Intuition and the Autonomy of Philosophy

What is the relation between science and philosophy? I hold that philosophy is in principle autonomous. When one understands what is intended by this, one will see that the claim is modest and that there are good reasons for accepting it. The view consists of two theses:

The Autonomy of Philosophy

Among the central questions of philosophy 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.

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.

These theses are *modal* claims; they posit only the *possibility* of autonomous and authoritative philosophical knowledge, perhaps on the part of creatures in cognitive conditions superior to ours. To refute these theses, one must show that this sort of knowledge is *impossible*. Bear in mind just how hard it is to show something to be *impossible*. After all, impossibility claims are equivalent to necessity claims: it is impossible that P iff it is necessary that not P. To show that something substantive is necessary, one must engage in at least some philosophical argumentation. The Autonomy and Authority theses are thus not matters for science to decide. They are philosophical questions and, I believe, demand philosophical methods for their resolution. In my view, much of the project is a conceptual investigation—investigation of the concepts of intuition (the topic of this book), evidence, concept possession, and so forth. The epistemic status of this conceptual investigation is akin to the classic conceptual investigation of effective calculability (or computability) in the 1930s. It would be a misunderstanding to think of the latter as empirical. Likewise for the Autonomy and Authority theses. One might be unhappy with these theses, but they flow from the concepts, as our conceptual investigation will reveal. Once one has accepted the

concepts, one is committed to accepting the relations among them.

Intuition is the key to the defense of the Autonomy and Authority. From the logical and semantical paradoxes we know that intuition can be mistaken. So the (early modern) infallibilist theory of intuition is incorrect. But, despite their fallibility, intuitions on my view nevertheless have a strong modal tie to the truth. This tie is not "local," however, since individual intuitions can be mistaken. Nor is the tie an ordinary holistic tie: I accept the possibility that some hypothetical subject's best efforts at the theoretical systematization of his intuitions might be mistaken. Rather, the tie is relativized; specifically, it is relativized to theoretical systematizations arrived at in relevantly high quality cognitive conditions. Such conditions might be beyond what individual human beings can achieve in isolation. It is plausible that we approximate such cognitive conditions only in sustained cooperation with others, perhaps over generations. And even here, it is an open question whether we will ever approximate them sufficiently closely.

In section 1 I will try to clarify the notion of intuition which is evidentially relevant to philosophical argumentation. Many philosophers enjoy the pastime of "intuition bashing," and in support of it they are fond of invoking the empirical findings of cognitive psychologists.[1] Although these studies evidently bear on "intuition" in a less discriminating use of the term (e.g., as a term for uncritical belief), they tell us little about intuition in the relevant sense. When empirical cognitive psychology turns its attention to intuition in this sense, it will be no surprise if it should reveal that a subject's intuitions can be fallible locally. From the paradoxes, we already knew that they were. Nor will it be a great surprise if more sustained empirical studies should uncover evidence that a subject's intuitions can be fallible in a more holistic way. Countless works taken from the history of logic, mathematics, and philosophy already give some indication that this might be so. Will empirical studies reveal that intuitions lack the strong modal tie to the truth which I mentioned a moment ago? Surely such a discovery is out of the question. Human beings only approximate the relevant cognitive conditions, and they do this only by working collectively over historical time. This quest is something we are living through as an intellectual culture. Our efforts have never even reached equilibrium and perhaps never will. The very idea of our conducting an empirical test (i.e., a

psychology experiment) for the hypothesized tie to the truth is misconceived. Moreover, even if our intellectual culture were always to fail, that would not refute the thesis of a strong modal tie. The cognitive conditions of human beings working collectively over historical time might fall short. The thesis that intuitions have the indicated strong modal tie to the truth is a philosophical (conceptual) thesis not open to empirical confirmation or refutation. The defense of it is philosophical, ultimately resting on intuitions.[2]

Some people might accept that the strong modal tie thesis about intuition—and the associated Authority and Autonomy theses—are nonempirical but hold that they do nothing to clarify the relation between science and philosophy as practiced by *human beings*. After all, these theses yield only the possibility of autonomous, authoritative philosophical knowledge on the part of creatures whose cognitive conditions are suitably good. What could this possibility have to do with the question of the relation between science and philosophy as actually practiced by us?

The answer is this. The investigation of the key concepts—intuition, evidence, concept possession—establish the possibility of autonomous, authoritative philosophical knowledge on the part of creatures in those ideal cognitive conditions. The same concepts, however, are essential to characterizing our own psychological and epistemic situation (and, indeed, that of any epistemic agent). The relation between science and philosophy in our own case is to be understood in terms of how we depart from the cognitive ideal: to the extent that we approximate the ideal, we are able to approximate autonomous, authoritative philosophical knowledge. I believe that, *collectively, over historical time, undertaking philosophy as a civilization-wide project*, we can obtain authoritative answers to a wide variety of central philosophical questions.

There are two largely independent defenses of the Autonomy and Authority of Philosophy—the Argument from Evidence and the Argument from Concepts. These two arguments correspond directly to the two central questions of modern epistemology, namely, the ground of knowledge of truths and the origin of ideas. The Argument from Evidence (the topic of section 2) runs as follows. Intuitions qualify as evidence, and the correct explanation of this fact is that intuitions have a strong (albeit indirect and fallible) tie to the truth when the subjects are in suitably

good cognitive conditions. That tie to the truth is sufficient to underwrite the Authority and Autonomy theses. The Argument from Concepts (the topic of section 3) consists of a series of examples and subsidiary arguments leading up to an analysis of what it is to possess a concept determinately. According to the analysis, it is constitutive of determinate concept possession that in suitably good cognitive conditions intuitions regarding the behavior of the concept have a strong tie to the truth. Given that most philosophically central concepts can be possessed determinately, the potential for associated intuitions is sufficient to underwrite the Autonomy and Authority of Philosophy.[3]

Before beginning, I should indicate what I mean by the central questions of philosophy. Nearly all philosophers seek answers to such questions as the nature of substance, mind, intelligence, consciousness, sensation, perception, knowledge, wisdom, truth, identity, infinity, divinity, time, explanation, causation, freedom, purpose, goodness, duty, the virtues, love, life, happiness, and so forth. When we think of the sorts of things that would qualify as answers to questions of this sort, three features stand out—universality, generality, and necessity.

