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A PRIORI KNOWLEDGE AND THE SCOPE OF PHILOSOPHY*

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Must philosophy rely substantively on science? If philosophy and science conflict, could philosophy ever have greater authority? I wish to recommend two theses which, though currently unfashionable, have been the dominant view historically:

> **The Autonomy of Philosophy** Among the central questions of philosophy[1] that can be answered by one standard theoretical means or another, most can in principle be answered by philosophical investigation and argument without relying substantively on the sciences.
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> **The Authority of Philosophy** Insofar as science and philosophy purport to answer the same central philosophical questions, in most cases the support that science could in principle provide for those answers is not as strong as that which philosophy could in principle provide for its answers. So, should there be conflicts, the authority of philosophy in most cases can be greater in principle.

There are two largely independent defenses of the Autonomy and Authority of Philosophy – the Argument from Evidence and the Argument from Concepts.[2] The latter offers an analysis of what it is to possess a concept determinately, an analysis which, together with the fact that the central concepts of philosophy can be possessed determinately, implies Autonomy and Authority. In this paper I will explain and defend (all too briefly, I am afraid) the Argument from Evidence:

(1) Intuitions are evidence.

(2) Modal reliabilism is the correct explanation of why intuitions are evidence.

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(3) Modal reliabilism implies the Autonomy and Authority of Philosophy as long as scientific essentialism is no barrier.

(4) Scientific essentialism is no barrier.

∴ The Autonomy and Authority of Philosophy hold.

Modal reliabilism, if correct, would provide the foundation of a general account of *a priori* knowledge. That, however, lies beyond the scope of this paper.

1. INTUITIONS ARE EVIDENCE

Our Standard Justificatory Procedure. I begin by reviewing some plain truths about the procedure we standardly use to justify our beliefs and theories. The first point is that we standardly use various items – for example, experiences, observations, testimony – as evidence. Now at one time many people accepted the doctrine that knowledge is justified true belief. But today we have good evidence to the contrary, namely, our intuitions that situations like those described in the Gettier literature are possible and that the relevant people in those situations would not know the things at issue. This and countless other examples show that, according to our standard justificatory procedure, *intuitions* are used as evidence (or as reasons). The evidential use of intuitions is ubiquitous in philosophy; recall just as few further examples: Chisholm's perceptual-relativity refutation of phenomenalism, Putnam's perfect-pretender refutation of behaviorism, all the various twin-earth examples, Burge's arthritis example, multiple-realizability, etc., etc. Each of these involves the evidential use of intuitions about certain possibilities and about whether relevant concepts apply to those possibilities.

Among our various theoretical beliefs, some are deemed to have *a priori* justification. This occurs for beliefs arrived at by a procedure that suitably approximates the following idealization: (1) canvassing intuitions; (2) subjecting those intuitions to dialectical critique; (3) constructing theories that systematize the surviving intuitions; (4) testing those theories against further intuitions; (5) repeating the process until equilibrium is approached.[3] The method philosophers standardly use to establish answers to central philosophical questions closely resembles this procedure of *a priori* justification. Perhaps the

most important difference is that philosophers make occasional use of empirical evidence – specifically, we invoke actual "real-life" examples and actual examples from (the history of) science. In virtually all cases, however, use of such examples can be "modalized away."[4] That is, such examples can, at least in principle, be dropped and in their place one can use *a priori* intuitions affirming corresponding (not to say identical) *possibilities* which have equivalent philosophical force. (I will return to this point in section 4.)

Phenomenology of Intuitions. My next step is to say something about what is meant by intuition in this context. We do not mean a magical power or inner voice or anything of the sort. For you to have an intuition that A is just for it to *seem* to you that A. Here 'seems' is understood, not as a cautionary or "hedging" term, but in its use as a term for a genuine kind of conscious episode. For example, when you first consider one of de Morgan's laws, often it neither seems to be true nor seems to be false; after a moment's reflection, however, something happens: it now seems true; you suddenly "just see" that it is true. Of course, this kind of seeming is *intellectual*, not sensory or introspective (or imaginative). The subject here is *a priori* (or rational) intuition.

Intuition must be distinguished from belief: belief is not a seeming; intuition is. For example, there are many mathematical theorems that I believe (because I have seen the proofs) but that do not *seem* to me to be true and that do not *seem* to me to be false; I do not have intuitions about them either way. Conversely, I have an intuition – it still *seems* to me – that the naive comprehension axiom of set theory is true; this is so despite the fact that I do not believe that it is true (because I know of the set-theoretical paradoxes).[5] This case evidently shows that the classical modern infallibilist theory of intuition is incorrect. There is a rather similar phenomenon in sensory (vs. intellectual) seeming. In the Müller-Lyer illusion, it still *seems* to me that one of the arrows is longer than the other; this is so despite the fact that I do not believe that it is (because I have measured them). In each case, the seeming (intellectual or sensory) persists in spite of the countervailing belief.

This brings up a closely related distinction between belief and intuition. Belief is highly plastic. Using (false) appeals to authority,

cajoling, intimidation, brainwashing, and so forth, you can get a person to believe almost anything, at least briefly. Not so for intuitions. Although there is disagreement about the degree of plasticity of intuitions (some people believe they are rather plastic; I do not), it is clear that they are inherently far more resistent to such influences than beliefs. Intuitions are also distinct from judgments, guesses, and hunches. There are significant restrictions on the propositions concerning which one can have intuitions; by contrast, there are virtually no restrictions on the propositions concerning which one can make a judgment or a guess or have a hunch. For related reasons, intuition is also different from common sense.

