

2017-2018 PLATO High School Essay Contest Winning Papers

Theme: Truth

First Place

“An Argument in Favor of Operative Truths”

by Ben Zimmerman

America, 2018: Seated at the front of a courtroom, an eyewitness testifies to a crime. Based on the testimony, a defendant is convicted. The British Isles, 1649: Oliver Cromwell, Lord Protector of the Commonwealth of England, believing himself an emissary of God, oversees the brutal conquest of Ireland and the massacre of thousands of Catholic civilians. A sailing ship, 1747: a group of sailors, to whom food, cider, and vinegar are provided, suffer from scurvy. Another group (beneficiaries of physician James Lind’s lucky hunch) is given citrus fruits, and avoids the disease. You, the reader, may be scratching your head trying to connect a courtroom, a dictator and a ship: these three vignettes may seem completely unrelated, yet they are linked by an unseen thread. All three realms – law, religion, and science – have been indelibly marked by humankind’s incessant desire to seek (and proclaim) the “truth,” and that pursuit can take many forms. The search to answer the question, “What is the truth?” animates the very heart of many of humankind’s most important quests, and history provides illustrations of the different ways we have attempted to answer it. “The Riverboat Trip” presents a few. Some people, like Mark, employ inductive reasoning to arrive at the truth: they take a data set or circumstance and infer that, under similar circumstances, the same result will be repeated. Others, like Tony, employ critical rationalism, attempting to disprove concepts or assumptions. Still others, like Lisa, utilize what is popularly known as the “scientific method,” creating hypotheses and attempting to verify them through repeated experimentation. Unfortunately, each of these approaches has significant limitations. In this paper, I will argue that the idea of a supreme and objective truth is ultimately unrealistic, unproductive, and unattainable. Instead, I will argue that what I’ll call operative truths are the most practical and least fallible type of truth: they advance our understanding and enable us to move asymptotically closer to the abstract notion of “absolute” truth.

To return to our courtroom example: for decades, eyewitness accounts were thought to set the gold standard in terms of unimpeachable truths upon which both judges and juries could rely. When Mark splashes water in Stottlemeier’s face, it seems undeniable that both Stottlemeier and Mark could testify to the “truth” of its having been wet: they are contemporaneous

witnesses to both the event and to the “truth” that when water is splashed, it feels wet. Similarly, if a woman testifies that she saw a passenger in a moving vehicle shoot a bystander and that she is positive she can identify the shooter (and if we take it as given that she is attempting to tell the truth), her statement would seem unequivocal. Yet, modern researchers such as Hal Lilienfeld and Scott Arkowitz tell us that eyewitness testimony is subject to many kinds of fundamental errors. How can this be? How can a truth that we “see with our own eyes” be shown to be false? One reason, of course, is that our memory for past events – even those that have occurred recently – has proven to be remarkably faulty under certain circumstances: fear, preconceptions, racial prejudices, the presence of a weapon, and even the act of retelling have all been shown to alter our memories. It is clear that just because we remember perceiving something to have happened in a certain way does not mean that it actually did. Data gathered through observation – unless recorded and reported instantaneously – is inevitably suspect, because its accuracy is contingent upon our fallible memories and perceptions.

Aside from the problem that memory introduces (when considering evidence gathered through observation), the notion that we can utilize observations to prove truths is in and of itself flawed. First, let’s review what we mean by observations. If we consider an “observation” to be the direct recording of data from the world around us, they can be made through our human senses but also with the aid of instruments. In the realm of science, such observations can then be used to help aid our understanding of naturally occurring events. However, what they cannot do is lead us to definitive conclusions, or “truths.” Of course, some branches of science rely heavily on the use of observations, and these observations often provide us with valuable data from which we can form hypotheses. For example, scientists examine tree rings to inform their assumptions about weather conditions in the past. However, the notion that past observations can be used as proof of future outcomes is false. This argument employs a circular logic in that it implies that we believe nature to be uniform because it has been uniform in the past. In addition, human beings seem to have a predisposition to find patterns where none exist – one great example of this is the infamous “hot hand fallacy,” or the notion that a basketball player can be in a “zone” in which their ability to make shots is better than usual. Nobel prize winner Daniel Kahneman confirms the consensus view among researchers that the hot hand is a cognitive illusion. Therefore, an inductive reasoner’s bottom-up approach, in which observations form a pattern and then the pattern is used to develop a theory, must be rejected as an imperfect way of determining what is “true.”