The questions of philosophy are universal in the sense that, regardless of the biological, psychological, sociological, or historical context, they (and their answers) would be of significant interest to most any philosopher, *qua* philosopher (at least once they had been introduced to the underlying concepts and their basic relations to one another). These questions are general in the sense that they—and their answers—do not pertain to this or that individual, species, or historical event. Typically, the central questions of philosophy—and their answers—are phrased in quite general terms without mention of particular individuals, species, etc. These questions are necessary in the sense that they call for answers that hold necessarily. In being interested in such things as the nature of mind, intelligence, the virtues, and life, philosophers do not want to know what those things just happen to be, but rather what those things *must* be, what they *are* in a strong sense. It is not enough that the virtue of piety happened to be what Euthyphro exhibited: a philosopher wants to know what piety must be.

Many philosophical questions that are of pressing importance to humanity lack one or more

of the three features—universality, generality, and necessity. Nevertheless, the relation between central and noncentral philosophical propositions (truths, questions) may, I believe, be understood on analogy with the relation between pure mathematics and applied mathematics. In most if not all cases, noncentral philosophical propositions are immediate consequences of central philosophical propositions plus auxiliary propositions that have little philosophical content in and of themselves. In actual practice, of course, various philosophical questions do not fit so neatly into this picture, but I think that in principle they can be made to fit. Or so I will assume.

1. Intuition

1.1 Standard Justificatory Procedure

I begin by reviewing some plain truths about the procedure we standardly use to justify our beliefs and theories generally.[4] The first point is that we standardly use various items—for example, experiences, observations, testimony—as evidence for other items, for example, theories. It should be emphasized that one does not need to adopt "evidentialism" as *analysis* of knowledge—or of justification or warrant—in order to think that evidence is a good thing epistemically. A theory of evidence does not commit one to holding that knowledge—or justification or warrant—is to be analyzed in terms of evidence. It is also worth emphasizing that evidence—as opposed to justification and warrant—is a topic not yet examined carefully in the epistemological literature, though it has been examined to some extent by philosophers of science.

Now at one time many people accepted the traditional doctrine that knowledge is justified true belief. But now we have good evidence that this is mistaken. Suppose someone has been driving for miles past what look like herds of sheep. At various points along the journey, our person *believes* that a sheep is in the pasture. Since the situation appears to be perfectly normal in all relevant respects, certainly the person is *justified* in believing that there is a sheep in the pasture. Suppose that it is indeed *true* that there is a sheep in the pasture. Is this enough for knowledge? No. For suppose that the thousands of sheep-looking things the person has been seeing are a breed of white poodle that from that distance look just like sheep and that, by pure chance, there happens to be a solitary sheep hidden in the middle of the acres of poodles. Clearly, the person does not know

that there is a sheep in the pasture.[5] Examples like this provide good evidence that the traditional theory is mistaken. We find it intuitively obvious that there could be such a situation like that described and in such a situation the person would not know that there is a sheep in the pasture despite having a justified true belief. This intuition—that there could be such a situation and in it the person would not know—and other intuitions like it are our evidence that the traditional theory is mistaken.

So, according to our standard justificatory procedure, *intuitions* are used as evidence. Now sometimes in using intuitions to justify various conclusions, it is somewhat more natural to call them *reasons* rather than *evidence*. For example, my reasons for accepting that a certain statement is logically true are these: it follows intuitively from certain more elementary statements that intuitively are logically true; I have clear intuitions that it follows, and I have clear intuitions that these more elementary statements are logically valid. Standardly, we say that intuitions like these are *evident* (at least *prima facie*). For convenience of exposition let us extend the term 'evidence' to include reasons that are evident in this way.[6] So in this terminology, the standard justificatory procedure counts as evidence, not only experiences, observations, and testimony as evidence, but also intuitions. It shall be clear that this terminological extension does not bias our discussion. Readers who object to this practice should hereafter read 'evidence' as 'reasons that are evident'.

When I say that intuitions are used as evidence, I of course mean that the *contents* of the intuitions count as evidence. When one has an intuition, however, often one is introspectively aware that one is having that intuition. On such an occasion, one would then have a bit of introspective evidence as well, namely, that one is having that intuition. Consider an example. I am presently intuiting that if P then not not P. Accordingly, the content of this intuition—that if P then not not P—counts as a bit of my evidence; I may use this logical proposition as evidence (as a reason) for various other things. In addition to having the indicated intuition, I am also introspectively aware of having the intuition. Accordingly, the content of this introspection—that I am having the intuition that if P then not not P—also counts as a bit of my evidence; I may use this proposition about my intellectual state as evidence (as a reason) for various other things.

To see the prevalence of the use of intuitions in philosophy, recall some standard examples beyond the above Gettier-style examples: Chisholm's abnormal-conditions refutation of phenomenalism, Chisholm's and Putnam's refutations of behaviorism, the use of multiple-realizability in refuting narrow identity theses, the twin-earth arguments for *a posteriori* necessities and externalism in mental content, Burge's arthritis argument for anti-individualism in mental content, Jackson's Mary example, etc., etc. Each of these involve intuitions about certain possibilities and about whether relevant concepts would apply to them. It is safe to say that these intuitions—and conclusions based on them—determine the structure of contemporary debates in epistemology and philosophy of mind. As these examples illustrate, it is intuitions about concrete cases that are accorded primary evidential weight by our standard justificatory procedure; theoretical intuitions are by comparison given far less evidential weight.