(Incidentally, the work of cognitive psychologists such as Wason, Johnson-Laird, Eleanor Rosh, Richard Nisbett, D. Kahneman and A. Tversky tells us little about intuition in the restricted use of the term relevant here; they have simply not been concerned with intuitions in this sense.)

The Argument from Epistemic Norms. Granted that our standard justificatory practice presently *uses* intuitions as evidence, why should this move radicals who just boldly deny that intuitions really *are* evidence? In "The Incoherence of Empiricism" I argued that denying that intuitions have evidential weight leads one to epistemic self-defeat. The purpose of this style of argument is to persuade even those under the spell of radicalism. To give a feel for this style of argument I will now sketch one of three such arguments against radical empiricism, the view that *only* (phenomenal) experiences and/or observations have genuine evidential weight.[6]

Consider an absurd position like *visualism*, the view that countenances only visual experience as evidence and that arbitrarily excludes nonvisual experiences (tactile, auditory, etc.). How is radical empiricism relevantly different? To avoid begging the question, radical empiricists must answer *from within* the standard justificatory procedure. The question to consider, therefore, is this: when one implements the standard justificatory procedure's mechanism of self-criticism, does intuition – in contrast to nonvisual experience – get excluded as a source of evidence?

In relation to "three *c*s" – *consistency, corroboration,* and *confirmation* – intuition is quite unlike spurious sources of evidence

such as tea leaves, tarot, oracles, the stars, birds, and the like. First, a person's concrete-case intuitions are largely consistent with one another. (We confine ourselves to concrete-case intuitions, for it is to these that the standard justificatory procedure assigns primary evidential weight.) To be sure, a given person's concrete-case intuitions occasionally appear to be inconsistent with one another, but so do our observations and even our pure sense experiences. This is hardly enough to throw out observation and sense experience as sources of evidence. Moreover, for each of these sources – including intuition – most apparent conflicts can be reconciled by standard rephrasal techniques (for an example, see section 4). Second, although different people do have conflicting intuitions from time to time, there is an impressive corroboration by others of one's elementary logical, mathematical, conceptual, and modal intuitions. The situation is much the same with observation: different people have conflicting observations from time to time, but this is hardly enough to throw out observation as a source of evidence. Third, unlike tea-leaf reading, intuition is seldom, if ever, disconfirmed by our experiences and observations. The primary reason is that the contents of our intuitions – whether conceptual, logical, mathematical, or modal – are by and large independent of the contents of our observations and experiences. The one potential exception involves our modal intuitions, but virtually no conflicts arise there because our intuitions about what experiences and observations are logically (metaphysically) possible are so liberal.

There is another kind of conflict, namely, conflict between certain *theories* and certain intuitions (e.g., intuitions about simultaneity and Euclidean geometry). Do such conflicts overturn intuition as a source of evidence? No, for there are analogous conflicts between certain theories and certain observations (e.g., observations that the sun is about the same size as the moon and that it moves across the sky). Likewise, experience and testimony come into conflict with certain theories. Such conflicts are not enough to overturn either of these sources of evidence. As a matter of fact, however, most of our elementary conceptual, logical, and numerical intuitions are not in conflict with, but are actually affirmed by, our empirical theories. And modal and higher mathematical intuitions, while not affirmed by our empirical theories, are for the most part not inconsistent

with them. Moreover, our best comprehensive theory based on *all* standard sources of evidence, *including intuition*, affirms most of our modal and higher mathematical intuitions. This should be no surprise since it begins by including intuitions as evidence.

If radical empiricists are to try to overthrow intuition by means of the standard justificatory procedure's mechanism for self-criticism, they have only one alternative. They must invoke the comprehensive theory that one would formulate if one admitted only those sources of evidence *other than* intuition. Characterized more abstractly, this method of challenging standard sources of evidence goes as follows. One formulates one's best comprehensive theory on the basis of the standard sources of evidence that one is not challenging. If the resulting theory deems the omitted sources not to be reliable, then they are discounted as sources of evidence.

This method is appropriate in some cases, for example, to challenge as a source of evidence the hitherto uncritically accepted pronouncements of an established political authority (reminiscent of the Wizard of Oz). However, there are cases in which this method does not work. For example, it may not be used by "visualists" to challenge other modes of experience (tactile, auditory, etc.) as sources of evidence. Neither vision nor touch may be used in this way to override the other as a source of evidence. To be a source of evidence, neither requires affirmation by the best comprehensive theory based on other sources of evidence.

The difference between the political-authority case and the visualism case is plain. The political authority is *intuitively not as basic* a source of evidence as the sources of evidence that are being used to eliminate it (i.e., experience, observation, etc.). By contrast, vision and touch are *intuitively equally basic* sources of evidence. The standard justificatory procedure permits us to apply the present method against a currently accepted source of evidence if and only if *intuitively* that source is not as basic as the sources of evidence being used to challenge it.[7]

So in the radical empiricists' effort to eliminate intuition as a source of evidence, the standard justificatory procedure would warrant this move only if we had intuitions to the effect that intuition is a less basic source of evidence than experience and/or observation, one requiring auxiliary support from the best comprehensive

theory based exclusively on these other sources of evidence. But when we consider relevant cases, we see that we do not have such intuitions. For example, suppose a person has an intuition, say, that if P then not not P; or (in your favorite Gettier example) that the person in question would not know; or that a good theory must take into account *all* the evidence; and so forth. Nothing more is needed. Intuitively, these intuitions are evidentially as basic as evidence gets. They are intuitively as basic as experiences, much as tactile experiences are intuitively as basic as visual experiences. In consequence, the present method for challenging a source of evidence cannot be used against intuition, any more than it can be used against, say, touch or vision.[8]

Thus, intuition survives as a genuine source of evidence when one applies the standard justificatory procedure's mechanism for self-criticism. We have not been able to find a relevant difference between radial empiricism, which excludes intuition as a source of evidence, and various preposterous theories (e.g., visualism) that arbitrarily exclude other standard sources of evidence (e.g., touch). But, surely, these preposterous theories are not justified. So radical empiricism is not justified, either.

