

Two Objections to Ayer's Criterion of Verifiability

What sorts of statements are factually meaningful? What sorts of statements aren't? In "The Elimination of Metaphysics," A.J. Ayer attempts to answer these questions by introducing and defending a criterion of verifiability by which we can discern which statements of fact are literally significant. In this paper, I will argue that his criterion is too weak in at least two respects.

To evaluate this criterion of verifiability, we must first adumbrate Ayer's formulation of it. He writes:

We say that a sentence is factually significant to any given person, if, and only if, he knows how to verify the proposition which it purports to express—that is, if he knows what observations would lead him, under certain conditions, to accept the proposition as being true, or reject it as being false. (qtd. in Klemke 183)

Put more simply, a statement of fact is meaningful if, and only if, it is verifiable. With this foundation laid, Ayer then makes a pair of caveats.

The first is to draw a distinction between practical verifiability and theoretical verifiability. A proposition that is practically verifiable, he explains, is one that we are actually capable of verifying should we choose to do so (Ayer 183). Take, for example, the proposition that water boils at 212 degrees Fahrenheit. This statement is verifiable *in practice* because we have the tools, right now, to go and verify it—we need only some water, a pot, a stove, and a thermometer. On the other hand, a proposition is theoretically verifiable if we are not presently capable of verifying it, but we do know what observations would determine the matter (Ayer 183). An example of such a proposition is that there exists liquid water on Proxima Centauri b,

the closest exoplanet to Earth. Currently, we do not have the means to examine Proxima Centauri b in any detail that would confirm or disconfirm that proposition. But we know what sorts of observations would lead us to either accept the proposition as true or reject it as false, provided that we had the means to make such observations. Thus, the proposition that there exists liquid water on Proxima Centauri b is verifiable *in theory*. On Ayer's view, both practically verifiable propositions *and* theoretically verifiable propositions are factually significant; his criterion only weeds out those propositions which are neither.

The second caveat Ayer makes is the distinction between the "strong" and "weak" senses of the term "verifiable." He explains that "a proposition is said to be verifiable, in the strong sense . . . if, and only if, its truth could be conclusively established in experience. But it is verifiable, in the weak sense, if it is possible for experience to render it probable" (qtd. in Klemke 184). Ayer correctly notes that a criterion that deems only propositions that are *conclusively* verifiable as factually significant would be too restrictive. Simply, this is because the truths of an overwhelming majority of matters of fact—perhaps *all* matters of fact—cannot be conclusively established.¹ Ayer concludes, thus, that our criterion of verifiability must operate under the weak sense of the term "verifiable," and that "the question that must be asked about any putative statement of fact is . . . 'Would any observations be relevant to the determination of

¹ The application of Cartesian doubt to most or all matters of fact would demonstrate this, but Ayer also offers the following:

Consider, for example, the case of general propositions of law—such propositions, namely, as "arsenic is poisonous"; "all men are mortal"; "a body tends to expand when it is heated." It is of the very nature of these propositions that their truth cannot be established with certainty by any finite series of observations. But if it is recognized that such general propositions of law are designed to cover an infinite number of cases, then it must be admitted that they cannot, even in principle, be verified conclusively. (qtd. in Klemke 184)

its truth or falsehood?”” (qtd. in Klemke 185). Only if the above question is answered No should a statement be regarded as factually insignificant.

Now that we have outlined Ayer’s position, let us properly formulate his criterion of verifiability (CV hereafter).

CV. A statement is factually significant if, and only if, it is verifiable in the weak sense of the term—that is, if it is possible, either in theory or in practice, for experience to render it probable.

This principle seems like a fine start for discerning whether statements of fact are literally significant. It is restrictive enough that it seems to properly discard statements that are not concerned whatsoever with empirical evidence. It is liberal enough that it does not prohibit meaning from any statements of fact whose truths cannot be conclusively established in experience. And it permits both practical and theoretical verifiability as avenues by which a statement can be deemed factually significant. Why, then, is (CV) unsatisfactory?