Philosophical investigation and argument approximate the following idealization: canvassing intuitions; subjecting those intuitions to dialectical critique; constructing theories that systematize the surviving intuitions; testing those theories against further intuitions; and so on until equilibrium is approached. This procedure resembles the procedure of seeking "reflective equilibrium" but differs from it crucially. In the latter procedure, an equilibrium among beliefs—including empirical beliefs—is sought. In the present procedure, an equilibrium among intuitions is sought. (See the next subsection for the difference between beliefs and intuitions.) Empirical beliefs—and the experiences and observations upon which they are based—are sometime used to raise and to resolve doubts about the quality of the background cognitive conditions (intelligence, attentiveness, constancy, memory, etc.). But these empirical resources play are not inputs for the procedure itself; 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, the foregoing is an idealization. In real life, these stages are pursued concurrently, and they are performed only partially. The results are usually provisional and are used as "feedback" to guide subsequent efforts. Moreover, these efforts are typically collective, and the results of past efforts—including those of past generations—are used liberally. Speech and writing are standardly

used. In this connection, phenomenal experience and observation are sometimes 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 are not inputs for the procedure itself. When I speak of not needing to rely substantively on empirical science, this is another one of the points I have in mind.

Perhaps the most important departure from this idealization is that in seeking answers to central philosophical questions, we also make fairly frequent 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." That is, such examples can, at least in principle, be dropped and in their place one can use *rational* intuitions affirming corresponding (not to say identical) *possibilities* which have equivalent philosophical force.[7] Consider the example of blind-sight. We have actual cases subjects with accurate beliefs regarding objects in their physical visual field but without (beliefs about) any conscious sensory awareness of those objects. But for the purpose of settling central questions of philosophy (e.g., about the essential nature of consciousness and sense perception), it is enough that the phenomenon of blind-sight be *possible*. And intuitively it is. The experiments are required to establish that it *actually* occurs; but to establish that it is *possible*, intuition suffices.

Certain phenomenological possibilities might constitute an exception to the idea of "modalizing away" empirical evidence: perhaps for certain kinds of experience (e.g., certain Gestalt phenomena), the actual experience is required in order to know that that kind of experience is possible. If so, this would not upset my main theses. The reason is that this use of experience differs markedly from the use science makes of experience. When I say that philosophy need not rely substantively on science, one of my intentions is to allow this use of experiences to establish mere phenomological possibilities. Although this point is important, I will not address it further in this paper; indeed, at certain points I will talk as if the method needed to establish answers to central philosophical questions is nothing but a special case of the method of pure *a priori* justification. For the indicated reason, this might not be quite right, and appropriate adjustments would need to be

made.[8]

1.2 Phenomenology of Intuitions

My next step is to discuss the notion of intuition relevant to the context of justification in logic, mathematics, and philosophy. We do not mean a magical power or inner voice or special glow or any other mysterious quality. When you have an intuition that A, it *seems* to you that A. Here 'seems' is understood, not in its use 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 true nor seems false; after a moment's reflection, however, something happens: it now just seems true. The view I will defend is that intuition (this type of seeming) is a *sui generis*, irreducible, natural (i.e., non-Cambridge-like) propositional attitude which occurs episodically.

When we speak here of intuition, we mean "rational intuition." This is distinguished from what physicists call "physical intuition." We have a physical intuition that, when a house is undermined, it will fall. This does not count as a rational intuition, for it does not present itself as necessary: it does not seem that a house undermined *must* fall; plainly, it is *possible* for a house undermined to remain in its original position or, indeed, to rise up. By contrast, when we have a rational intuition—say, that if P then not not P—it presents itself as necessary: it does not seem to us that things could be otherwise; it must be that if P then not not P. (I am unsure how exactly to analyze what is meant by saying that a rational intuition presents itself as necessary. Perhaps something like this: necessarily, if x intuits that P, it seems to x that P and also that necessarily P. But I wish to take no stand on this.)

The distinction between rational intuition and physical intuition is related to a terminological point. In recent philosophy there has been an unfortunate blurring of traditional terminology. Rational intuitions about hypothetical cases are often being erroneously called *thought experiments*. This deviates from traditional use, and it blurs an important distinction which we should be kept vividly in mind. Traditionally, in a thought experiment one usually elicits a physical intuition (not a rational intuition) about what would happen in a hypothetical situation in which physical, or natural,

laws (whatever they happen to be) are held constant but physical conditions are in various other respects nonactual and often highly idealized (e.g., so that it would be physically impossible for observers to be present or it would be physically impossible for anyone to conduct the experiment). A classic example is Newton's thought experiment about a rotating bucket in an otherwise empty space. Would water creep up the side of the bucket (assuming that the physical laws remained unchanged)? Rational intuition is silent about this sort of question. Rational intuitions concern such matters as whether a case is possible (logically or metaphysically), and about whether a concept applies to such cases. For example, in the Gettier example we have a rational intuition that the case is possible, and we have a rational intuition that the concept of knowledge would not apply to the person in the case. In Tyler Burge's arthritis case, we have a rational intuition that the example is possible and a rational intuition that in the example the patient would believe that he has arthritis in his thigh. Similarly, in Putnam's twin-earth example. None of these are thought experiments in the traditional sense; to call them thought experiments is, not only to invite confusion about philosophical method, but to destroy the utility of a once useful term.

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).[9] There is a rather similar phenomenon in sense perception. In the Müller-Lyer illusion, it still *seems* to me that one of the two arrows is longer than the other; this is so despite the fact that I do not believe that one of the two arrows is longer (because I have measured them). In each case, the seeming persists in spite of the countervailing belief.