There is a way to strengthen this argument. Suppose that in our justificatory practices we were to make an arbitrary departure from our epistemic norms. There would then be *prima facie* reason to doubt that the theories we would formulate by following the non-standard procedure are justified. Since radical empiricists make an arbitrary departure form our epistemic norms, what can they do to overcome this reasonable doubt in their own case? They are caught in a fatal dilemma. On the one hand, they could invoke theories arrived at by following the standard justificatory procedure, with its inclusion of intuitions as evidence. But, by the radical empiricists' own standards, these theories are not justified. So this avenue is of no help. On the other hand, they could invoke theories arrived at by following their radical empiricist procedure. But this would be of no help, either. For, as we have seen, there is reasonable doubt that, by following that procedure, one obtains justified theories. To overcome this doubt, one may not invoke the very theories about whose justification there is already reasonable doubt. That would only beg the question. Either way, therefore, radical empiricists are

unable to overcome the reasonable doubt that their procedure leads to justified theories. So the reasonable doubt stands.

Our epistemic situation is in this sense "hermeneutical": when one makes an arbitrary departure from it, reasonable doubts are generated, and there is in principle no way to overcome them. This is the fate of radical empiricism. Only the standard justificatory procedure escapes this problem: because it conforms to – and, indeed, constitutes – the epistemic norm, there is no *prima facie* reason to doubt that the theories it yields are justified; so the problem never arises.

2. EXPLANATION OF WHY INTUITIONS ARE EVIDENCE

What explains why intuitions are evidence? In "Philosophical Limits of Scientific Essentialism" I argued that the only adequate explanation is some kind of truth-based, or reliabilist, explanation. In *Philosophical Limits of Science* I develop this argument in detail, dealing there with various alternative explanations – pragmatist, coherentist, conventionalist, and rule-based (or practice-based). In the present context, I will assume that these arguments are successful and that we must turn to a truth-based explanation.

Reliabilism has been associated with analyses of knowledge and justification, analyses which most philosophers today reject. Our topic, however, is not knowledge or justification but rather evidence. This difference is salutary, for here reliabilism promises to be less problematic. But not as a *general* theory of evidence: sources of evidence traditionally classified as derived sources are subject to counterexamples much like those used against reliabilist theories of justification. For example, testimony would still provide a person with evidence (reasons to believe) even if it were really just systematic undetectable lying. So reliability is not a necessary condition for something's qualifying as a source of evidence. Nor is reliability a sufficient condition for something's qualifying as a source of evidence: as in the case of justification, such things as nomologically reliable clairvoyance, telepathy, dreams, hunches, etc. are *prima facie* counterexamples.

The natural response to these counterexamples is to demand only that *basic* sources of evidence be reliable: something is a derived

source of evidence relative to a given subject iff it is deemed (perhaps unreliably) to have a reliable tie to the truth by the best comprehensive theory based on the subject's basic sources of evidence.[9] Let us suppose that experience and intuition are our basic sources[10] and that all other sources are derived. The above counterexamples would not then fault this analysis of derived sources of evidence. In the case of undetectable lying, testimony would now rightly be counted as a source of evidence, for the subject's best comprehensive theory based on basic sources (experience and intuition) would deem it to have a reliable tie to the truth (even if it in fact does not because of the envisaged lying). In the case of spurious derived sources (reliable clairvoyance, telepathy, dreams, hunches, etc.), if one has not affirmed their reliability by means of one's best comprehensive theory based on one's basic sources, their deliverances would rightly not qualify as evidence.

In this setting, reliabilism is restricted to basic sources of evidence: something is a basic source of evidence iff it has a certain kind of reliable tie to the truth. The fundamental question then concerns the character of this tie. Is it a contingent (nomological or causal) tie? Or is it some kind of strong necessary tie?

Contingent Reliabilism. On this account, something counts as a basic source of evidence iff there is a nomologically necessary, but nevertheless contingent, tie between its deliverances and the truth. This account, however, is subject to counterexamples of the sort which faulted the original sufficiency condition above (nomologically reliable telepathy, clairvoyance, guesses, hunches, etc.). Consider a creature who has a capacity for making reliable telepathically generated guesses. Phenomenologically, these guesses resemble those which people make in blind-sight experiments. The guesses at issue concern necessary truths of some very high degree of difficulty. These truths are known to the beings on distant planet who have arrived at them by ordinary *a priori* means (theoretical systematization of intuitions, proof of consequences therefrom, etc.). These beings have intelligence far exceeding that of our creature or anyone else coinhabiting his planet. Indeed, the creature and his coinhabitants will never be able to establish any of these necessary truths (or even assess their consistency) by ordinary *a priori* means. Finally, suppose that the

following holds as a matter of nomological necessity: the creature guesses that p is true iff p is a necessary truth of the indicated kind and the creature is trying to make a guess as to whether p is true or false. But, plainly, guessing would not qualify as a basic source of evidence for the creature, contrary to contingent reliabilism.[11]