Tony’s approach to finding the truth, on the other hand, could be characterized as “top-

down” or critical rationalism. Rather than stating that something is “true,” (implying that it will continue to be true or accurate in the future), Tony instead proposes a method in which a concept is put forth in order to be tested for falsification: “When I woke up, I realized I couldn’t have spent the night in China, and not remember travelling there... So what happened in the dream wasn’t consistent... It wasn’t consistent, so it wasn’t true—it’s as simple as that!” This method initially seems appealing because it helps us to avoid the trap of circular logic described above and creates a framework in which a single piece of contradictory evidence is enough to disprove a hypothesis (thus also having the merit of being remarkably efficient). Unfortunately, though, while effective at disproving false suppositions, critical rationalism does not really provide us with a standard at which the “right” amount of corroborating or supporting evidence can be deemed enough to verify any claim of truth. In other words, a skeptic could argue that we simply haven’t yet found the piece of contrary evidence to prove a claim wrong (or “not true”).

Lisa’s method – the aforementioned scientific method – initially seems promising. She creates a testable hypothesis: “Why don’t we take a chance that this stream flows down to the river that we came up here on?” and in fact, the stream does lead the group back to the mansion. However, while a hypothesis is testable, it is not possible to prove that it is true. A well-crafted hypothesis is falsifiable (it makes a statement that can be shown to be wrong), but we can never prove that it is true – bringing us back to the induction problem. Additionally, hypotheses can themselves inadvertently guide scientists to frame their experiments in a way that is biased or more conducive to a certain result. For instance, a wrong hypothesis may lead a scientist to exclude (or not consider) relevant data, instead ascribing an experimental result to the (included but incomplete) data set.

Finally, we need to consider the concept of axiomatic truths – truths that can be accepted without any argument or need of proof. These make an oblique appearance in the case when Lisa asserts “We knew for a fact that the mansion was on the river. And we knew for a fact that we were on the stream.” In this instance, these axioms are relatively benign (although we could argue that the group did not, in fact, “know” that they were on a stream that was definitely a tributary of the larger river they had just visited – it’s conceivable that, instead, it fed into another nearby river). However, it is not only problematic when axioms prove wrong: history has shown us that at least some axiomatic “truths” can also prove extremely dangerous. The fanatical Puritan despot Oliver Cromwell, mentioned above, is only one example of a religious leader who rejected the idea that belief should rest on demonstrable evidence. Many of his cruel actions were motivated by beliefs he felt were axiomatic to his Puritan Christian faith, because he was

certain he had a mandate from heaven.

Given the shortcomings of the approaches taken by Mark, Tony, and Lisa (as well as countless others throughout human history, such as Cromwell) I propose an approach that utilizes what I will call operative truths – which may either be a model or, in cases where we don't have enough data, a question. We don't need to think of these operative truths as supreme or objective or absolute: they are useful until we come up with something even better. We ask a question, or propose a model, and either receive an answer or use the model until our experience shows us that it requires refinement. Take, for example, the atomic mass of carbon. This is an estimate – it is a weighted average of all carbon isotopes -- yet we use it all the time to great effect. This is an example of an operative truth that works well enough until we can get a better estimate. “Truth” is an asymptotic progression towards something that is ultimately unattainable. Therefore, the definition of truth that we must use is that which can be known with the most certainty at this time. We can get very close to the “truth” through refinements that we can and should strive to make: each refinement inches us a little closer to our goal of “knowing.”

Works Cited

Kahneman, Daniel. *Thinking, fast and slow*. Farrar, Straus and Giroux, 2015.

Lilienfeld, Hal and Arkowitz, Scott O. “Why Science Tells Us Not to Rely on Eyewitness Accounts.” *Scientific American*, 1 Jan. 2010, www.scientificamerican.com/article/do-the-eyes-have-it/.

