Necessary Truth and the Existence of External Objects

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Since at least the time of Descartes, one of the most important issues facing Western philosophers has been the relationship between the internal world of individual human consciousness and the external world of physical objects. Some thinkers, most notably Berkeley and Hegel, sought to resolve the issue by altogether denying the existence of an objective world beyond sense perception. Others, such as W. V. Quine, have gone to the opposite extreme by denying the existence of consciousness, mental substances, or anything else which could be said to exist apart from the physical world. All of these views share in common the idea that some kind of polarity allegedly exists between the external and the internal, such that one is inexorably occasioned by, or derived from, the other.

I have argued elsewhere that an examination of the axioms of formal logic, rather than of the nature or structure of consciousness, may provide a clue as to the ontological status of physical objects. In what follows, I hope to draw upon and improve this idea in an effort to provide a deductive proof for the existence of physical objects apart from cognition. In so doing, my chief goal is to establish a prima facie distinction between the existence of physical objects and the cognitive realization of those objects as such. I shall not attempt to deal with broader issues pertaining to the ontological status of consciousness, cognition, and the like.

I. Strong Idealism Defined

Unlike their ancient and medieval forbearers, the philosophers of the Enlightenment were especially fascinated by the vagaries of sense perception. By shifting the focus of philosophy from reason to perceived experience, Locke, Berkeley, Hume, and their ilk radically challenged the longstanding Aristotelian correspondence theory of knowledge and its accompanying metaphysical doctrines. More importantly, they called into question the very intelligibility of a "real world" which can be said to exist independently of knowing, experiencing subjects. In an orderly, piecemeal succession, the empiricists divested epistemology of its old tokens, starting with Locke's doubting of substantial
qualities and ending with Hume's rejection of substance and mind.

Although Hume is not an idealist in the strict sense, he nonetheless provides a very good example of the kind of thinking I wish to criticize in this paper. Hume begins his Treatise of Human Nature with a detailed consideration of the origin of ideas. All perceptions, he says, can be divided into ideas and impressions. The latter are those perceptions which "enter with most force and violence," including physical sensations, desires, emotions, etc. (1:1:1). The former, in contrast, are "faint images" of impressions which emerge in the course of thinking and discourse. According to Hume, all thoughts and ideas ultimately come from impressions. We could not have ideas for things for which we have no impressions whatsoever (1:1:1).

All ideas of the mind seem to be interconnected by some universal set of principles (1:1:4). The first of these, which Hume terms resemblance, refers to the way in which particular ideas or impressions are said to be similar to other ideas or impressions. The second, contiguity, refers to the way in which particular ideas or impressions are ordered in time and space. The third, cause and effect, refers to the way in which certain ideas or impressions cause or bring about other ideas or impressions. The first two principles pertain to relations between ideas and can be divided into qualities such as identity, quality, etc. (1:1:5). Cause and effect, in contrast, pertains to all contingent matters of fact about the world (1:3:2).

Cause and effect, again, refers to relationships in which particular ideas or impressions seem to cause or occasion other ideas or impressions. Hume argues that empirical observation, rather than a priori reasoning, leads us to posit cause and effect: "Though the mind in its reasonings from causes or effects carries its view beyond those objects, which it sees or remembers, it must never lose sight of them entirely, nor reason merely upon its own ideas..." (1:3:4). The observation of causal relationships between impressions forms the basis of human experience as well as all reasoning about matters of fact (1:3:4-5).

Given that resemblance, contiguity, and causation are the only ties that unite our ideas together in consciousness, how are we to discern between true beliefs about matters of fact and fictitious beliefs? In the first place, Hume says, a belief is not the same thing as a simple idea. Rather, belief is "a particular manner
of forming an idea" which convinces the mind of some thing's existence (I:3:7). The idea, moreover, is always formed according to relational and/or causal relationships between present impressions or impressions given to us in the past (I:3:8). To put it another way, the mind forms beliefs according to the resemblance, contiguity, or causal connections which subsist among particular impressions and ideas. In cases of demonstration, truth is established precisely because falsity is unintelligible. But in cases of matters of fact, true belief is established to the extent that such a belief corresponds to present impressions, impressions given in the past, or an agglomeration of both. Thus for Hume, all human knowledge reduces to ideas; we can have no knowledge of substance.

This account of knowledge differs from that of Locke and Berkeley in a number of important ways, a few of which are certainly worth noting. For Locke, the mind can only form simple ideas from the primary substantial qualities of objects of experience, e.g., extension, numbers, the power to produce secondary qualities in minds, etc. (II:2). Locke takes for granted that minds exist and that these minds form ideas from the primary qualities of objects of experience. It follows, then, that we can know something of the substance - that is, the world outside our minds - but only through its power to produce ideas within us. For Berkeley, in contrast, we cannot even know the primary qualities of substances (I:9-10). All we know are the ideas given to the mind. It is impossible to know whether these ideas correspond to some substance separate from our own minds. Hume goes one step further then both Locke and Berkeley by suggesting that all knowledge reduces to ideas formed from impressions. We cannot even assume a "mind" to which ideas are given, for the idea of mind is not formed from present or past impressions.