Modal Reliabilism. Given that contingent reliabilism fails, we are left with modal reliabilism, according to which something counts as a basic source iff there is some kind of strong modal tie between its deliverances and the truth. This thesis provides an invitation to search for the weakest modal tie to the truth sufficiently rich to explain the evidential status of our basic sources of evidence. In this paper I will attempt this only approximately and only for the case of intuitions.[12]

The explanation of the evidential status of intuitions requires a modal tie between intuitions and the truth which is strong enough to block counterexamples, such as those which beset contingent reliabilism. At the same time, if there is a modal tie which does this and which is weaker than infallibilism, we should adopt it. This suggests that we make the strong modal tie to the truth *dialectical and holistic* rather than local:

> For suitably good cognitive conditions, it is necessary that, if while in such conditions a subject goes through the whole procedure of *a priori* justification (described in section 1), then most of the propositions derivable from the resulting comprehensive theoretical systematization of the subject's intuitions would have to be true.

My hypothesis is that something like this modal tie is the sort we are seeking. Of course, this modal tie would be vacuous and the associated explanation of the evidential status of intuitions would fail if it were not possible for some subjects to be in cognitive conditions of the quality indicated. This possibility, and the associated modal tie to the truth, will be important in what follows next.

3. DERIVATION OF THE AUTHORITY AND AUTONOMY OF PHILOSOPHY

It is *necessary* that the comprehensive theoretical systematization of a subject's intuitions in cognitive conditions of the indicated quality

is largely true (i.e., most of the propositions derivable from it are true). No such necessity ever holds for science. No matter how good the cognitive conditions, it is always *possible* that scientific theories arrived at in those conditions are largely mistaken. Why? For all the standard reasons – undetectably unrepresentative samples, non-simple natural laws, distorting perceptual media – not to mention too few or malfunctioning sense organs, hallucinations, vats, etc. Because of this, a comprehensive theoretical systematization of intuitions in the indicated cognitive conditions would have an in principle greater epistemic authority. But the methods by which that theoretical systematization would have been arrived at are just the standard methods of philosophy; they include no substantive reliance on science. Now suppose that the indicated theoretical systematization of intuitions would include answers to most of the central questions of philosophy that can be answered by one standard theoretical means or another. Then, given that the epistemic support for this theoretical systematization is greater in principle than anything science could achieve in support of its theories, the thesis of the Authority of Philosophy would hold.

This argument is based on the supposition that the indicated theoretical systematization of intuitions would include answers to most of the central questions of philosophy which can be answered by one standard theoretical means or another. This supposition is basically the thesis of the Autonomy of Philosophy. The Argument from Concepts will provide perhaps the most conclusive defense of this thesis. But we are able to mount an independent defense right now.

Consider the intuitions that are the inputs when a subject engages in the indicated process. They include a wide range of intuitions about matters bearing on central questions of philosophy. What level of cognitive conditions would be required to insure the strong modal tie – that is, to insure that, necessarily, most of the propositions derivable from the resulting theoretical systematisation would be true? Presumably, it would be a high level. But as cognitive conditions (notably, attentiveness and intelligence) improve, the scope of one's intuitions increases. As a result, at the indicted high level of cognitive conditions, the scope of the intuitions that would be the inputs for the process would be very wide. It is extremely plau-

sible that they would have implications for most central questions of philosophy. (In fact, our own intuitions already do.) What, then, could prevent the resulting theoretical systematization from giving answers to these questions? I know of nothing that could. But there are two nagging worries, namely, that inevitable limitations on intelligence and/or scientific essentialism might somehow constitute barriers.

Consider the worry about limitations on intelligence. Most of the central questions of philosophy do not seem to be the sort of questions requiring infinitary intelligence (e.g., for doing infinitary proofs, infinitary computations, etc.); some finite level (perhaps well beyond ours) ought to suffice. (In the Argument from Concepts I give a positive theoretical argument which insures that, no matter how high, the requisite level of intelligence must be possible, so this finiteness point is not essential.) If this is right, the issue comes down to the question of what level of finitary intelligence would be required (for having a sufficiently wide range of intuitions) to yield Autonomy. Is the level of intelligence needed to underwrite the Authority of Philosophy enough for this? Since the intelligence needed for Authority is very high, it seems to me that it ought to be enough. But suppose not; suppose some higher but nevertheless finite level of intelligence is needed. Intuitively, however, for any finite level of intelligence, it is possible for some being to be that intelligent. So, if there were a barrier to Autonomy, it would have to be something other than intelligence. Someone might respond that this intuition ought not be honored. But on what ground? There is no even faintly credible ground besides one associated with scientific essentialism, namely, that this intuition is really only an intuition of the kind of epistemic possibility which is so central to the defense of scientific essentialism. But this intuition is expressed in semantically stable terms, so scientific essentialists are committed to accepting it at face value, as I will argue in the next section.

This leaves us with the general scientific essentialist worry. Perhaps, as cognitive conditions (intelligence, attentiveness, etc.) improve, the scope of intuitions reaches a limit (or even narrows). Questions beyond that limit are scientific questions epistemically on a par with the question of the chemical composition of water, the analysis of heat, etc. In the next section I will argue that this is com-

pletely mistaken. If the argument is successful, we will be entitled to conclude that there is no barrier to having intuitions of sufficiently wide scope to underwrite the Autonomy of Philosophy.

