers who explain that he meant that "truth is a quality, the value of which is confirmed by its effectiveness when applying concepts to practice (thus, "pragmatic").

As I think I understand James's theory as summarized, I would understand that his concept of 'truth' is a useful summary of Peirce's longer definition. I especially appreciate the reviewers comment stating that the value of the incomplete truth statement can be enhanced or reduced by its effectiveness in the use of the statement.

John Dewey, held that inquiry, whether scientific, technical, sociological, philosophical or cultural, is self-corrective over time if openly submitted for testing by a community of inquirers in order to clarify, justify, refine and/or refute proposed truths.

I appreciate Dewey's introduction of the idea that truth testing occurs in all human endeavors and that if the failures are attended and utilized, the truth tested will be self-correcting which will result in an improved but still incomplete truth.

## 6. Negative Pragmatism

In 1930 a new variation of the pragmatic theory was defined by William Hocking. It claimed "what works pragmatically may or may not be true, but what does not work must be false." The last phrase of this idea was restated by others as "... if an idea does not work, then it cannot possibly be true, for the reason that the truth always works ...".

The reviewers point out that not only is this rewritten phrase a criterion of truth, but it is a definition. It stipulates that truth is a constant and that "truth always works."

I presume to understand the applied label "negative pragmatism" because of the second phrase about 'not working.' This seems to be the first time in my limited research about truth where the importance of the failure of a particular test of a thought or statement is formally stated.

In the 1940s when Richard Feynman, talking about the scientific endeavor said "We never are definitely right, we can only be sure we are wrong." , philosophers thought this statement was supportive of the pragmatism

theory and very supportive of Hocking's negative pragmatism. These philosophers also thought that Feynman's further statement that a theory "... could never be proved right, because tomorrow's experiment might succeed in proving wrong what you thought was right.", was very close to Dewey's ideas about truth being self correcting when subjected to continuous testing.

I find I have great appreciation of what I believe to be the intent of Hocking's original statement that " what works pragmatically may or may not be true, but what does not work must be false." I presume to understand Hocking's intent in the first phrase in the following way. The first phrase, "what works pragmatically may or may not be true," can only be true if I assume that the thing that 'works' must be a thing about which we 'may or may not' have labeled as true some unknowingly incorrect statements. I have some problem with what I consider inadequate wording of the second phrase. I would be happier if it read, "what does not work when properly tested must be false." Any scientist will tell you, an experiment to test a specific aspect of a new theory must be carefully designed.

I have some argument with the rephrased statement "if an idea does not work, then it cannot possibly be true." This can only be true if we absolutely know that the idea being tested does not work. But since this knowledge would require an infinite amount of testing, which is not available, we cannot know absolutely that the idea cannot work.

I also have some trouble with "the truth always works." I have to understand this as stating that the thing that we have correctly labeled as true always works. For that statement to acquire the attribute truth, it would have to be an absolute truth. And there are some absolute truths. 1 plus 1 equals 2 is one because we defined it that way. But thoughts & statements about events in nature depend on various uncontrollable and possibly unknown factors, so what may be thought to be true at one instant of time may not be true at some other time.

Pragmatism and negative pragmatism seem closely aligned with the coherence theory of truth in that the testing must incorporate knowledge from all human endeavors and experience. Since the universe seems to be an integrated system, the testing should account for its diversity. Feynman said, "... if it disagrees with experiment, it is wrong." I wish he would have said, "if it disagrees with a proper experiment, properly done, it is wrong."

### **7. Redundancy theory of truth.**

The redundancy theory of truth, claims that saying a statement is true is completely equivalent to asserting the statement itself. This theory holds that the use of words like fact and truth are nothing but a shorthand way of asserting a proposition, and that treating these words as separate problems in isolation from judgment is confusing. I find myself very sympathetic with this theory.

There are many more theories of or about truth which could be briefly introduced to increase your and my degree of confusion about the nature of the word truth.

### **C. Some Current Definitions & Comments**

I will start with a set of statements from a source I am not in sympathy with, but which have some interesting examples of how to use the old ideas about the nature of truth to promote a certain point of view. From TRUTH DEFINED.COM which concludes that TRUTH is GOD, we have:

They admit they do not have a definition for the word Truth. They begin with what they call an intuitive concept of Truth. That "Truth is the property of sentences whose meanings correspond with facts out in the real world. We also assume that propositions have only two states: either true or false." Then they offer this argument that Truth Exists:

"It is self-defeating to deny the existence of truth. If someone claims that Truth does not exist," then we can counter by asking if the claim is True or False. If the claim is False, then Truth Exists, and if the claim is True, then Truth Exists."

I admire their admission that they cannot define truth, and that truth is a property of a statement, but then they go ahead and define it anyway. They also assume that propositions have only two states. Since they seem to be creating this logical argument, they are free to make the rules. But then they present an argument for the existence of truth as if truth were a real thing. I can only think I understand what they say if I assume they are talking about some Absolute set of Truths. As you have discovered, I don't believe there are very many Absolute Truths and those few I think exist are just the kind of truths being evoked here. That is, man-made truths, that are to be thought of as absolutely true only within the boundaries of the abstract system for which they were established.