The answer lies within the notion of probability. Recall that (CV) says that a statement is factually significant iff it is possible for experience to render it probable. What does it mean for an experience to render a statement *probable*? I take it that there are two candidate answers to this question that we must consider: either (1) a given experience has some ontological relationship to a given statement such that the experience literally makes the statement more likely to be true, or (2) just that a given experience increases the experiencer’s confidence in a given statement such that the experiencer is led to accept the statement as true.

Ayer discusses probability as though (1) were the proper account of it. Yet a moment’s reflection on (1) reveals that it is not plausible at all. Do our experiences have any effect on

whether a given statement is true or false? Of course not, save only for those statements that concern our subjective experiences, e.g. statements about one's thoughts or feelings. (But it is vacuously true that our experience has an effect on statements about our experience.) For any statement of fact, there are precisely two probabilities that that statement may literally have: 0% or 100%. That which the statement expresses either is the case, or it is not the case; it is not a matter of likelihood. Moreover, even in cases wherein the outcome may be presently undecided (e.g. future events),² surely most will concede that one's own subjective experiences have no ontological relationship to what will actually happen (again, save for events that involve one's own subjective experiences). To suppose otherwise is superstition.

Conceiving of probability as confidence, as in (2), is a far more plausible account than the one we have just described. While it is difficult to see how one's experience can actually affect a matter of fact, it is comparatively easy to see how one's experience can affect one's own confidence: both experience and confidence are subjectively determined by the experiencer.

To illustrate the difference between (1) and (2), as well to demonstrate why the latter is a better account of probability (as re Ayer's criterion of verifiability), consider the following example. A statement, *S*, says that every person in the room next to you is a philosophy major. How would we verify this, in the weak sense of the term—which is to say, render it probable via experience? We might observe a flyer on the door of the room that says “philosophy majors only.” We might discover that only philosophy majors have a key to the room. We might, finally,

² I qualify “undecided” with “may be” because I do not intend to litigate determinism here. But whether determinism is true is irrelevant. If the future is decided, then human experience *cannot* literally affect what will be the case; if the future is undecided, it is still *implausible* that human experience can literally affect what will be the case (save for those parts of what will be the case that involve subjective experiences). At the very least, the claim that experience literally affects reality seems to be the sort of empirically unverifiable statement that Ayer's criterion intends to rule out!

knock on the door and from outside verbally confirm that each person is a philosophy major. Now consider our two candidate accounts of probability. If we operate under (2), we may say that we have rendered *S* probable (and thereby verified it, in the weak sense) because in observing the three pieces of evidence, we have increased our confidence in *S* such that we are led to accept it as true. On the other hand, we cannot say that we have rendered *S* probable under (1). Because the people in the room were already either philosophy majors or not philosophy majors before we made our observations, we cannot say that we literally made *S* more likely to be true; its truth-value was already determined. On (1), then, even a basic observation statement like *S* can *never* be made probable, and thus can never be verified. A (CV) that conceives of probability as (1) would consequently be of little utility.

For the above reasons, we must hold that (2) is the more plausible account of probability. Accordingly, we may update (CV) as follows:

CV*. A statement is factually significant if, and only if, it is verifiable in the weak sense of the term—that is, if it is possible, either in theory or in practice, for experience to increase the experiencer’s confidence in the statement such that he/she is led to accept the statement as true.

With this definition in mind, there are at least two objections to which (CV*) is subject. The first is that it makes the standard for factual significance entirely subjective. Recall that what renders a statement of fact verifiable is just the possibility that experience could increase the experiencer’s confidence in the statement such that he/she would be led to accept the statement as true. This entails a concerning implication, to wit that (CV*) does not in principle preclude any *kind* of experience from being relevant to a given proposition’s verifiability. The only

constraint is that the experience in question must—and even then only in theory—help determine whether one will accept the proposition as true or reject it as false.