4. SCIENTIFIC ESSENTIALISM IS NO BARRIER

Scientific essentialism (SE) is the doctrine that there are necessities (e.g., that water = H_2O) that are knowable only with the aid of empirical science. The arguments supporting SE rely on intuitions; without them SE would be unjustified. (I defend this claim in detail in "Philosophical Limits of Scientific Essentialism".) For example, the famous twin-earth intuition concerning water, H_2O, and XYZ. But there is a problem. Before the advent of SE, we had a host of anti-SE intuitions, for example, the intuition that it could have turned out that some samples of water contained no hydrogen. What are we to make of the conflict between pro-and anti-SE intuitions?

Rephrasal Strategies. Proponents of SE have two responses. First, they could simply declare that anti-SE intuitions are mistaken whereas their own pro-SE intuitions are correct. But critics of SE could simply meet this response by stating that things are the other way around. The result would be a stalemate. To avoid it, proponents of SE must turn to the second response, according to which widespread conflict among our intuitions is only an appearance. All, or most, of our intuitions are correct. Despite their correctness, however, many are *misreported.* When we rephrase our (apparently) anti-SE intuitions to make them consistent with our pro-SE intuitions, we succeed. But when we try to rephrase the latter to make them consistent with the former, we fail. Accordingly, the stalemate is broken in favor of SE.

According to Kripke, when we report our pro-SE intuitions, what we say is strictly and literally true, and we are reporting ordinary possibilities. But when we report our apparently anti-SE intuitions, we confuse ordinary possibility with the possibility of a certain kind of epistemic situation (see Kripke, pp. 103–4). Consider an example. When we say 'It could have turned out that some samples of water contained no hydrogen', what we say is strictly and literally false. The intuition is true but incorrectly reported. The correct report

would be something like this: it is possible for there to be a language group which is in an epistemic situation qualitatively identical to ours but which uses the expressions 'water' and/or 'hydrogen' to mean something other than what we do. This possibility is consistent with the SE thesis that, necessarily, water = H_2O. At the same time, when anti-scientific-essentialists try to use this rephrasal strategy to deflate pro-SE intuitions (e.g., the twin-earth intuition), they fail. (This matter is discussed at length in my "Mental Properties.") This and other examples lead to the following general schema for applying the rephrasal strategy: ⌜It could have turned out that A⌝ is to be rephrased as ⌜It is possible that a language group in an epistemic situation qualitatively identical to ours would make a true statement by asserting ⌜A⌝ with normal literal intent⌝.

Semantic Stability. The rephrasal strategy suggests a distinction between *semantically stable* and *semantically unstable* expressions. An expression is semantically stable iff, necessarily, in any language group in an epistemic situation qualitatively identical to ours, the expression would mean the same thing. An expression is semantically unstable iff it is possible for it to mean something different in some language group whose epistemic situation is qualitatively identical to ours. Of course, 'qualitatively identical epistemic situation' must be understood in the intended way.[13]

Presumably an expression is semantically unstable iff the external environment makes some contribution to its meaning. Natural kind terms are paradigmatic – 'water', 'gold', 'heat', 'beech', 'elm', etc. Logical, mathematical, and a great many philosophical terms, by contrast, are semantically stable: the external environment makes no such contribution. For example, 'some', 'all', 'and', 'if', 'is identical to', 'is', 'necessarily', 'possibly', 'true', 'valid', '0', '1', '+', '÷', 'ϵ'; 'property', 'quality', 'quantity', 'relation', 'proposition', 'state of affairs', 'object', 'category', etc. It seems clear that all these are semantically stable: any language group in an epistemic situation qualitatively identical to ours would mean what we mean by these "formal" expressions.

How is the list to be continued? My hypothesis is that most, if not all, of the central terms of philosophy are semantically stable: 'conscious', 'sensation', 'pleasure', 'pain', 'emotion', 'think', 'believe',

'desire', 'decide', 'know', 'reason', 'evidence', 'justify', 'understand', 'explain', 'purpose', 'good', 'fair', 'ought'. Case by case, each of these intuitively is semantically stable. Consider 'pain', for example. If there were a language group in an epistemic situation *qualitatively identical* to ours, they would use 'pain' to mean pain. 'Pain' is a term for a certain felt quality; our counterparts in a language group whose epistemic situation is *qualitatively identical* would have to be using 'pain' for the *identical quality*.

Notice that I did not say that *all* central philosophical terms are semantically stable. It might be held that there are uses of 'time', 'space', 'probable', 'cause', and 'matter' which are semantically unstable. Even if there are, however, there exist other uses – seen in expressions like 'a kind of time', 'a kind of space', etc. – which are semantically stable. These *generic* uses occur in sentences such as 'Euclidean space is a possible kind of space', 'Newtonian time is a possible kind of time', etc. which are semantically stable sentences. In any language group in an epistemic situation qualitatively identical to ours, these sentence would mean the same as they mean for us and presumably would be true, just as they are for us. These generic uses are sufficient, I believe, to underwrite a general philosophy of space and time, probability, etc.