Of course, one must not confuse intuition with sense perception. Intuition is an *intellectual* seeming; sense perception is a *sensory* seeming (an *appearing*). By and large, the two cannot overlap: most things that can seem intellectually to be so cannot seem sensorily to be so, and

conversely. For example, it cannot seem to you sensorily that the naive comprehension axiom holds. Nor can it seem to you intellectually (i.e., without any relevant sensations and without any attendant beliefs) that there exist billions of brain cells; intuition is silent about this essentially empirical question. There are, however, certain special cases in which intellectual seeming and sensory seeming can evidently overlap. For example, it can seem sensorily that shades s_1 and s_2 are different, and it can seem intellectually that s_1 and s_2 are different. Nevertheless, if it is possible for someone to have the intuition that A (i.e., if it is possible for it to seem intellectually to someone that A), typically it is possible for someone to have the intuition that A while believing that not A (or, at least, doubting that it is true that A) and while having no particular experiences, sensory (imaginative) or reflective, relevant to the truth of the proposition that A.

This brings up a closely related distinction between belief and intuition. Belief is highly plastic; not so for intuition. For nearly any proposition about which you have beliefs, authority, cajoling, intimidation, etc. fairly readily insinuate at least some doubt and thereby diminish to some extent, perhaps only briefly, the strength of your belief. But seldom, if ever, do these things so readily diminish the strength of your intuitions. Just try to diminish readily your intuition of the naive comprehension axiom or your intuition that your favorite Gettier example could occur. 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, as a family, they are inherently more resistant to such influences than are the associated beliefs.

It might be thought that intuition can be reduced to some sort of spontaneous inclination to belief.[10] There are counterexamples to such a reduction, however. As I am writing this, I have spontaneous inclinations to believe countless things about, say, numbers. But at this very moment I am having *no* intuition about numbers. I am trying to write, and this is about all I can do at once; my mind is full. If I am to have an intuition about numbers, then above and beyond a mere inclination, something else must happen—a *sui generis* cognitive episode must occur. Inclinations to believe are simply not episodic in this way. For another sort of counterexample, consider *a posteriori* necessities which (on the received theory) lie beyond the reach of our rational intuition: for example,

that gold has atomic number 79, that heat involves microscopic motion, etc., etc. Presumably, by suitably modifying the brain we could cause a subject to acquire the sort of spontaneous inclination featured in the proposed reduction. We could, for example, cause someone to have a spontaneous inclination to believe that gold has atomic number 79. (Such inclinations would be akin to the sort of irrational inclinations posited by some social theorists, e.g., "hardwired" inclinations to believe that other races are inferior.) Likewise for other *a posteriori* necessities. But the person still would not be able to intuit these necessities, for in that case they would be *a priori*, not *a posteriori*, as everyone takes them to be.

On another reductionist approach, intuitions are identified with a "raising-to-consciousness" of nonconscious background beliefs.[11] This proposal, however, has a number of problems. Suppose that, out of the blue, you ask me whether the naive comprehension axiom and the axioms and rules of classical logic all hold. I would thereupon have the conscious belief that they do *not* all hold. A plausible explanation is that, having studied the paradoxes in the past, I reached the conclusion that these cannot all hold, and that conclusion became one of my standing background beliefs. Upon being questioned just now, this negative background belief was then raised to consciousness. Thus, the proposal helps to explain certain conscious beliefs. But what about intuition? I have intuitions to the effect that the naive comprehension axiom plus the axioms and rules of classical logic *do* all hold. These positive intuitions would be explained on the proposed raising-to-consciousness model only if I also had associated positive background beliefs to that effect. But in that case, these positive background beliefs would have to be in *explicit contradiction* to another one of my background beliefs (namely, that the indicated principles do *not* all hold). More importantly, if my positive intuitions were explained by the supposed positive background beliefs, then given that I also have the associated negative background belief (that the indicated principles do *not* all hold), I ought, by symmetry, also have the intuition that the indicated principles do *not* all hold. But I have no such intuition, nor am I disposed to have one. In the same vein, given my educational background, I have a host of nonconscious background beliefs regarding various mathematical theorems about which I am not disposed to have any intuitions. Likewise, I

have a host of nonconscious background beliefs regarding contingent matters (e.g., that I was not born on Mars) about which I am not disposed to have any intuitions.

The proposal also runs into problems with the phenomenon of novelty. At any given time, there are a number of novel questions about which one has no belief one way or the other (even a nonconscious background belief) but about which one would have a clear-cut intuition. In cases like this, one typically forms the belief associated with the intuition as soon as the intuition occurs; not the other way round. Here is an example. Consider average twenty-year old college students with no background in logic, linguistics, or philosophy. *At least according to our standard belief ascription practices*, we would not say that they right now believe that there are two readings of 'Necessarily, the number of planets is greater than seven', one on which it is false and one on which it is true given that there are nine planets. Nor would we say that they have the contrary belief. They have no nonconscious background belief one way or the other regarding this question. When they come to your lecture dealing with this, they are going to acquire new beliefs, not raise to consciousness ones they already had.[12] This at least is what our standard belief ascription practice dictates. Now suppose we confront them with the question. After some reflection, the good students come to see both readings; they have the intuitions. And therewith—not before—they come to have the associated beliefs. The conclusion is that intuition may not be identified with (or explained in terms of) a raising-to-consciousness of nonconscious background beliefs. None of this is to say that there are no nonconscious mechanisms which play some role in the formation of intuitions. (We will return to this idea in a moment.) The point is that intuition is not in any simple way the manifestation of one's background beliefs.