They offer this argument that Truth is Spiritual. "The existence of truth presupposes the existence of minds. Without a mind, truth could not exist. The object of knowledge is a meaningful thought which resides in one or more minds."

Here they admit that truth cannot exist without minds, plural. Since this group seems to believe that God is singular, the plural implies that the minds of the rest of us are included. And our minds seem to be mortal, so only the mind of God seems to count. Also, in my mind, the concept of the abstract thing called truth is not limited to the spiritual. These arguments, if accepted and not examined, do provide a plausible pathway to eliminate doubt.

They offer this argument that Truth is not a function of Matter. "The existence of truth is incompatible with any materialistic view of man. Materialists believe that all thinking and reasoning is merely the result of the random motion of particles in the brain. But one set of relative physical motions is not truer than another set. Therefore, if there is no mind, there can be no truth; and if there is no truth, materialism cannot be true."

and

"Truth cannot be a function of the position of material objects because if a thought was the result of some physical motion in the brain, no two persons could have the same thought. A physical motion is a fleeting event different from every other motion. Two persons could not have the same random motion, nor could one person have the same random motion twice."

These last two arguments seem to imply a very restricted view of Materialism and display a serious misunderstanding of the nature of the structure of the brain and of random events. I am sure the Materialist would object when their idea that thinking & reasoning is the result of very ordered motion of particles in the brain circuits were to be described as the "random motion of particles in the brain." And the assertion that a given random sequence of events can never be repeated is false.

Next, I will look at some selected definitions from other sources.

First from Wikipedia: "Truth is most often used to mean being in accord with fact or reality, or fidelity to an original or to a standard."

The main problem I have with the first phrase is how do we know if the statement is in accord with fact or reality? We either decide for ourselves or accept some other authority. The same question can be asked about what is a fact or reality. The answer is the same as before.

And from the Collins English Dictionary – Complete and Unabridged, 12th Edition 2014, we have all the expected phrases with the addition of this, "A proven or verified principle or statement."

The main new thing of interest is the inclusion of the word 'verified.' To verify is to check again to see if you arrive at the same conclusion. Past experience, when attended, demonstrates the usefulness of checking again because both we and our environment, in all of our possible aspects, keeps changing.

When Feynman said, "We never are definitely right, we can only be sure we are wrong" he was referring to the procedure, for verifying or testing a hypothesis, accepted in the scientific community. The procedure involves selecting some new feature predicted to be present by the hypothesis, and conducting a test or experiment to confirm its presence. When Feynman said, "We never are definitely right," he was referring to the accepted fact, stated by Wikipedia, that the "hypothesis is a proposed explanation for an observation. Observations and experiments may disprove a hypothesis, but can never entirely *prove* one." There seem to be many ways to confirm the presence of the predicted new feature, so finding the expected feature will not provide conclusive proof that the hypothesis is completely true. Not finding the hypothesis false does imply that the hypothesis "may" be true. The usual procedure is to repeat this and other test for the expected feature in as many different ways as can be discovered. Each test that does not find the tested hypothesis false adds some incremental validity to the hypothesis. After the accumulation of extensive & varied test results without a single repeatable false result, the scientific community may accept the hypothesis as extremely valid. Some of these extremely valid hypotheses have been declared Laws of nature. Some of these Natural laws have later been found to be false.

#### **D. Fictionalism**

Now, a little bit about what I think I understand about Fictionalism. Let me start with Plato and his idea that all the real or abstract things we encountered in life, physical objects, words, numbers, ideas, were, at best, poor copies of the perfect forms of these things that existed somewhere. Second, I remind you of the old philosophical and common idea about the nature of the word "truth." Any given statement was either true or not true. There was no in-between.

My limited understanding of Fictionalism is that it is about the idea that in all our conversations with each other, we escape the Platonic mind load we would have if we had to believe that each abstract idea we used in our everyday conversations, had some kind of real existence somewhere. This escape is achieved by a common but unidentified agreement between everyone that all abstract things are fictions, even if we acknowledge that many of them are very useful in every-day conversation.

My example comes from the ample literature about fictionalism in science and it involves the use of the abstract concepts of mathematics, specifically, numbers and equations. The Fictionalist seem to be saying that there is a serious problem encountered if we say an equation is true. They seem to be claiming that for the equation to be considered as true, each symbol and number in the equation must have a real physical representation somewhere. This would not seem to be much of a problem for a symbol representing a physical property like mass. But for the

equation to be useful, we must replace the symbol with the numerical value of the specific mass in question. The specific mass does already exist, but the numbers used in the numerical value also need to have a real physical existence somewhere. Since we use numbers and other abstractions in so many different ways, and if Plato was right, these philosophers may have uncovered the source of all the missing mass in the universe.

The Fictionalist seem to claim that scientist have eliminated all these problems by agreeing among themselves that all these equations represent incomplete models of the real physical situations they are created to simulate. And numbers are useful but fictional abstractions.