Second Place

“A Defense of the Correspondence Theory of Truth” by Michael Wang

Truth has been and still is at the core of philosophical discussions - man has always sought to understand and define truth. And there is no question why - a property that imbues some words with normative force while generating disrespect for others in its absence, truth is fundamental to persuading others to share your views and to explaining the world around us. Furthermore, there has always been something appealing about believing in truth, a transcendental quality that relieves humans of worry and doubt, whether it be scientific, religious, etc. Today, in an increasingly polarized world with various forms of knowledge production, some of which are faulty, the task of understanding truth has become more important. We need to know what constitutes truth and how to distinguish truthful claims from false ones.

The definition of truth is elusive and difficult to pinpoint with words. So to begin to determine what constitutes truth, we must define the vocabulary that will be used in the following arguments and clarify a few characteristics of truth. First, I define the term “proposition”, which will be used interchangeably with “belief”, as a statement expressing a judgment that may be true or false. Second, I define the term “fact” as a “sui generis type of entity in which objects exemplify properties or stand in relations” (Mulligan and Correia). In regards to the characteristics of truth, first, truth exists in opposition to falsity. Denying the possibility of falsity would not only contradict the basis of our discussion, but oppose all existing laws of logic and science. Consequently, our aim is not just to establish the features of truth, but to distinguish truth from falsity, something which I believe makes deflationary theories of truth deficient. Second, truth is a property of beliefs or propositions. Consider a pile of snow, independent of the rest of the world. When we observe the snow, there is no truth-bearer; we simply see snow. Although we may make true judgments about the snow, the snow in and of itself possesses no truth-value. When we introduce a person to the scenario to claim snow is white, however, truth exists because we can ascribe truth-value to that proposition. Third, truth is not intrinsic to a proposition. In other words, we cannot contemplate the proposition snow is white and reveal the source of its truth-value; the proposition is true because of something extrinsic to itself. Consider the same proposition, independent of the rest of the world. We cannot examine the proposition alone and discover truth because we know of neither snow nor

its color. Only when we introduce white snow do we understand the original proposition to be true. Thus, truth exists in a relation between propositions or beliefs and some external entities.

For the correspondence theory of truth, those external entities are facts. To clarify, the theory makes the ontological claim that a proposition is true if and only if some fact exists that corresponds to the proposition. The question now becomes: why facts? At least for realists, the answer is intuitive. The realists see the world as existing objectively, independent of humanity. This world is the world of facts and so, when we describe this world, we are truthful. Consider a blue flower: when I believe the flower is blue, my belief is true. Imagine that I am now born color-blind, and the flower appears grey to me. Only when I believe the flower is blue is my belief true because the flower's blueness is a fact, regardless of what I see. Thus, convincing one to side with the realists is perhaps the simplest way to warrant the final part of the correspondence theory. However, reconciling ideological differences between realists and anti-realists is a separate matter. Nonetheless, I still believe the correspondence theory to be sufficient for all. First, assuming we are idealists who hold that the world of the realists is unknowable to humanity because reality is constructed mentally, the correspondence theory is not disproven. The theory only establishes a set of conditions necessary for truth; we strive to identify facts, but whether or not we succeed is insignificant to truth's existence. Second, for the anti-realists who deny an objective reality independent of humanity entirely, we only need to redefine what constitutes a fact. A fact then becomes the next objective entity in the anti-realists' reality and we derive truth-value by establishing correspondence between propositions and these new "facts". Thus, to summarize, the project of discovering truth holds describing the world in its purest, most objective sense as its ultimate goal. Furthermore, a belief or proposition is true if and only if it corresponds to some fact.

Equipped with the correspondence theory of truth, we have a means of answering all the questions raised in *The Riverboat Trip*. When Mark makes his first judgment, he is correct to say: "What I said was true 'cause water's really wet." His belief about water being wet is true because it corresponds to the fact that water is wet. However, when asked how he knows his trip to China was a dream, Harry's answer is less satisfying. Harry claims that he could not have traveled to China in a night because "what happened in the dream wasn't consistent with everything else in my life." Let us represent Harry's proposition as: I traveled to China last night. When proving the proposition false, Harry applies the coherence theory of truth, which states, "A belief is true if and only if it is part of a coherent system of beliefs" (Glanzberg). Imagine that the night before, Harry did not venture to China, and he slept without moving. Although the coherence theory allows Harry to make the correct judgment in this instance, Harry was