With this qualification in mind, we can state my hypothesis thus: most of the central terms of philosophy are semantically stable or else have generic uses which are semantically stable. Case by case, intuitions support this hypothesis. To deny it would be *ad hoc* unless accompanied by argument; I know of none which is not tendentious or question-begging. Unless and until a successful argument is found, we should accept the hypothesis.

Limits of Scientific Essentialism. This hypothesis is coupled with a second, namely, that scientific essentialism holds only for semantically unstable expressions. There are several arguments for the second hypothesis. The first, which I will now sketch, is a generalization on the argument from "Mental Properties" and has to do with the way one argues for SE in the case of particular expressions. (Another argument is that the most plausible explanation of certain puzzling patterns in our intuitions, including in particular pro- and anti-SE intuitions, implies the hypothesis. A third is that the analysis

of what it is to possess a concept determinately implies the hypothesis. I discuss these two lines of defense in "Philosophical Limits of Scientific Essentialism".)

Consider how one argues for SE in a particular case, for example, the cogent SE argument that, necessarily, water = H_2O. The argument consists of two steps. First, pro-SE intuitions supporting the identity are elicited: in all known cases, these intuitions either are or can be reworked into twin-earth style intuitions. Second, it is shown that the rephrasal strategy can be used to deflate the force of our anti-SE intuitions but that, when anti-scientific-essentialists attempt to use it to deflate the force of our pro-SE intuitions (i.e., the intuitions elicited in step one), they fail. Because both steps evidently succeed, one may conclude that SE holds for 'water'.

Now consider some semantically stable term t. To show that SE holds for t, one would need to go through both steps. The problem is that *both steps fail* for all semantically stable terms t. In connection with the first step, consider the t-analogue of the twin-earth argument for 'water'. We are to contemplate the possibility of another planet (or possible world) macroscopically like earth but microscopically different. We are to consider items here to which t applies, and we are then to ask whether, intuitively, t would fail to apply to the corresponding items on the hypothetical planet (in the possible world). The question is outlandish if t is a "formal" term, that is, an expression of the following sort: 'is identical to', 'is', 'necessarily', 'possibly', 'true', 'property', 'quality', 'quantity', 'relation', 'proposition', 'state of affairs', 'substance', 'event', 'category', etc. For example, there are properties here; could there fail to be properties there?!

What about semantically stable expressions that are not "formal" but rather "contentful"? Consider 'conscious', for example. The following would be the 'conscious'-analogue of the original twin-earth argument for 'water'. Suppose that on earth all and only things that are conscious have a certain microstructure, say, "Con-fibers" (which are composed ultimately of hydrogen, oxygen, carbon, etc.). Consider a twin earth on which our Doppelgängers display "consciousness"-behavior exactly like ours. It turns out, however, that, whereas our consciousness – and our associated "consciousness"-behavior – co-occurs with firing Con-fibers, the

"consciousness"-behavior of our Doppelgängers co-occurs instead with firing Con_{te}-fibers (composed ultimately of X, Y, Z, etc.). Would we say that these creatures are conscious? To be sure, we would not be *certain* that they are conscious; macroscopic behavioral criteria never entail that a mental predicate applies. Nevertheless, *it would not be counterintuitive to say that they are conscious.* Note the contrast with water. It would be counterintuitive to say that samples of XYZ on twin earth are samples of water. This intuition is the essential first step of the SE argument concerning 'water'. The analogous intuition concerning 'conscious' is simply *missing*! Accordingly, the essential first step of the argument that SE applies to 'conscious' cannot even get off the ground.

I come now to the second step in the SE argument, namely, that anti-SE intuitions can be neutralized by means of the rephrasal strategy. My argument against this has two stages.

First, suppose that the intuitions in questions are expressed using *only* semantically stable terms. Then they will retain their original force even upon rephrasal. Suppose, for example, that an intuition is originally reported with a sentence ⌜It is possible that S⌝ consisting entirely of semantically stable expressions. Then (by the definition of semantic stability) any language group in an epistemic situation qualitatively identical to ours would mean what we mean by ⌜S⌝. Therefore, the rephrasal ⌜It is possible for there to be a language group in an epistemic situation qualitatively identical to ours who would make a true statement by asserting ⌜S⌝⌝ would imply ⌜It is possible that S⌝. So the force of the original intuition is not deflated.

Second, suppose that the intuitions in question are "mixed" – that is, expressed with a combination of semantically stable and unstable terms. Because of the semantically unstable terms, the force of these intuitions shifts upon rephrasal. But for the purpose of investigating central philosophical questions, there is a strategy for dealing with this. The idea is to find a new intuition with the philosophical import of the original but expressed entirely in semantically stable terms. To do this, we construct an appropriate semantically stable "counterpart" for each of the semantically unstable terms. In some cases, there may be no exact (i.e., necessarily equivalent) counterpart. But we can always find a counterpart which is as close to the semanti-

cally unstable original as is philosophically important. To illustrate this strategy, consider the chauvinistic identity-thesis that being conscious = having firing Con-fibers. A multiple-realizability argument against this thesis might invoke the intuition that it is possible for something to be conscious and not have Con-fibers. This intuition is "mixed": even though the expressions 'something', 'have', 'not', and 'conscious' are semantically stable, 'Con-fibers' is not. (And presumably 'Con-fibers' lacks an exact semantically stable counterpart, for there is evidently no semantically stable way to capture, e.g., relevant matters of scale.) The intuition therefore would not retain its original force upon rephrasal. The philosophical import of the intuition, however, is that it is possible for there to be consciousness in the absence of a certain highly specific nested complex of interrelated nonmetal parts (ultimately hydrogen, oxygen, carbon, etc.). We can get as close as we want to this notion using expressions from pure mathematics and other semantically stable expressions such as 'part', 'relation', 'non', and 'mental'. Even though what is "left over" might be of scientific interest, it would not be relevant to the philosophical point (i.e., refuting the chauvinistic identity thesis). Because the new counterpart intuition is expressed with semantically stable expressions, it will (by the considerations of the previous paragraph) retain its original force upon rephrasal. Although this is only an illustration, it suggests how, for more complicated "mixed" intuitions, we can find counterpart intuitions which have the same philosophical import as the originals and which are expressible with semantically stable expressions. These counterpart intuitions would thus not be deflated upon rephrasal.

