Truth

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Introduction

How do we know any of this is true? There are several factors that determine the truthfulness of a theory or an explanation of events:

- The theory is <u>congruent</u> with our experience. It fits the facts. No fact is left unexplained by the theory. The theory is falsifiable, and no falsifying fact or event has been found.

- The theory is internally <u>consistent</u>. It has no contradictions within itself, and it all hangs together elegantly.

- The theory is <u>coherent</u> with everything else we consider true. It confirms, or at least fails to contradict, the rest of our knowledge, where "knowledge" means beliefs for which we can give rigorous reasons for considering them true.

- The theory is <u>useful</u>. It has predictive power. It allows us to gain control of the world and to make accurate choices concerning what is likely to happen. It gives us mastery. When we act on the basis of the theory or explanation, our actions are successful.

I am in the pragmatist camp here. I think the chief quality of a theory that causes us to believe it, that is, to act as if it is true, is its usefulness. Let's look at each of these characteristics in turn.

Congruence

Congruence is correspondence. Truth is said to be a quality of propositions such that they correspond to reality. If someone says the car is in the driveway, we can go look

at the driveway to see if the car is really there. What's true, on this view, is an accurate reflection or statement of reality. But we don't have direct contact with reality, where "reality" means something completely independent of us. We have direct contact only with our experience, and our contact with reality is filtered through our experience. When what we experience is predictable, and our actions have favorable results, then we can infer that what we are basing our actions on is true. Our theory is congruent with the facts, as we experience them.

Consistency

A consistent theory is one all the elements of which hang together; it contains no contradictions. An inconsistent theory has little or no predictive value. If elements of the theory contradict themselves, one can't make consistent logical inferences from the theory. One can make inferences, but they are contradictory, and one does not know which inference to base one's actions on. An inconsistent theory is not useful.

Related to consistency is simplicity. The recommendation to simplify theory is called Occam's Razor.[1] The simpler a theory is, the more easily disprovable and the more easily understandable it is.

Coherence

A good theory is coherent with other theories. We take as true those assertions, ideas or theories that cohere with all the rest of what we take as true, including our empirical observations as well as our theoretical knowledge. (We should always be ready, however, to revise such judgments on the basis of new information, else we risk falling into dogmatism.) A good example of this attribute of truth is found in the physical sciences. The theories of physical science hold together quite well. Physics, chemistry, geology, biology and astronomy all reinforce each other.

Usefulness

An essential characteristic of truth is that it increases our mastery of our lives and environment; it enables us to exert our power, in the sense of our ability to get things done. I include in the term "environment" both the world of physical things and the world of ideas, of theory. What is true is what works to organize our practice and our thought, so that we are able both to handle reality effectively and to reason with logical rigor to true conclusions.

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[1] Occam's razor (also spelled Ockham's razor) is a principle attributed to the 14th-century English logician and Franciscan friar William of Ockham. [It is] a heuristic maxim that advises economy, parsimony, or simplicity in scientific theories. Occam's razor states that the explanation of any phenomenon should make as few assumptions as possible, eliminating those that make no difference in the observable predictions of the explanatory hypothesis or theory…. Furthermore, when multiple competing theories have equal predictive powers, the principle recommends selecting those that introduce the fewest assumptions and postulate the fewest hypothetical entities.
  – Wikipedia, URL: http://en.wikipedia.org/wiki/Occam's_Razor

The physical sciences exemplify this attribute of truth. The scientific method is a method of evidence-based argument consisting of systematic observation and explanation. Since observation is central, assertions must include reports of the data on which they are based, including enough description of how the data was acquired to enable others to acquire similar data and look for alternative explanations. What authorizes belief is objective confirmation (or contradiction) of expected results by independent observers. The more rigorous the specification of expected results, the more compelling the confirmation (or contradiction). In other words, a theory we take to be true is useful in that it enables us to make predictions that are verified by further observation.

The authority structure of science is anarchic, with scientists deciding for themselves whom and what to believe. The occasional data fakers, professors who tyrannize their graduate students, or national academies that install an orthodoxy pretty quickly get outrun by events. The result is an accumulation of theories (i.e., systematic explanations) that are better established than anything else in human experience (although still incomplete -- perhaps with big holes in some areas).[2]

If multiple theories explain the observations, we choose the one that explains more of the observations or explains them with more precision or to a greater level of detail. In other words, we choose the one that is most useful for making further predictions and hence for enabling us to master our lives.

Truth is useful. Does that mean that what is useful is true? That is not a useful question. Let's not ask what truth is; let's ask instead how we can recognize it reliably when it appears.

A good theory points out aspects of our experience to which it would be beneficial to pay attention. A good philosophical explanation identifies patterns in our experience. (By "pattern" I mean repeated regularity, a configuration of events or things. This is not the Re-evaluation Counseling meaning of the term, which denotes a subset of patterns in general.)

The relationship between theory and pattern is two-way. Theory describes patterns found in experience, and the patterns found in experience inform theory. We can use other words as well:

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 Theory          Patterns (regularities)
        ------->
        incorporates
        sees, grasps
        goes out and gets

        <-------
        inform
        are incorporated into
        give input to
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[2] Thanks to Hunter Ellinger for this insight.

Ultimately, truth is good. It works to promote human flourishing. Truth promotes goodness, love, harmony and beauty, both in the short term and in the long term. Truth promotes health.

Confidence

Truth gives us confidence. To believe something to be true is to be willing to act on it and, in fact, actually to act on it when the occasion arises. Confidence alone is not a guarantee of truth. People can have great confidence in something that is false, or at least has bad consequences. People with confidence in what is false have faith, in a disparaging or pejorative sense of the term "faith." But if someone has clear perception and tends to believe true things, then the higher that person's confidence in something, the more likely it is to be true. This is the basis in reality for the argument from authority for the truthfulness of propositions.

Non-Falsifiable Theories

Metaphysical theories, theories intended to be universally applicable and to explain all elements of experience and the objects of experience, are not falsifiable. For example, the theory that everything has an inside and an outside – a subjective, privately observable aspect and an objective, publicly observable aspect – cannot be disproved. One cannot prove that some things have no subjective aspect because to do so would require us to observe the inside, the subjectivity, of those things and determine that they had no subjectivity. But by definition we cannot directly observe the subjectivity of anything other than our own.

In cases where a theory is not easily or at all falsifiable, for instance a metaphysical explanation of life, one cannot verify its congruence or correspondence with reality. One can, however, make judgments on the basis of the other criteria. One can decide to act is if it is true or not on the basis of its consistency, its coherence and its practicality for achieving one's ends.

What Is Knowable and What Is Believable

What we can know from direct experience: That the transcendental Self is unobservable.

What we believe to be true on the basis of the best science to date: That the quantum-mechanical level of reality is indeterminate.

What may be true and does not contradict what we know:
- That everything has an inside and an outside.
- That the transcendental Self of each person is the Self of all, al-Lah.
- That the quantum-mechanical level of reality is where al-Lah intervenes in the physical world.

Revision History

Version	Date	Author	Change
1.0	27 July 2008	Bill Meacham	First publication
1.1	28 October 2008	Bill Meacham	Fix minor typo. No substantive change.
1.2	12 February 2010	Bill Meacham	Add note about competing theories.