fortunate. Consider the following case: during that night, Harry dreams a different dream. In this dream, Harry finds himself in his bed. His room is perfectly in order and the lights are off. He gets up to drink a glass of water and returns to bed. Beyond that, Harry remembers nothing. When he wakes up, Harry believes that he did wake up to drink that glass of water, when he never did. Both situations cohere with everything else in Harry's life, but he falsely believes that he drank the glass of water. This case elucidates an overarching issue with the coherence theory of truth: multiple propositions may cohere with our system of beliefs and it becomes impossible to discern truth from falsity. For instance, it is conceivable that a storyteller weave a tale of our history that coheres with all of our present beliefs, but remains fictitious. Instead, the aforementioned proposition is false because it does not correspond with some fact; the fact that Harry traveled to China does not exist because he remained in bed all night.

As the riverboat trip continues, the students evaluate the truth-value of the proposition "If we follow the stream, we'll come back to the mansion". Lisa encourages the group to follow the river and when it actually leads them back to the mansion, she claims, "We tried it out, and sure enough, we found our way back to the mansion! Don't you see? Our idea was true because it worked!". Lisa determines the proposition to be true by utilizing the pragmatist's theory of truth, which states, "Truth is satisfactory to believe" (Glanzberg). However, Lisa's approach instinctively appears defective in various ways. First, it appears to be describing the utility of a proposition, not its truth-value. Truth should not be subjective. Second, the theory devolves to the correspondence theory. In other words, it is most useful to believe in propositions that correspond with facts because belief in reality allows us to make accurate predictions, understand our world, etc. (Note that the same argument applies to the coherence theory: propositions that correspond with facts cohere with factual beliefs about the world. We are unable to test the coherence of our first belief because no beliefs exist for it to cohere to. In order to avoid a defective original belief, the foundation for our web of beliefs should be grounded in reality, where facts already exist in coherence with other facts.) Third, grounding the truth-value of a proposition in the consequence of the proposition, its utility, is infinitely regressive. If we posit some proposition x, to prove it true, we would need to test it to see if it "worked". However, we would also need to prove the proposition x worked true. Accordingly, we would need to test the new proposition to see if it "worked", and so on and so forth. The correspondence theory resolves the regress because proposition x is true regardless of the consequences of believing x. Beyond these general faults, careful analysis of Lisa's argument further discredits the pragmatist theory. When Lisa claims her proposition "worked", she uses the term "worked" to represent

being led back to the mansion. In other words, the aforementioned proposition is true if the students are successfully led to the mansion and false if they are not. However, this notion of testing a belief for usefulness is unnecessary; Lisa only believes it to be because she and the other students lack knowledge of their whereabouts. The usefulness of the students' proposition has been predetermined because either the stream exists in such a way that it leads to the mansion or it does not. If it is a fact that the stream leads to the mansion, the students' corresponding proposition is made true. As a result, Tony and Mark are correct when they exclaim, "No, it [the idea] worked because it was true!", not the other way around.

Reflecting upon The Riverboat Trip, we see that the correspondence theory provides an account of truth that is both objective and universal in all situations, as truth should be. To provide another example, we know a scientific theory to be true when it corresponds to some fact. Centuries ago, the geocentric model of the solar system was widely accepted as true. It was coherent with scientists' observations of stars and planets in the sky and it was useful to believe in the fields of astronomy, religion, etc. However, we now view the heliocentric model as true because it is a fact that the planets of our solar system revolve around the sun. Although such cases illustrate why the correspondence theory is the only theory that answers all questions of truth sufficiently, it still receives significant criticism, independent of competitive theories. One popular objection is articulated as follows: "Although they [correspondence theories] apply to truths from some domains of discourse, e.g., the domain of science, they fail for others, e.g. the domain of morality: there are no moral facts" (David). However, I do not believe that the objection is responsive to the thesis of the theory. Depending on one's stance on other philosophical issues, responses to the objection vary. First, for the noncognitivists, claims about domains other than reality cannot be true in the first place because such truths are nonexistent. Second, for the reductionists, facts from domains that the objection considers problematic are simply unproblematic facts in disguise. For instance, moral truths do not exist independently, but are justified by social-behavioral facts (David). Third, one may simply welcome the objection as unresponsive because truths like moral facts do exist, so the correspondence theory still functions.