Intuitions are also quite distinct from judgments, guesses, and hunches. There are significant restrictions on the propositions concerning which we are able to have intuitions. By contrast, there are virtually no restrictions on what we can judge, guess, or have a hunch about. Judgments are a kind of occurrent belief; as such, they are not seemings. Guesses are phenomenologically rather more like choices; they are plainly not seemings. And hunches are akin to merely caused, ungrounded convictions or noninferential beliefs; they too are not seemings. For

example, suppose that during an examination in beginning logic, a student is asked whether the following is a logical truth: if P or Q, then it is not the case that both not P and not Q. The student might have a hunch that it is. But something else could happen: it could actually *seem* to the student that it is. Phenomenologically, this kind of episode is quite distinct from a mere hunch. Or suppose that I ask you whether the coin is in my right hand or whether it is in my left. You might have a hunch that it is in my left hand, but it does not *seem* to you that it is. You have no intellectual episode in which it seems to you that I have a coin in my left hand. When I show you that it is in my right hand, you no longer have a hunch that it is in my left. Your merely caused, ungrounded conviction (noninferential belief) is automatically overridden by the grounded belief that it is in my right hand, and it is thereby displaced. Not so for seemings, intellectual or sensory: they are not automatically displaced by grounded contrary beliefs. (Recall the naive comprehension axiom and the Müller-Lyer arrows.)

Many items that are, somewhat carelessly, called intuitions in casual discourse in logic, mathematics, linguistics, or philosophy are really only a certain sort of memory. For example, it does not *seem* to me that $25^2 = 625$; this is something I learned from calculation or a table. Note how this differs, phenomenologically, from what happens when one has an intuition. After a moment's reflection on the question, it just *seems* to you that, if P or Q, then it is not the case that both not P and not Q. Likewise, upon considering the example described earlier, it just *seems* to you that the person in the example would not know that there is a sheep in the pasture. Nothing comparable happens in the case of the proposition that $25^2 = 625$.

For similar reasons, intuition must also be distinguished from common sense. True, most elementary intuitions are commonsensical. However, a great many intuitions do not qualify as commonsensical—just because they are non-elementary. For example, intuitions about mathematical limits, the infinite divisibility of space and time, the axiom of choice, and so forth are hardly commonsensical. Conversely, we often lack intuitions (i.e., rational intuitions) about matters that are highly commonsensical. For example, the following propositions are commonsensical: a house undermined will fall; items priced substantially below market value are likely to be defective;

it is unwise to put your finger in electrical sockets; etc. But rational intuition is silent about these matters. Such considerations suggest that common sense is an amalgamation: widely shared, more or less useful empirical beliefs; practical wisdom; rational intuitions; and physical intuitions. Common sense certainly cannot be *identified* with rational intuition.

Some philosophers identify all intuitions with linguistic intuitions. But this is plainly wrong if by 'linguistic intuition' they mean intuitions about words (e.g., English words) and their application. A moment's reflection reveals what is wrong with this idea: most of our intuitions simply do not have any linguistic content. Consider your intuition that, if snow is white, then it is not the case that snow is not white, or consider your intuition that the person in the sheep example would not know there is a sheep in the pasture. These intuitions simply do not concern English words and their applicability. The point can be dramatized by the fact that non-English speakers have these intuitions, whereas non-English speakers do not have intuitions about English words and their applicability. (This is not to say that there is not an intimate tie between linguistic intuitions and certain classes of nonlinguistic intuitions, but that is an altogether different matter.)

Some philosophers think of intuitions, not as linguistic intuitions, but instead as conceptual intuitions. Nothing is wrong with this if 'conceptual intuition' is understood broadly enough. But there is a common construal—traceable to Hume's notion of relations of ideas and popular with logical positivists—according to which conceptual intuitions are all analytic (in the traditional sense of conceptual containment, or truth by definition plus logic, or convertibility into logical truths by substitution of synonyms). (Of course, the onus is on philosophers who accept this view to clarify what they mean by 'analytic'.) But this theory of intuition is quite mistaken, for countless intuitions are not be counted as analytic (on the traditional construals).[13] For example, the intuition that phenomenal colors are incompatible, that moral and aesthetic facts supervene on the (totality of) physical and psychological facts, that a given determinate (e.g., a particular phenomenal shade) falls under its determinables (e.g., being a phenomenal shade), that the part/whole relation is transitive over the field of regions, that congruence is a symmetric relation, etc., etc.

Possibility intuitions are another extremely important class of intuitions which are not

analytic (on the traditional construals of the term). (E.g., the intuition that the Gettier examples are possible, etc.) True, some philosophers have claimed that possibility intuitions are just intuitions of consistency. This would be reasonable if possibility were just consistency: since the proposition that p is consistent is traditionally counted as analytic, the proposition that p is possible would be analytic as well. But there are compelling objections to identifying possibility with consistency. First, all the other traditional examples of nonanalytic impossibilities (e.g., compatible but distinct phenomenal colors; nonsupervening aesthetic facts; non-reflexive congruence relations; etc.) would still be erroneously counted as possible according to the proposal. Furthermore, if by 'consistency' one means freedom from provable contradiction (relative to a formal system), Gödel's incompleteness theorem refutes the identification of possibility with consistency: no contradiction can be proved either from the Gödel self-unprovability sentence (relative to the formal system) or from its negation, but one of these two sentences expresses an impossibility.[14] Finally, since scientific essentialist impossibilities (e.g., that water contains no hydrogen, that gold is a compound, etc.) are consistent (on the prominent construals of consistency), they would erroneously be counted as possible according to the proposal.[15] Clearly, possibility intuitions cannot be identified with consistency intuitions. This point is extremely important to philosophical method, for the typical philosophical counterexample requires a possibility intuition (that such and such condition is possible) as well as an ordinary concept-applicability intuition (that in such and such situation a relevant item would, or would not, count as an F). Without possibility intuitions, philosophy would be fatally crippled.[16]