For the purposes of this paper, I will refer to the aforementioned notion that all knowledge of existing things reduces to ideas as strong idealism. Some philosophers, including Kant, have attempted to refute strong idealism by suggesting that an external world must exist in order for our ideas to exist, even if the exact nature of this world remains eternally beyond our grasp. More recently, certain analytic philosophers have gone in the opposite direction by suggesting that ideas, and all attendant notions of mind, consciousness, and the like, are somehow reducible to physical or materialistic processes, thereby inverting
the nature of the problem entirely. For such philosophers, the question is how to account for the existence of the "internal world," and not vice versa. I make no attempt here to deal with either of these solutions. Rather, I want to suggest an alternate way to account for the existence of an external world beyond cognition or sense experience by examining the idea of logically necessary truth.

II. Necessary Truth and the Existence of Physical Objects

All relevant epistemological issues aside, it is generally accepted that certain truths of formal logic or mathematics, such as "2+2=4," are necessary, such that their denial implies a kind of unintelligible contradiction. To put it another way, we cannot intelligibly imagine a state of affairs in which a necessary statement such as "2+2=4" could be false, provided that the terms in question are adequately defined. At the same time, however, we can intelligibly imagine a universe which is like ours in all respects except that it does not contain any human (or, for that matter, rational) beings. The question then becomes: do logically necessary truths obtain in such a universe?

In one sense, this seems impossible, inasmuch as it is impossible to imagine any possible world in which the denial of "2+2=4" is true. But it is also clear that the very concepts (quantitative and otherwise) that are presupposed by this statement are unintelligible in the absence of rational minds to conceive them. This latter point has led some philosophers to conclude that the whole notion of necessary truth is in some sense absurd. J. S. Mill, for instance, argues that the "character of necessity ascribed to truths of mathematics, and even... the peculiar certainty attributed to them, is an illusion [because] those truths relate to, and express the properties of, purely imaginary objects" (19). Similarly, A. J. Ayer points out that the reason necessary truths are necessary is that "we cannot abandon them without sinning against the rules which govern the use of language, and so make our utterances self-stultifying" (33). But language is, of course, something which is inconceivable without the existence of beings who use language. In this sense, logically necessary truths are only necessary within a decidedly contingent context - namely, a context in which rational beings exist.

Assuming that the latter point is true, i.e., that the existence of rational beings is contingent, it follows that the existence
of any rational being X at time T is purely potential - that is, it may or may not be the case that X exists at time T. Assuming further that the aforementioned truths of logic are ontologically dependent on the existence of some rational being X, it follows that these truths may or may not obtain at time T, depending on whether X happens to exist at T. From these assumptions, it would seem to follow that in a universe such that X does not exist at time T, no logically necessary truths obtain at time T.

Even if we grant that the instantiation of logically necessary truths is ontologically dependent on the existence of some rational being X, it does not necessarily follow that there is a possible rational being X such that the existence of X could instantiate a different or even contradictory set of logically necessary truths. In fact, it seems impossible to imagine a rational being X such that the existence of X instantiates a "truth" of the form "2+2=5." Even in a state of pure potentiality, logically necessary truths seem binding on all possible rational beings. To this extent, logically necessary truths remain necessary for all possible beings, whether or not such beings ever happen to actually exist at all.

This idea implies, among other things, that the truth-value of certain logical axioms or propositions remains independent of the actual cognition of some rational being X. In other words, certain axioms or propositions remain necessarily true even if the instantiation of these axioms or propositions by some rational being X is contingent. If this is the case, it follows that the truth value of logically necessary axioms or propositions is in some sense independent of the ontological status of rational beings, possible or actual. They remain constant even in a universe in which rational beings happen not to exist.

Taken at face value, this view carries a number of difficulties. It seems absurd, for example, to suggest that "2+2=4" is a true proposition in a universe with no rational beings to instantiate notions of quantity. Notice, however, that the very construction of these arguments necessarily implies that our universe is such that at least one rational being exists (namely, the author). And while it is certainly true that the rational being in question just happens to exist (that is, exists contingently), the fact remains that he does actually exist, which means that the aforementioned logically necessary truths obtain.

Let us assume for a moment that the external world, and
all physical objects that are part of the external world, do not exist apart from the cognition of some rational being X (a position which is roughly synonymous with "strong idealism"). Most of the aforementioned logically necessary truths, especially those pertaining to mathematics, implicitly rely upon a principle of quantification, which in turn relies upon principles of identity through which physical objects are differentiated. If physical objects do not exist, then it makes no sense to speak of "identities" and, by extension, "quantities." Thus the very idea of a statement such as "2+2=4" becomes, in some sense, unintelligible.

As we have already seen, however, it is impossible for any possible rational being to come into existence and not to instantiate the aforementioned logically necessary truths. If this is the case, it follows that whenever some rational being X comes into existence at time T, it not only instantiates certain logically necessary truths, but also all the necessary preconditions involved with the instantiation of these truths. Inasmuch as the actual existence of physical objects is a precondition of the instantiation of at least some of these truths (viz., the laws of mathematics), it follows that the actual existence of some rational being X at time T necessitates the existence of physical objects. And inasmuch as at least one rational being actually exists (viz., the author), it follows that physical objects also exist.