Presented with the three main theories of truth, correspondence, coherence, and pragmatist, the above essay offers a defense of the correspondence theory. For all of mankind's existence, the goal of understanding truth has always been to perceive and understand the world in its purest form. We all rely on truth to understand the mechanics of the universe, like Mark, to identify lies, like Harry, and to make decisions, like Lisa. The correspondence theory provides

that robust account of reality we desire.

Works Cited

David, Marian, "The Correspondence Theory of Truth", The Stanford Encyclopedia of Philosophy (Fall 2016 Edition), Edward N. Zalta (ed.), URL = [<https://plato.stanford.edu/archives/fall2016/entries/truth-correspondence/>](https://plato.stanford.edu/archives/fall2016/entries/truth-correspondence/)

Glanzberg, Michael, "Truth", The Stanford Encyclopedia of Philosophy (Winter 2016 Edition), Edward N. Zalta (ed.), URL = [<https://plato.stanford.edu/archives/win2016/entries/truth/>](https://plato.stanford.edu/archives/win2016/entries/truth/)

Mulligan, Kevin and Correia, Fabrice, "Facts", The Stanford Encyclopedia of Philosophy (Winter 2017 Edition), Edward N. Zalta (ed.), URL = [<https://plato.stanford.edu/archives/win2017/entries/facts/>](https://plato.stanford.edu/archives/win2017/entries/facts/)

Third Place

“A Contextual Theory of Truth” by Tianyi Miao

What is truth? To qualify as a good answer, the definition should be broad enough to fully capture our intuition, specific enough to eliminate any ambiguity, and practical enough to be useful in our lives. In this essay, I shall propose a contextual theory of truth, which defines truth in relation to a conceivable world specified in context. I will begin by examining the correspondence theory, the coherence theory, and the pragmatic theory. These neoclassical theories reveal important intuitions about truth, but they all face unresolved objections. I will show that the contextual theory not only fits our intuition and resolves these objections, but is also useful for mathematics, literature, and hypothetical worlds. I shall conclude by illustrating that the contextual theory offers useful guidance for knowledge.

At first glance, the definition of truth seems obvious: truth is the correspondence to a fact. According to a survey in 2009, 44.9% of contemporary philosophers accept or lean towards the correspondence theory, making it the most prevalent philosophical view on truth (Bourget). It reveals an important aspect of our intuition: we believe that there are absolute facts underlying our reality, and for a proposition to be true, it must correspond to this system of absolute facts. However, the correspondence theory is not free of objections. Firstly, now that we define truth in terms of facts, how should we define “facts”? Ambiguous definitions of facts, such as “the way our reality is,” only set off a chain of infinite regress. For instance, how should we define “reality” then? Secondly, even if we accept our intuition of facts as irreducible axioms, a skeptic may still argue that since we can never know facts for certain, we have no way to ascertain truth, so the correspondence theory is useless. Thirdly, the correspondence theory cannot adequately determine truth in hypothetical worlds, which are expressed by counterfactual statements like “if Lincoln had not been assassinated, he could have finished his term of office.” Because a counterfactual premise does not correspond to facts by definition, similar conditional statements are true by logic. Such statements include “if Lincoln had not been assassinated, then I would have been a billionaire,” which appears preposterous under common sense. Finally, while mathematical truth is well-defined under an axiomatic system, mathematical facts are undefined and meaningless.

Consequently, some philosophers embrace the coherence theory of truth, claiming that a proposition is true if and only if it coheres with a set of propositions. Therefore, truth is relative to a system of beliefs. Upon further inspection, however, we can find the coherence theory deeply

counterintuitive. Russell proposed the Specification Problem as an objection: for any proposition p , we can almost always find a set of beliefs that it coheres to; meanwhile, we can almost always construct another set of beliefs that cohere with its negation, not p (Russell). Because we may easily make p and not p true at the same time, the coherence theory is trivial.