This is perhaps the place to note that, phenomenologically, there is no relevant difference between analytic and nonanalytic intuitions. Consider two transitivity intuitions: (1) the intuition that, if spatial region x is part of spatial region y and spatial region y is part of spatial region z, then spatial region x is part of spatial region z; (2) the intuition that, if biological organism x is a descendant of biological organism y and biological organism y is a descendant of biological organism z, then biological organism x is a descendant of biological organism z. There is no relevant phenomenological difference between these two transitivity intuitions despite the fact that

the former would traditionally be counted as synthetic and the latter would be counted as analytic (insofar as it is a consequence of a standard definition). Nor is there any relevant "formal" difference between these two intuitions. These facts should give pause to "Humean empiricists" who would attribute evidential force to our analytic intuitions but not our synthetic intuitions: for the question of whether a given intuition is analytic or synthetic is a theoretical question which cannot be settled until late in one's philosophical investigation. The only cogent way to proceed is to admit all intuitions as evidence, at least provisionally. (I should note that this is only one of many serious problems facing "Humean empiricism.")

Earlier we considered a proposal to reduce intuitions to a raising-to-consciousness of one's nonconscious background beliefs. Although we found this proposal unsatisfactory, we did not rule out the idea that some other sort of nonconscious mechanism plays some role in the formation of intuitions at least in human beings; rather, the point was that an intuition is not a raising-to-consciousness of a nonconscious background belief. Suppose, then, that we posit a nonconscious mechanism, not a body of nonconscious background beliefs, but something else perhaps resembling one. Suppose that this mechanism somehow encodes a (recursively specifiable) theory and that the mechanism's outputs are thought of as theorems which the mechanism generates. Although I would reject the idea that intuition is identical to these the raising-to-consciousness of these outputs, there is no reason to think that they might not play some role in explaining (some features of) human intuition. There is, however, an empiricist version of this proposal which we can be sure is mistaken. According to it, the encoded "theory" has the structure of an acceptable empirical theory, that is, an acceptable theory whose evidential base consists entirely of (reports of) the subject's phenomenal experiences and observations.

Many things are wrong with this proposal. To the extent that such an explanation resembles the rising-to-consciousness theory discussed earlier, it would be subject to many of the problems mentioned there. A more significant problem, however, is that it fails to explain the evidential status of our *modal* intuitions—arguably the most important class of intuitions for philosophy. Given Quinean arguments, no truly acceptable purely empirical theory would contain modals at all. So the

proposed explanation would be unable to explain any of our modal intuitions.[17] (Maybe modals are "hardwired" nonempirical components of the nonconscious theory. We will return to this idea in the section 2.)

Let us sum up. The thesis that I am led to is that intuition is a *sui generis*, irreducible, natural (i.e., non-Cambridge-like) propositional attitude which occurs episodically. Although the foregoing discussion hardly proves this thesis, it makes it very plausible.

Very well, but of what epistemic worth are intuitions? Many philosophers believe that the empirical findings of cognitive psychologists such as Wason, Johnson-Laird, Rosch, Nisbett, Kahneman and Tversky cast doubt on their epistemic worth. But, in fact, although these studies bear on "intuition" in an indiscriminate use of the term, they evidently tell us little about the notion of intuition we have been discussing which is relevant to justificatory practices in logic, mathematics, philosophy, and linguistics. As far as I have been able to determine, empirical investigators have not attempted to study intuitions in the relevant sense; for example, they have not been testing whether the subjects' intellectual episodes satisfy the several criteria isolated above: intellectual (vs. sensory) seemings which present themselves as necessary; distinct from "physical intuitions," thought experiments, beliefs, guesses, hunches, judgments, common sense, and memory; comparatively nonplastic; not readily overridden by countervailing beliefs; not reducible to inclinations, raisings-to-consciousness of nonconscious background beliefs, linguistic mastery, reports of consistency; etc. Clearly, it will be a delicate matter to design experiments which successfully test for such criteria.

When empirical cognitive psychology eventually studies intuition, it will certainly uncover the fact that a subject's intuitions can be fallible locally. But as I indicated above, the paradoxes already showed that. Likewise, more sustained empirical studies might uncover evidence that a subject's intuitions can be fallible in a more holistic way; we already know that the theoretical output of logicians, mathematicians, and philosophers working in isolation can be flawed. But these negative facts pale by comparison with a positive fact, namely, the on-balance agreement of elementary concrete-case intuitions among human subjects. Indeed, the on-balance agreement

among our elementary concrete-case intuitions is one of the most impressive general facts about human cognition.

2. The Argument from Evidence

I come now to the first argument for the Autonomy and Authority of Philosophy. Granted that our standard justificatory practice presently *uses* intuitions as evidence, why should this move exclusionist philosophers (e.g., radical empiricists) who just boldly deny that intuitions really *are* evidence? In "The Incoherence of Empiricism" I argued that these exclusionary views lead one to epistemic self-defeat. In this paper, I will just assume that these arguments succeed and that we cannot coherently deny that intuitions have evidential weight. What explains why intuitions are evidence? In "Philosophical Limits of Scientific Essentialism"[18] I argued that the only adequate explanation is some kind of truth-based, or reliabilist, explanation. In *Philosophical Limits of Science*[19] I develop this argument in greater detail, dealing there with various alternative explanations—pragmatist, coherentist, conventionalist, and practice-based. I show that these explanations are based on principles that are open to straightforward counterexamples: if the principles were accepted, clear cases of nonevidence would have to be admitted as evidence in the situations envisaged in the examples. There is also a rule-of-evidence theory (reminiscent of Roderick Chisholm), that is, a theory which simply codifies rules for what counts as evidence in various sorts of circumstances. But this theory does not offer an *explanation* of why the sources of evidence described in the rules are sources of evidence: the rules merely *describe*; they do not *explain*. In the present context, I will assume that the case against each of these non-truth based approaches is telling and that we must turn to a truth-based, or reliabilist, explanation. This assumption will appeal to many readers independently of the indicated arguments.

