

MODERN ACCOUNTS

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## KNOWLEDGE AND MODALITY

The prominence of the modalities (i.e., necessity and contingency) in epistemological discussions is due to the influence of Immanuel Kant (1965), who maintained that:

- (1) All knowledge of necessary propositions is a priori; and
- (2) All propositions known a priori are necessary.

Saul Kripke (1971, 1980) renewed interest in Kant's account of the relationship between the a priori and the necessary by arguing that some necessary propositions are known a posteriori and some contingent propositions are known a priori. A cogent assessment of the controversy requires some preliminary clarification.

The distinction between necessary and contingent propositions is metaphysical. A necessarily true (false) proposition is one that is true (false) and cannot be false (true). The distinction between a priori and a posteriori knowledge is epistemic. S knows a priori that p just in case: (a) S knows that p; and (b) S's justification for believing that p does not depend on experience. Condition (b) is controversial. On the traditional reading, (b) is equivalent to (c): S's belief that p is nonexperientially justified. Hilary Putnam (1983) and Philip Kitcher (1983), however, argue that (b) is equivalent to (d): S's belief that p is nonexperientially justified and cannot be defeated by experience. Albert Casullo (2003) rejects the Putnam-Kitcher reading on the grounds that it yields an analysis of a priori knowledge that excludes the possibility that someone knows a posteriori a proposition that can be known a priori.

The expression "knowledge of necessary propositions" in (1) is ambiguous. The following definitions remove the ambiguity:

- (A) S knows the *general modal status* of p just in case S knows that p is a necessary proposition (i.e., either necessarily true or necessarily false) or S knows that p is a contingent proposition (i.e., either contingently true or contingently false);
- (B) S knows the *truth value* of p just in case S knows that p is true or S knows that p is false (assuming truth is always bivalent);
- (C) S knows the *specific modal status* of p just in case S knows that p is necessarily true or S knows that p is necessarily false or S knows that p is contingently true or S knows that p is contingently false.

(A) and (B) are logically independent. One can know that Goldbach's Conjecture is a necessary proposition but not know whether it is true or false. Alternatively, one can know that some mathematical proposition is true but not know whether it is a necessary proposition or a contingent proposition. (C), however, is not independent of (A) and (B). One cannot know the specific modal status of a proposition unless one knows both its general modal status and its truth value.

(1) is crucial for Kant, because it is the leading premise of his only argument in support of the existence of a priori knowledge:

- (1) All knowledge of necessary propositions is a priori.
- (3) Mathematical propositions, such as that  $7 + 5 = 12$ , are necessary.
- (4) Therefore, knowledge of mathematical propositions, such as that  $7 + 5 = 12$ , is a priori.

(1), however, is ambiguous. There are two ways of reading it:

- (1T) All knowledge of the *truth value* of necessary propositions is a priori, or
- (1G) All knowledge of the *general modal status* of necessary propositions is a priori.

The argument is valid only if (1) is read as (1T). Kant, however, supports (1) with the observation that although experience teaches that something is so and so, it does not teach us that it cannot be otherwise. Taken at face value, this observation states that experience teaches us that a proposition is true and that experience does not teach us that it is necessary. This supports (1G), not (1T).

Kripke rejects (1) by offering examples of necessary truths that are alleged to be known a posteriori. First, he maintains that if P is an identity statement between names, such as "Hesperus = Phosphorus," or a statement asserting that an object has an essential property, such as "This table is made of wood," then one knows a priori that:

- (5) If P then necessarily P.

Second, he argues that because one knows by empirical investigation that Hesperus = Phosphorus and that this table is made of wood, one knows a posteriori that:

- (6) P.

Kripke concludes that one knows by *modus ponens* that:

- (7) Necessarily P.

(7) is known a posteriori because it is based on (6), which is known a posteriori.

How do Kripke's examples bear on (1)? Once again, a distinction must be made between (1G) and (1T). Kripke's examples, if cogent, establish that (1T) is false: They establish that one knows a posteriori that some necessary propositions are true. They do not, however, establish that (1G) is false: They do not establish that one knows a posteriori that some necessary propositions are necessary. It may appear that Kripke's conclusion that one has a posteriori knowledge that necessarily P entails that (1G) is false. Here a distinction must be made between (1G) and:

- (1S) All knowledge of the *specific modal status* of necessary propositions is a priori.