One pragmatic theory defines truth as useful beliefs. Apparently, this definition facilitates the knowledge of truth, because by definition, we know truth for certain whenever we endorse useful beliefs. However, this convenience comes at the cost of our intuition. We agree that knowing truth is generally useful, but in some situations, useful beliefs might turn out to be intuitively false. For a soldier on the battlefield, believing that “I will survive” is useful, because this belief can boost his confidence, his will to fight, and thus his likelihood of survival. However, in cases where the soldier believed he would survive but didn’t, his belief is overconfident and false. Due to its divergence from our intuition, the pragmatic theory is more appropriate as a theory of knowledge, instead of a theory of truth.

Therefore, I shall propose a contextual theory of truth, which includes the intuitive features of correspondence and coherence, but excludes their respective drawbacks. From everyday experience, we can easily see that we tend to think of truth contextually. Consider the proposition “elves exist.” Rarely would any reasonable person say it’s true, because there are really no elves in our world. An unspoken condition of this proposition is “in our world,” which could only be inferred from the context. By contrast, if we were talking about J.R.R. Tolkien’s *Lord of the Rings*, we would have readily recognized “elves exist” as true, because in Tolkien’s fictional world given by context, elves do exist.

To specify the context, we shall use the concept of conceivable worlds. Constructed with natural or mathematical languages, a conceivable world is a descriptive model for a world of discourse, where truth and falsehood are predefined. For instance, a conceivable world based on first-order propositional logic consists of a set of propositions, namely p , q , and r , and a truth table that designates p , q , and r respectively as true, false, and true. We can say that p is true, because p is true on the truth table. This example shows that truth is an inherent part of a conceivable world. Hence, the contextual theory prevents an infinite regress of defining reality and facts.

Defining truth relative to a context makes the contextual theory resemble the coherence theory, but since we must specify a conceivable world, the contextual theory eliminates potential ambiguities, thus resolving the Specification Problem. For instance, we can construct a conceivable world A where p is true, as well as B where not p is true. Then, the practical problem is relayed to a theory of knowledge, which determines whether we should believe in A or B as a model of our reality. Contextual truth is part of the definition of a conceivable world and independent from empirical senses.

Hence, when we talk about a well-specified conceivable world, we never have to worry about being radically deceived by a Cartesian demon, so the contextual theory resolves the skeptic argument against the correspondence theory.

In the conceivable worlds that are more complex and more similar to our reality, our intuitive idea of correspondence naturally emerges. In a chart of stock prices versus time, which can be construed as a conceivable world, there is only one definite price at a given time. Suppose that the price at 18:00 is 170 dollars. The proposition “the price at 18:00 is 160” is false, because 160 is not equal to 170, and the proposition does not correspond to the conceivable world. As a result, the contextual theory does not reject correspondence, but only seeks to clarify it without loss of intuition. The contextual truth is absolute within a conceivable world, but relative across different conceivable worlds.

In the definition of a conceivable world, the world can be anything meaningful enough to be discussed as a “world”. For example, mathematics can be interpreted as a conceivable world, and the context shall be the axioms and definitions. When we say that “ $1 + 1 = 2$ ” is true, we implicitly acknowledge the Peano axioms for natural numbers, and the definition for 1, 2, and plus. In literary analysis, a piece of literature can give rise to many conceivable worlds that are consistent with the textual meaning, including the original authorial intent and the readers’ interpretations. Although different readers may disagree with each other, for a given reader at a given moment, truth within his or her interpretation is always predefined. Likewise, when we evaluate counterfactual statements, we implicitly adopt a causal model in context. Consider the statement “if Lincoln had not been assassinated, then I would have been a billionaire.” In a naive propositional logic model, because Lincoln was assassinated, the premise is false, so the statement is true. By contrast, if we adopt a causal model of our world, we can discover that whether Lincoln was assassinated or not cannot influence whether the speaker could become a billionaire, so we tend to judge this counterfactual statement false.

I might be objected that the contextual theory is too broad to introduce new information. However, it is exactly the generality that makes conceivable worlds useful – it not only allows us to express a greater variety of worldviews, but also provides us with a common framework to compare different worldviews, scientific paradigms, and metaphysical claims, many of which are previously incommensurable. For instance, even the most confident atheist will admit that a theist worldview is at least conceivable, and vice versa; similarly, an idealist can agree that a realist worldview is conceivable. Because all belief systems can be recast as conceivable worlds, their conflicts can be reduced to one question: which conceivable world is our world? This question will be relevant in a theory of knowledge, but not a theory of truth. Furthermore, we tend to be more tolerant and open-

minded when we understand other worldviews as conceivable worlds than when we believe, without justification, that our own worldview is the absolute truth.