Reliabilism has been associated with analyses of knowledge and justification. Our topic, however, is not knowledge or justification but rather evidence. This difference is salutary, for here reliabilism promises to be easier to defend. But not as a *general* theory of evidence: sources of evidence traditionally classified as *derived* (vs. basic) sources are subject to counterexamples much like those often 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.[20] (The same problem would beset observational beliefs in a world in which all epistemic agents suffer systematic hallucination as a matter of nomological necessity.) 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 basic source of evidence iff it has an appropriate kind of reliable tie to the truth.[21] Then we would be free to adopt some alternative treatment of nonbasic sources; for example, something is a nonbasic source of evidence relative to a given subject iff it would be 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.[22] Let us agree that phenomenal experience is a basic source. Given this, 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 simplest comprehensive theory based on his experiences 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 simplest 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 an appropriate kind of reliable tie to the truth. There are two fundamental questions to answer. First, what is the character of the indicated reliable tie to the truth? Is it a contingent (nomological or causal) tie? Or is it some kind of strong necessary tie? Second, what sources of evidence are basic?

2.1 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 a 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 co-inhabiting his planet. Indeed, our creature and his co-inhabitants 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 guessing 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.

A similar counterexample concerns a creature who is hardwired to make guesses about the truth or falsity of certain noncontingent propositions of some extremely high degree of difficulty. These propositions comprise a list of about one billion. The true propositions on this list fit into no neat theoretical systematization known to any living creature. Nor is any living creature intelligent enough to settle by ordinary means (theoretical systematization of intuitions and proof of consequences therefrom) whether the propositions that the creature guesses to be true are true—or even whether they are consistent. The creature is hardwired thus: it is nomologically necessary that, for each of the indicated propositions p, the creature, upon considering the question whether p is true, guesses that p is true iff p is true. But, plainly, guessing would not qualify as a basic source of evidence for the creature, contrary to contingent reliabilism.

One way of trying to rule out the counterexamples would be to add to contingent reliabilism a further requirement involving *evolutionary psychology*: in the course of the evolution of the species, a cognitive mechanism's contingent tie to the truth must have been the more advantageous

to the survival of the species than alternative sources which would not have had a tie to the truth. But this additional requirement does not help. Each of the examples can be adapted to yield a counterexample to the revised analysis. Specifically, we need only make the examples about a hypothetical species in whom the extraordinary powers for making true guesses have played a positive (but always undetected role) in the species' evolution. Certainly this would be possible. But there would be no temptation to say that guessing would in the circumstance be a basic source of evidence. Thus, the revised analysis does not provide a sufficient condition.[23] Similar counterexamples could be constructed even if it were required that the disposition to make reliable guesses be implanted in accordance with a good "design plan."

2.2 Modal Reliabilism

Given that some form of reliabilist theory is needed to explain our basic sources of evidence and given that contingent reliabilism fails to do this, we are left with modal reliabilism. According to this view, something counts as a basic source iff there is an appropriate kind of strong modal tie between its deliverances and the truth. Each of the above problems confronting contingent reliabilism is traceable to the fact that contingent reliabilism posits only a contingent tie between the deliverances of a basic source and the truth. For example, the reliability of (evolutionarily advantageous) telepathically generated guesses is only contingent; likewise, for the reliability of (evolutionarily advantageous) hardwiring-generated guesses. These problems do not arise if we require basic sources of evidence to have a strong modal tie to the truth. This is precisely what modal reliabilism says. These diagnostic facts thus provide further support for the thesis that modal reliabilism is correct.

This outcome should strike many philosophers (including, most traditional empiricists) as just right. These philosophers accept that phenomenal experience (feeling pain, its appearing that this is a table, etc.) is intrinsically more basic than, say, observation and testimony—in the words of Quine, the phenomenalistic is "epistemologically prior" to these sources. These philosophers, however, need an explanation for this fact. (Traditional empiricists, for example, take this fact as a dogma lacking explanation.) At the same time, these philosophers recognize that, for beings in good

cognitive conditions, the on-balance reliability of phenomenal experience is not a mere contingent matter. Surely this fact should be relevant to explaining why phenomenal experience is a basic source of evidence, why it is "epistemologically prior" to observation and testimony. Modal reliabilism is simply a theory which reworks these plausible claims into a positive account. But we do not base our case for modal reliabilism on plausibility. It is based on the foregoing argument. A general theory of basic evidence must be reliabilist. Contingent reliabilism, however, is beset with fatal problems. To avoid them, we are forced to modal reliabilism: a candidate source of evidence is basic iff its deliverances have an appropriate kind of strong modal tie to the truth. Phenomenal experience is a basic source because it has *that* kind of modal tie to the truth.

2.3 Our Basic Sources of Evidence

Before we try to say more precisely what that sort of modal tie this is, let us turn to the second question which was raised earlier but not answered. Namely, what sources of evidence are basic?

Taking it for granted that phenomenal experience is a basic source, how should we classify intuition? Is it a derived or a basic source? This question can, I believe, be answered directly by means of intuitive considerations.[24] Intuitively, intuition is a basic source of evidence.[25] 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. This ought to be the end of the matter. But, for certain sort of radical empiricist, such intuitive considerations might not persuade precisely because it is a dogma of these empiricists that intuition is not a basic source; only experience is.