These considerations indicate that the second step in the SE argument fails even in the case of "mixed" intuitions. The general conclusion, therefore, is that both steps in the SE argument fail for semantically stable expressions. Hence, there is no reason whatsoever to think that SE generalizes from semantically unstable expressions to semantically stable expressions and, in turn, to think that SE is a barrier to the Autonomy and Authority of Philosophy.

5. CONCLUDING REMARK

I have outlined my reasons for accepting the four premises of the Argument from Evidence, and as we saw, that argument implies

Autonomy and Authority. It is of course another matter whether it is nomologically possible for human beings to be in sufficiently good cognitive conditions to achieve the kind of autonomy and authority asserted as a mere possibility in these two theses. Whether this is nomologically possible is a question on which I take no stand here. My personal belief, however, is that collectively, over historical time, undertaking philosophy as a civilization-wide project, we can do so closely enough to obtain authoritative answers to a substantial number of central philosophical questions.

NOTES

* I presented this material as a talk drawn from a long manuscript "On the Possibility of Philosophical Knowledge" (forthcoming), which was made available to William Lycan and Ernest Sosa, the other participants in the APA Symposium *A Priori* Knowledge. Although the talk was incomplete in various ways, my hope was that it would serve as the basis for a fruitful discussion. Professors Lycan and Sosa heartily engaged the idea and in their papers more than met my expectations. My replies (also printed in this issue) fill in some points omitted in the present paper. In the course of the paper I refer to three preliminary papers and a forthcoming book – "Philosophical Limits of Scientific Essentialism", "The Incoherence of Empiricism", "Mental Properties", and *Philosophical Limits of Science* – which also address our topic. I should like to take this occasion to draw attention to an important and elegant paper by Eli Hirsch, "Metaphysical Necessity and Conceptual Truth". His views are similar to views I had worked out independently (described here and in the above papers). Finally, I wish to extend my warmest thanks to Philip Nickel, Jessica Wilson, and especially Iain Martel for help preparing the manuscript, to James Tomberlin for conceiving of the Symposium, and to Reinaldo Elugardo for including this record of it in this issue.

[1] Three criteria help to identify the central questions of philosophy. They are *universal* in that, regardless of the context (biological, historical, etc.), they would be of significant interest to philosophers, in their role as philosophers, at least once they had grasped the underlying concepts and their interrelations. These questions are *general* in that they do not pertain to this or that individual, species, historical event, etc. And they are *necessary* in that they call for answers that hold necessarily: it would not be enough to know that piety happened to be what Euthyphro exhibited; a philosopher wants to know what it must be.

Many philosophical questions of pressing *importance* to humanity lack one or more of the three features, I believe, however, that the relation between these questions and the central questions may be understood on analogy with the distinction between applied mathematics and pure mathematics. In most if not all cases, the answers to noncentral questions are immediate consequences of answers to central questions plus auxiliary (usually empirical) propositions having little philosophical content in and of themselves.

[2] Developed in my *Philosophical Limits of Science*, forthcoming.

[3] This procedure resembles the procedure of seeking "reflective equilibrium" but differs from it crucially. In the latter procedure, an equilibrium among all beliefs – including empirical beliefs – is sought. In the *a priori* process, an equilibrium based on *a priori* intuitions is sought. Empirical beliefs – and the experiences and observations upon which they are based – are sometimes used to raise and to resolve doubts about the quality of the background cognitive conditions (intelligence, etc.). But these empirical resources play no role in the procedure of *a priori* justification itself. *A priori* intuitions – not empirical beliefs – constitute the grist for its mill. When I speak of not needing to rely *substantively* on empirical science, this is one of the points I have in mind.

As indicated, this procedure is an idealization. In real life, various stages are pursued at once, and they are performed only partially. The results are usually provisional and are used as "feedback" to guide subsequent efforts. These efforts are typically collective, and the results of past efforts – including those of past generations – are used liberally. The fact that speech and writings are used does not disqualify these collective efforts as *a priori*, at least not according to the central use of '*a priori*' I am employing. Experience and/or observation can be used to raise – and also to resolve – doubts about the quality of the communication conditions (speaker and author sincerity, reliability of the medium of transmission, accuracy of interpretation, etc.). But these empirical resources play no role in the procedure of the *a priori* justification itself. When I speak of not needing to rely substantively on empirical science, this is another one of the points I have in mind.

[4] For certain phenomenal possibilities (e.g., certain Gestalt phenomena), perhaps the actual experience is required in order to know that that kind of experience is possible. This would not upset my main theses, for such use of experience would differ markedly from the use science makes of experience. When I say that philosophy need not rely substantively on science, another one of my intentions is to allow the use of experience to establish mere phenomenal possibilities. Despite this, I will sometimes talk as if the method of answering central philosophical questions is purely *a priori*. Perhaps this is not quite right, and appropriate adjustments might need to be made.