It may be objected that the actual existence of physical objects beyond the cognition of some rational being X is not necessary for the instantiation of relevant logically necessary truths. Quantity, for instance, may be derived from "ideas" of physical objects alone, whether or not these ideas correspond to some reality outside of the cognition of some rational being X. My reply is twofold. First, on what basis can quantity be derived if ideas alone exist? On a partially materialist view, quantity can be derived from physical differences - that is, we can decide that there are two things rather than one if the things in question meet certain physical criteria (e.g., the atoms of which they are constructed are at a certain spatio-temporal distance from each other, the atoms have differing chemical make-ups, etc.). On what grounds can we possibly say of two ideas that they are distinct without positing the existence of some kind of super-ideal substance?

Second, the existence of ideas must come either from
some reality outside the cognition of some rational being X, or else from other ideas already present to that same being. If the latter is true, then the ideas in question must themselves come from other ideas, or else they must come from at least one innate idea. The former is not plausible because it leads to an endless causal chain of ideas. The latter, in contrast, needs to be accounted for according to a principle of sufficient reason. Such an idea, even if innate, must come from somewhere apart from itself. Clearly it cannot come from another idea, since it is the first idea, which means either it comes from an external world apart from cognition or else was "implanted" by some other force.

The question then becomes what this "other force" might be. If it is not part of an external world outside of cognition, then it must be some kind of "superphysical" or supernatural force. We then must decide whether the alleged existence of such a "supernatural force" carries more evidentiary weight than the alleged existence of an external, physical world. The principle of parsimony (or Ockham's razor, if you prefer) allows us to eliminate this hypothesis. There is no need to posit the existence of a supernatural force when we can just as easily account for the existence of ideas with reference to an external world which exists apart from the cognition of some rational being X.

The point is that quantity, among other things, logically entails the existence of physical objects, such that quantity cannot obtain apart from the existence of physical objects. Even in a world in which some rational being X happens not to exist, there is no state of affairs such that X could come into existence without the concomitant existence of physical objects, for these are necessitated by the concomitant instantiation of logically necessary truths. The preceding proof can be expressed in the following syllogistic form:

P1: If some rational being X exists at time T, then all logically necessary truths are instantiated.
P2: The instantiation of some logically necessary truths is ontologically dependent on the existence of physical objects apart from the cognition of some rational being X.
P3: No physical objects exist apart from the cognition of some rational being X.
P4: Some rational being X exists at time T.
Cl: Therefore, only logically necessary truths that are not ontologically dependent on the existence of physical ob-
jects apart from the cognition of some rational being X are instantiated at time T.
C2: But this is absurd (from P1 and P2).
C3: Therefore, P3 is false.
C4: Therefore, some physical objects exist apart from the cognition of some rational being X at time T.

In the foregoing proof, only a few of the premises are truly controversial. P1 seems irreproachable because its negation would entail the denial of at least some logically necessary truths, which is impossible. P2, however, depends on the aforementioned idea that certain logically necessary truths, such as the laws of mathematics, require the existence of physical objects to be intelligible. I have already addressed one possible objection to this premise; are there any others? It seems that one could deny that concepts such as quantity are ontologically dependent upon the existence of physical objects, but it is unclear exactly how this would be the case. Quantity presupposes the existence of two Xs, where X is a physical object of some kind or else an idea derived from a physical object.

The only other option is to deny the existence of cognition, in which case all physical objects exist apart from the cognition of some agent X. This option takes us beyond the purview of metaphysics and into the philosophy of mind; as such I make no attempt to deal with it here. The proof is not intended to demonstrate that all existence is reducible to physical phenomena, but rather to refute the strong idealist position by demonstrating that at least some things exist apart from the cognition of some rational being X. The question of whether cognition exists at all as a separate, non-physical phenomenon is left open. I should point out, however, that the general foundation of this proof, as well as its conclusions, seem perfectly compatible with a strong materialist view of mind and substance.

III. Conclusion
In sum, although the instantiation of logically necessary truths is ontologically dependent upon the existence of some rational being X, their necessity is such that they could not be otherwise for any possible rational being X. This implies that the actual existence of any rational being X at time T brings with it the instantiation of logically necessary truths, as well as any and all preconditions which this instantiation requires. I have argued
that the actual existence of physical objects is a precondition to the instantiation of at least some of these truths. Whether or not cognition stands in any real relationship to physical objects remains an open question. But in the meantime, the existence of logically necessary laws provides sufficient grounds for concluding that at least some physical objects exist apart from the cognition of rational beings.

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NOTES
1 Cf., e.g., W. V. Quine. The Ways of Paradox and Other Essays. New York: Random House, 1966; Ontological Relativity and Other Essays. New York: Columbia University Press, 1969. Quine is obviously only one of many modern philosophers who endorse this sort of thesis. Others worth mentioning include Gilbert Ryle, John Searle, Paul and Patricia Churchland, etc.

REFERENCES