I must admit that, with my limited understanding of Fictionalism, I find little value in most of the philosophical arguments for and against this concept. I don't agree with what seems to be one of their starting assumptions, that truth is a real thing and only has 2 states, true and not true.

I also don't understand the rationale for what appears to me to be the creation of a problem which people have already solved. When early verbal communication got started, I assume most of the conversation was about real existing things, of all kinds, that had to be dealt with. Much later, when it was discovered that we could think of and talk about things that that we could not find in nature, there was a problem. Plato solved this problem because he claimed that all these things we could not find did exist as real things somewhere. This made it possible to maintain the "fiction" that we were talking about real things, even if we were only talking about some representative of the real things.

Sometime between then and now we found or created the concept of the "abstract" to identify all the things we talk about that we can't find in nature. Most of us seem to function well with whatever we think the word abstract means and we seem to have forgotten Plato's idea about the real existence of these things. So, for most of us that problem is solved.

The problem about the nature of the concept conveyed by the use of the word "truth" does not appear to be solved because many people still seem to think of and use the word as if it represented some real tangible thing.

## **G. Conclusions**

From my earlier definition of an 'absolute truth', you may have noticed that I treat the concept of truth to be an attribute that may be applied to some statement. I do not think of 'The Truth' as a thing that exist independently of the things it may be used to fortify. I do consider the 'concept of truth' as a man made convenient abstract thing.

For me, the concept of truth is a fiction we use to make conversation convenient and to try to eliminate uncertainty. Most people are very uncomfortable with any kind of uncertainty in their lives. When you learn something new, you can accept it or reject it. Rejecting a new idea is easy because you can do so for many reasons.

Accepting something new is more difficult. To accept the new idea you must trust the source of the idea. The source may be your own experience, which most of us think is a source we should trust. When the source is someone else we may or may not trust the source. When we are very young, we trust our parents. What they say must be absolutely true. As we grow older we discover that some of the things they said might not be as true as they or we thought. All through our lives we encounter new ideas from many sources. How do we decide who to trust and does the new idea seem valid. The answer to both questions seems to depend on our past experiences. The easy path is to accept the new idea if the source is thought to be recognized as an authority on this subject. The short hand for this easy path thought process is the idea of truth. If, in the light of our past experience, the source seems like an authority and the new idea seems like it could be true, we may decide it is true and label it the truth.



The scientific community has learned to avoid this easy path. New ideas are formulated as hypothesis that must be tested and verified. This verification is an infinitely long process, and the degree of validity builds as long as the varied test do not prove the hypothesis false. While the scientific community tolerates this extended pathway toward increasing validity, they talk in statements that imply to the public that the scientist believe that their statements are true now.

When a hypothesis with high validity is occasionally shown to be false, and the media make a big deal about this change, the public does not tolerate this well. The public tends to, and in educational institutions, is encouraged to attribute the ideas in a hypothesis with high validity as the absolute truth. Any change is regarded as evidence that the scientist don't know what they are doing, or can't make up their minds. In order to improve this situation, the idea of a fixed eternal absolute truth must be modified toward a more realistic view of an ever improving knowledge of the subject.

I propose that we, in everyday conversation, actually treat every statement about X as a hypothesis to be verified by repeated testing with our experiences in a manner similar to the process the scientific community uses. This mostly unconscious process allows each of us to slowly and progressively test & verify the potential truth of any old or new idea we decide to accept on a trial basis. But while this testing is going on we often talk as if the potentially useful idea is true.

I don't believe that a useful truth is a thing to be found or that it is either true or false. It is a variable modifier, the validity of which can increase with extended positive experiences. As is the case with a scientific hypothesis, the validity of the hypothesis can increase with positive experiences but it can never reach the point of becoming an absolute truth and any particular experience may at any time show the hypothesis to be false. We may or may not pay attention to this result.

I consider the hypothesis presented in this paper as having a high validity. I encourage you to test its validity.

I find, that as a result of the research that went into preparing this talk, that I cannot fully support any of the theories I have reviewed for you. I seem to be most closely aligned with the Pragmatist.

Thank you for your attention. Are there any questions or comments?

Pg 21 From FAREWELL TO REALITY by Jim Baggott

### **The Correspondence Theory of Truth**

He claims that truth plays a central role in deciding what is a scientific methodology. But he has decided that the reality we can study is a metaphysical concept and that all scientific theories also contain other metaphysical concepts. He points out that new speculative concepts cannot be considered to be true, and that some concepts thought to be true are later found to be false. He wonders how these facts affect the concept of scientific truth? His answer is to anchor the concept of truth in what he calls the facts of the empirical reality. "A statement is true if, and only if, it conforms to established facts about the real world derived from our perceptions or measurements." He believes that this statement means that there can be no right or wrong without reference to facts about the real world. We must live with the knowledge, as Russell said, that the fact that is true today may not be true tomorrow. "We can only think of scientific theories as possessing a certain verisimilitude, a truth likeness, which increases with each successive generation of scientific development." In this way, each successful new development takes us "closer to the truth about empirical reality."