[5] I am indebted to George Myro for this example and for the point it illustrates, namely, that it is possible to have an intuition without having the corresponding belief.

[6] Of course, it is the *contents* of one's experiences and observations that are held to be evidential. Note that there is a more moderate empiricism which, like Hume's, deems (the contents of) intuitions of relations of ideas – that is, intuitions of analyticities – to be evidence but which excludes as evidence all intuitions of nonanalyticities. This view is also self-defeating, but for somewhat different reasons.

[7] Someone might think that, rather than consulting intuition on the question of relative basicness, one should consult the simplest overall theory that takes as its evidence the deliverances of all of one's currently accepted sources of evidence. But this approach yields the wrong results. For example, according to it, the political authority, with just a bit of cleverness, would be as immune to challenge as, say, sense experience. But despite this, it would be appropriate to reject the political authority as a special source of evidence. The way we would do this, according to the standard procedure, would be to fall back on our intuitions about relative basicness.

[8] This diagnosis is not circular: intuitions about relative basicness of candidate sources are not being used as evidence here; their use here is a prescribed step in the standard procedure of self-critique.

Someone might hold that being intuitively basic is necessary but not sufficient for a candidate source to withstand critique. For sufficiency, something additional is required, namely, that our best explanation of the candidate source should entail that its deliverances (tend to) be true. Using this idea, radical empiricists might hold that our best explanation of our (reports of) experiences and/or observations entail that they (tend to) be true but that this is not so for our best explanation of our intuitions. From this, the radical empiricist might conclude that, although experience and/or observation withstand critique, intuition does not. This, however, is question-begging. For advocates of intuitions may counter that the best explanation of intuition must invoke the analysis of what it takes to possess concepts determinately, and, according to that analysis, a necessary condition of determinate concept possession is that intuitions involving the concept (tend to) be true. Why accept this theory? Well, if (certain compelling) intuitions are admitted as evidence, its superiority over competing theories can be shown. Given this prospect, it would be question-begging for radical empiricists to reject this style of explanation in favor of their own candidate: their candidate could be defended only by disregarding a significant body of evidence (or at least what is counted as evidence according to our epistemic norms).

Is it question-begging for advocates of intuitions to invoke intuitions in support of this theory of determinate concept possession? No. It is standard justificatory practice to use intuitions evidentially. We are in a dialectical context in which radicals are trying to produce a *reason* for departing from this standard practice. No such reason is forthcoming; instead, radical empiricists only disregard a theory based on all the evidence in favor of a theory based on a circumscribed body of evidence. The conclusion is that this way of trying to undermine the argument in the text is unsuccessful.

[9] This account of derived sources should be viewed as an idealization. Note that I need not commit myself to it; for an alternative account, see note 7 in my Replies below. What is important is that there be some account consistent with a reliabilist account of basic sources.

[10] Might intuition be a derived source? No. First, intuitively, intuition is as basic as experience (or any source of evidence). Second, as Quine has shown us, our best overall purely empirical theory does not affirm that our modal intuitions have a reliable tie to the truth and, hence, would not explain their evidential status. Within the general explanatory strategy, there is no alternative but no identify intuition as a basic source of evidence. (This point is developed in greater detail in section 6, pp. 323–328, of my "Philosophical Limits of Scientific Essentialism".)

[11] An analogous counterexample could be constructed around "hardwired" dispositions to guess. Of course, by sophisticated maneuvers, contingent reliabilists might try to avoid these and other problems, but as far as I can tell, such efforts do not escape the underlying difficulties.

[12] I will not attempt to state my final general analysis; that requires having various preliminaries which emerge in the course of the Argument from Concepts, alluded to earlier as the second pillar of my argument. In the finished version, the modal tie invoked in the analysis of evidence is constitutive of determinate concept possession. Determinate concept possession governs both *a priori* intuitions

and "phenomenal intuitions," and insures their tie to the truth. Note that in the present proposal I require only that *most* derivable consequences of the indicated *a priori* theory be true. I do not say *all*, for I do not want to rule out unresolvable logical and philosophical antinomies.

[13] As Kripke intended it (p. 103), this expression must be so understood that the rephrasal strategy can be successfully applied to 'It could have turned out that water had no hydrogen in it' but not to 'It could have turned out that the four color theorem is false'. Other points of clarification: By saying that semantically stable expressions must mean the same in the indicated language group, I mean that they must make the same contribution to the propositions expressed by sentences in which they occur. This is meant to rule out indexicals as semantically stable. Note also that these definitions are indexed to *our* language group. Corresponding absolute notions can be defined. The resulting absolute notions mesh neatly with the Autonomy and Authority of Philosophy since these are modal theses concerning the possibility of autonomous, authoritative philosophical theories. At a few points my discussion will need the absolute notion; it should be clear when it is in effect. Note furthermore that by defining semantic stability in terms of whole language groups, rather than particular individuals, Burge-like phenomena would not by themselves render an expression semantically unstable; semantic instability has to do with the effects of the external environment. Of course, it is an expression *in one of its senses* that is semantically stable or unstable: there could be an ambiguous expression which is stable in one of its senses and unstable in another. Note finally that the notion of semantic stability applies to expressions; there is a corresponding object-language notion of a semantically stable concept. In a finished formulation this object-language notion might be preferable.

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