Kripke's examples establish that (1S) is false: They establish that one knows a posteriori that some necessary propositions are necessarily true. Because knowledge of the specific modal status of a proposition is the conjunction of knowledge of its general modal status and knowledge of its truth value, it follows from the fact that one's knowledge of the truth value of P is a posteriori that one's knowledge of its specific modal status is also a posteriori. However, from the fact that one's knowledge of the specific modal status of P is a posteriori, it does not follow that one's knowledge of its general modal status is also a posteriori.

(1G) has not gone unchallenged. Kitcher (1983) argues that even if knowledge of the general modal status of propositions is justified by nonexperiential evidence, such as the results of abstract reasoning or thought experiments, it does not follow that such knowledge is a priori because the nonexperiential justification in question can be defeated by experience. Casullo (2003) rejects (1G) on the grounds that the Kantian contention that experience can provide knowledge of only the actual world overlooks the fact that much practical and scientific knowledge involves counterfactual conditionals, which provide information that goes beyond what is true of the actual world.

Kripke also argues that some contingent truths are known a priori. His examples are based on the observation that a definite description can be employed to fix the reference—as opposed to give the meaning—of a term. Consider someone who employs the definition description "the length of S at  $t_0$ " to fix the reference of the expression "one meter." Kripke maintains that this person knows, without further empirical investigation, that S is one meter long at  $t_0$ . Yet the statement is contingent

because “one meter” rigidly designates the length that is in fact the length of S at  $t_0$  but, under different conditions, S would have had a different length at  $t_0$ . In reply, Alvin Plantinga (1974) and Keith Donnellan (1979) contend that, without empirical investigation, the reference fixer knows that the sentence “S is one meter long at  $t_0$ ” expresses a truth, though not the truth that it expresses. Gareth Evans (1979) disputes this contention.

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## KNOWLEDGE AND TRUTH, THE VALUE OF

Questions concerning the value of knowledge and truth range from those that suggest complete skepticism about such value to those that reflect more discriminating concerns about the precise nature of the value in question and the comparative judgment that one of the two is more valuable than the other.

### THE COMPARATIVE QUESTION AND THE PRAGMATIC ACCOUNT

The history of epistemology has its conceptual roots in the dialogues of Plato, and the question of the value of knowledge and truth arises there as well. In Plato’s *Meno*, Socrates and Meno discuss a number of issues, including the issue of the nature and value of knowledge. Socrates

raises the question of the value of knowledge, and Meno answers by proposing a pragmatic theory: knowledge is valuable because it gets us what we want. Socrates immediately proposes a counterexample, to the effect that true opinion would work just as well: If you want to get to Larissa, hiring a guide who has a true opinion of how to get there will have the same practical results as hiring a guide who knows the way. Meno then voices a philosophically deep perplexity, wondering aloud why knowledge should be more prized than true opinion and whether there is any difference between the two. Meno thus questions two assumptions, the first being the assumption that knowledge is more valuable than true opinion, and the second that knowledge is something more than true opinion.

Socrates’s counterexample suggests another: If you want to get to Larissa, it matters not whether your guide has true opinion or merely empirically adequate views on the matter. To see the counterexample, we need to understand that an empirically adequate theory is one that “saves the appearances,” in other words, one that would never be refuted by any sensory experience. The simplest way to see that such a theory is not the same thing as a true theory is to consider skeptical scenarios such as René Descartes’s evil demon world. The denizens of such a world will have roughly the same views as we do, and their views will be as empirically adequate as ours. Since the demon is so skillful at carrying out his intentions, however, their views will be false even if ours are true. In such a world, there are no guides with true opinions about how to get to Larissa. Instead, the best one could hope for is a guide who has an empirically adequate view of the matter. Yet, if we compare the two situations, the one in the actual world where the hired guide has a true opinion, and the one in the demon world where the hired guide has only an empirically adequate opinion, no suffering accrues to the traveler in the demon world that does not also accrue to the traveler in the actual world, and no benefits are experienced by the traveler in the demon world that are not also experienced by the traveler in the actual world. That is to say, their experiences are indistinguishable, leaving us to wonder what practical advantage truth has over empirical adequacy.

### SKEPTICISM ABOUT THE VALUE OF KNOWLEDGE AND TRUTH

Besides this Platonic threat to the value of knowledge and truth, there are other threats. One arises from the specter of skepticism. If we grant that there is no adequate answer to the skeptic, we might have the experience of philo-