Another possible objection to the contextual theory is the redundancy theory that the concept of truth is redundant (Frege). The redundancy theory stems from the observation that “it is true that snow is white” is equivalent to “snow is white.” Frege then concludes that because adding the phrase “it is true that” does not alter the meaning of the assertion, the idea of truth is redundant. However, an alternative interpretation of the example exists. In casual conversations, we are good at omitting and inferring underlying contexts. Just like how we omit “in our world” when we say that “snow is white,” we usually omit “it is true that” when we actually make an assertion of truth. We would reasonably expect our listeners to infer the unspoken context and truth assertion. Therefore, we omit the declaration not because truth is redundant, but because explicitly stating truth is unnecessary in context. Since the redundancy theory does not rule out the alternative interpretation, it’s not necessary to discard the notion of truth.

Yet, a theory of truth will be much less impressive if it does not entail some theories of knowledge. Without indicating the necessary and sufficient conditions for a belief to qualify as knowledge, which is still a heated topic in contemporary epistemology, I shall define knowledge as an approximation of truth. We may assume that our world belongs to the set of conceivable worlds with at least one intelligent entity, who will estimate the truth of its world. This set is too large and too diverse to provide any practical guidance, but if we only consider a subset that satisfies some fundamental conditions, we can develop many pragmatic roadmaps to truth with deductive certainty. For example, in worlds where the principle of uniformity holds, the most fundamental physical laws are uniform throughout space and time. Given as an axiom, the principle of uniformity guarantees the validity of induction, which cannot deductively prove its own validity within the world because of the problem of induction (Vickers). As a result, the intelligent entity can safely assume that the basic physical laws will not suddenly change, a crucial premise for almost all physical sciences.

Admittedly, a thorough investigation on the theories of knowledge is beyond the reach of this essay. But the contextual theory is useful even if we disregard our world altogether: we can use it to discuss literature, mathematics, scientific models, and hypothetical universes with deductive certainty. By defining truth with respect to a conceivable world, the contextual theory integrates the absolute and relative aspects of truth in our intuition without introducing inconsistencies. Finally, given some fundamental assumptions about our reality, the contextual theory logically entails valid methods of estimating truth, making itself useful for pragmatic purposes.

Bibliography

Bourget, David & Chalmers, David J. (2014). What do philosophers believe? *Philosophical Studies* 170 (3):465-500.

Frege, G., 1918. 'Thoughts', in his *Logical Investigations*, Oxford: Blackwell, 1977.

Russell, B., 1907, 'On the Nature of Truth,' *Proceedings of the Aristotelian Society*, 7: 228-49.

Vickers, John, "The Problem of Induction", *The Stanford Encyclopedia of Philosophy* (Spring 2016 Edition), Edward N. Zalta (ed.), URL = <<https://plato.stanford.edu/archives/spr2016/entries/induction-problem/>>.

Third Place

“The Value of Fake Truth” by Dylan Park

When I first think about the question “what is truth?” I think about *The Matrix*. Even if we would like to believe that the things we experience first-hand are true, it is impossible for us to know that for sure. As that movie posits, can we really believe our hands and our eyes, when they might all be part of a simulation? If we hold ourselves to the highest standards, we cannot prove with 100% certainty that the world we experience is “true”, so when we ask if something is “true”, we cannot honestly say that any of our ideas are true beyond all doubt. I believe that this is partially what Harry was referring to in “*The Riverboat Trip*” when he said, “if it seemed that real to you, how come you now think you’re awake, and that China was just a dream. Maybe this riverboat’s a dream and China was for real!” He jokingly questions how we can be certain about the truth of the physical world we perceive, and I want to give that thought a serious examination; can we be certain that what we perceive to be true is actually true?