An example may help illustrate this point. Suppose that we are trying to discern whether the statement “there was a car crash on I-85 tonight” is factually significant. Suppose next that there is a person—let’s call him John—who firmly holds the belief that car crashes occur on I-85 on nights with full moons. Suppose finally that John observed a full moon tonight when he went out for his nightly walk. John’s experience in conjunction with his firmly held belief about full moons and car crashes has increased his confidence in the statement such that he is led to accept it as true. According to (CV*), the statement “there was a car crash on I-85 tonight” is verifiable and thereby factually significant simply by virtue of John’s cosmological observation and firmly held superstition. This is obviously absurd.

Moreover, (CV*) could rapidly render the statement “there was a car crash on I-85 tonight” unverifiable and thereby factually insignificant only by making the following revision to the example: John, for whatever reason, absolutely refuses to believe that there was a car crash on I-85 tonight. You show him photos of the crash, watch the nightly news’ coverage of the event with him, and even bring him to the scene of the accident. But no amount of evidence will convince him. (He believes it was staged, let’s say.) John’s confidence in the statement “there was a car crash on I-85 tonight” cannot even *in theory* be increased such that he is led to accept the statement as true; ipso facto we must say that this intuitively meaningful statement is factually insignificant according to (CV*).

We have just argued that (CV*)’s emphasis on individual confidence, as well as its inadequate constraint (read: none) on the nature of one’s experience by which a statement is

verified, cause verificationism to spiral into subjectivity. But the problems for Ayer's criterion do not end here. The second and even more pernicious weakness of (CV*) is that it can permit factual significance to any statement whatsoever! Recall once more that (CV*) says that a statement is factually significant iff it is possible for experience to increase the experiencer's confidence in the statement such that he/she is led to accept the statement as true. My previous objection focused on the phrase "the experiencer's confidence in the statement." Here, I will focus on the phrase "he/she is led to accept the statement as true." Much like (CV*) did not require that *experience* be of any particular kind provided that it helps one determine whether to accept a given statement as true, the criterion also does not require that *the statement* in question be of any particular kind provided that one could be led by experience to accept it as true. This means that, in principle, that statement can say anything at all.

A thought experiment will demonstrate this point.³ Suppose that there is a wise man who, when a statement is presented to him, replies in one of the following three ways: "true," "false," or "meaningless." We begin testing the reliability of the wise man's judgment, presenting him with everything from trivial statements of fact, to complex scientific hypotheses, to complete gibberish. After thousands upon thousands of tests, we observe that, so far as we can tell, the wise man has *without exception* replied "true" to statements we take to be true, "false" to statements we take to be false, and "meaningless" to statements which we take to be factually insignificant. His methods are unknown. All we know about him is that his judgment seems to be infallible.

³ This thought experiment is indebted to a similar argument offered by Edward Erwin in *The Concept of Meaninglessness*, involving a computer that reliably makes only true assertions. If this computer were to maintain its success over many years, then its assertion of any statement might provide confirming evidence for that statement (pp. 37–38).

Now suppose that, one day, we present to him for the first time Ayer's satirical example of a metaphysical pseudo-proposition: "the Absolute enters into, but is itself incapable of, evolution and progress" (qtd. in Klemke 183). To the surprise of all, the wise man replies, "True." Recall that he has never been observed to err. Further, add to this scenario any degree of conviction in the reliability of the wise man that you like—his enigmatic judgments have been used as the basis for miraculous scientific and medical discoveries, let's say. So when he replies "true" to "the Absolute enters into, but is itself incapable of, evolution and progress," this judgment is not easily dismissed. On the contrary, the wise man has been so historically reliable that you genuinely think it more likely that you have misinterpreted what seems like a nonsense statement than that he is in error. Even though you don't know what the statement means, your observation of the wise man's response in conjunction with your conviction in his reliability lead you to conclude that "the Absolute enters into, but is itself incapable of, evolution and progress" is true. According to (CV*), therefore, we must say that that intuitively nonsense statement is verifiable, and thereby factually significant. That this scenario can be modified to permit factual significance to any stock metaphysical pseudo-proposition—or, indeed, *any statement whatsoever*—has, I hope, demonstrated that Ayer's criterion of verifiability is defective.

Works Cited

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