Having said that we cannot 100% prove any truths about the physical world, I do not find that lack of proof too discouraging. We need only look at the GPS in our phones to look at all the progress mankind has made even without being 100% certain in the truth of the question “where am I?” In this essay, I argue that we must recognize most of the claims we believe to be true as, in fact, being only “practically true”--in other words, we treat them as true because they work, at least for now. These claims are only “true” because they appear to be the best ideas we have at the moment, and they have yet to be proven false. In addition, I argue that actual truth about our world must exist in some form, even if we personally are unable to know it.

I think most scientists would agree that what we say to be true has only been proven to be “practically true”. After all, that is why scientific claims are generally called theories. Theories are just explanations for natural phenomena that are supported by a mix of observations and experiments. Even if some are colloquially referred to as “laws”, those are just theories that have accrued a significant body of evidence. At one point in studying chemistry, we are taught that atoms consist of electrons orbiting protons and neutrons, much in the same way that planets orbit stars. Is this totally true?

For quite a while, the scientific community thought so. It made intuitive sense, as we already had significant evidence that planets operated that way, and it seemed reasonable to think of electrons as scaled-down versions of those orbiting bodies. Additionally, scientific

experiments seemed to support that idea—right up until the day they did not. We now believe that an electron’s “orbit” is much less certain than that of a moon, and scientists now say that an electron’s movement can be better imagined as an amorphous electron cloud. The physical world did not have some magical moment where its truth regarding electron movement changed; instead, when our best-working “orbit” theory was proven false, scientists moved on to the next best idea they could come up with. It is very possible that sometime down the line, experiments force us to amend or completely replace our electron cloud model as well. This ability to recognize when experimental evidence has proven our theories wrong and to adapt to new ideas is essential for the progress of science.

In saying this, I do not intend to discredit the value of our “practically true” claims. Even the aforementioned model of electron orbits continues to be “practically true” in certain specific applications, which is why it is still taught in schools today. For example, it explains that electrons would absorb energy from photons jumping up in its energy level before coming back down and emitting light. The important detail in teaching this old model is that it comes with the acknowledgement that it is not technically true and just appears to be so in specific scenarios. Science progresses even with theories that are not true and will continue to progress with “practically true” theories.

Additionally, it is very well possible that, in making these “practically true” statements, we happen upon the actual truth. For example, we now believe the Earth to be round. We have taken actual photographs from space showing that it is round. Beyond that, our understanding of physics indicates that planets very well should be round. Even though I mentioned *The Matrix* and how our observable world might not be real, there is still the significant possibility that it is real and that we have accurately determined one of the world’s truths: that the Earth is round. I do not deny this possibility. I simply wish to point out that we cannot be 100% sure that this is true, and we likely never will be able to. “Practical truths”, despite not being truths in the strictest technical sense, seem to be the best we will ever have in terms of claims about the world.

That is not to say that real truths about our world do not exist. We can see that there are various phenomena that we experience, so we can be confident that there is some truth that drives these phenomena. For example, we observe and try to explain gravity. We are taught that it a force that pulls masses toward each other. All of our tests for gravity show that this happens, but we cannot prove that it will work in every single scenario. In the end, we are simply using inductive reasoning based on past experiences, rather than any sort of “divine inspiration”. It is possible that a “God” decides on a whim whether a system has gravity and has just never decided

to stop gravity in our presence. Gravity could be part of a simulation or our calculations on gravity could be off. In any of these cases, the truth about gravity is different from how we perceive it. However, it is undeniable that there is some mechanism that is causing this force we call gravity to exist. If it is a “God”, then that being is the actual truth behind our believed truth. If we do live in a simulation and the “real” world is outside the simulation, then the truth behind gravity is the machine that is creating the forces we observe. Regardless of the true nature of gravity, we can be confident that there is some true existence causing this gravity. Again, as with the aforementioned round Earth claim, it is also quite possible that we will one day discover these truths. The important fact is that we are limited in how sure we can be about our claims, as we can only back these claims using our observations of the world as we perceive it.

In the end, it seems like we will have to get by without divine inspiration into what is really true about our world, and it seems like we have been doing well enough so far. From developments in engineering to medicine, we have been able to use inductive reasoning to advance society further. Furthermore, it is entirely possible that a number of our current scientific theories are actually true. I simply wish to point out that we do not know for sure, and we never may. In the meantime, Tony and the rest were able to find their way out of the forest, so perhaps fantasizing about real truths can remain as fantasy.