Let us remember where we are in the dialectic. We have agreed that intuition—including modal intuition—is a source of evidence and that empiricists who reject this are in a self-defeating position. The empiricists with whom we are now dealing are those who accept intuition as a source of evidence and who are in the midst of trying to explain why it is a source. Their strategy is to suppose that only experience is a basic source and that intuition must therefore be a derived source,

where something is a derived source of evidence relative to a given subject iff it is deemed (perhaps mistakenly) to have a reliable tie to the truth by the simplest comprehensive theory based on the subject's basic sources of evidence. The first count against these empiricists who accept that intuitions are evidence is that their supposition (that experience is the only basic source of evidence) goes against intuitions that intuition is basic. But we are ignoring this internal conflict for now. The second count against our empiricists is that the envisaged explanation fails. We have already seen the underlying problem. Once all Quinean techniques of regimentation are brought to bear, the simplest comprehensive explanation of our empirical evidence is a theory which is free of all modals—and, indeed, all intensional elements. Consequently, that comprehensive theory will not deem there to be a reliable tie between our modal intuitions and the truth. But, according to the empiricist strategy, modal intuitions would be evidence iff the subject's simplest comprehensive empirical theory deemed there to be a reliable tie between them and the truth. So our empiricists are unable to explain why modal intuitions—arguably the most important family of intuitions—have evidential weight. Relatedly, given the prevalence of modal intuitions among intuitions generally and given that modal intuitions would not be deemed to have a reliable tie to the truth, the reliability of intuitions generally would be called into question. In this event, intuitions would not have the evidential force which our empiricists agree they have. We are thus led to the conclusion that the empiricist strategy fails and that there is no alternative but to take intuition to be a basic source of evidence.[26]

Before we return to modal reliabilism, there is a preliminary problem which must be dispensed with, namely, the so-called "generality problem."[27] Consider the relation holding between x and p such that x believes p and p is the proposition that there is no largest prime. For the sake of argument, let us count this relation as a propositional attitude. Then the deliverances of this propositional attitude will have a strong modal tie to the truth: *necessarily*, whenever this propositional attitude holds between a subject and a proposition, that proposition will be true. But surely it is not the case that the mere belief that there is no largest prime is to count as basic evidence that there is no largest prime. For all we know, the belief might have been induced by

hypnosis! Does this case count as a counterexample to modal reliabilism? No. The reason is that this propositional attitude is not even a candidate for a basic source of evidence. Something can be a candidate basic source only if it is a natural (i.e., non-Cambridge-like) propositional attitude. Intuition, appearance, introspection, belief, desire, guessing, wondering, etc.—these all qualify. Contrast these with the relation holding between x and p such that x believes p and p is the proposition that there is no largest prime. The range of this relation is artificially restricted, in this case to a single necessary proposition. The relation is Cambridge-like, not a natural propositional attitude (indeed, not even a genuine *species* of belief). The advantage of a theory like modal reliabilism, which offers a free-standing analysis of what it is to be a basic source of evidence, is that it can avail itself of this plausible solution to the "generality problem" in terms of natural propositional attitudes. This is possible only if intuition is a natural propositional attitude. That is why the earlier phenomenological points about intellectual seeming are so important.

2.4 The Character of the Modal Tie

To avoid the problems besetting contingent reliabilism, we arrived at a *general scheme* for analyzing what it takes for a candidate source of evidence to be basic: it is basic iff its deliverances have an appropriate kind of strong modal tie to the truth. This biconditional is not itself an analysis: it is not intended that *just any* strong modal tie be sufficient for something's being a basic source of evidence. Rather, this scheme provides us with an *invitation* to find the weakest modal tie that does the job—that is, the weakest modal tie which lets in the right sources and excludes the wrong ones. The explanation of why intuition is a basic source of evidence then goes as follows. By definition, a candidate source of evidence is basic iff it has *that* sort of modal tie; intuition does have that sort of modal tie; hence, intuition is a basic source of evidence. Likewise for phenomenal experience: it too has that sort of modal tie; hence, it is a basic source of evidence. And we have an explanation of why other candidate sources (observation, testimony, etc.) are not basic: they are not basic because they lack that sort of modal tie.

We thus have an invitation to find the weakest modal tie that does the job. One candidate is the kind of modal tie posited by traditional infallibilists. The resulting analysis would be: a

candidate source is basic iff, necessarily, all deliverances of the source are true. But this is not satisfactory for two reasons. First, we have good reasons to reject infallibilism both in the case of intuition (e.g., the paradoxes) and in the case of phenomenal experience (e.g., Russell's locally uniform spectrum), so the infallibilist analysis would wrongly exclude intuition and phenomenal experience as basic sources of evidence. Second, as we will see, there are weaker modal ties that do the job.

One of them is an infallibilist tie relativized to ideal cognitive conditions. On the resulting analysis, a candidate source is basic iff, necessarily, for anyone in ideal cognitive conditions, the deliverances of that source would be true. Accordingly, for anyone in ideal cognitive conditions, basic sources provide a guaranteed pathway to the truth regarding the deliverances of the source. Of course, we humans are not in *ideal* cognitive conditions, so there is no guarantee that all of the deliverances of *our* basic sources are true. But, if we limit ourselves to suitably elementary propositions, then relative to them we *approximate* ideal cognitive conditions. For suitably elementary propositions, therefore, deliverances of our basic sources would provide in an approximate way the kind of pathway to the truth they would have generally in ideal conditions. For those of us capable of real theorizing—that is, subjects whose cognitive conditions (intelligence, memory, attentiveness, constancy, etc.) are good enough to enable them to process theoretically the deliverances of their basic sources—the size of the class of relevantly elementary propositions would not be inconsiderable.[28]

While this relativized infallibilist analysis does the job, it too posits a very strong modal tie. Our larger analytical strategy, however, invited us only to posit the weakest modal tie that does the job, and there is indeed a weaker one. It is a tie which is holistic in character and which holds, not with absolute universality, but as Aristotle would say *for-the-most-part*. To wit, a candidate source is basic iff for cognitive conditions of some suitably high quality, necessarily, if someone in those cognitive conditions were to process theoretically the deliverances of the candidate source, the resulting theory would provide a correct assessment as to the truth or falsity of most of those deliverances. Whereas the previous analysis required that the deliverances of a basic source

themselves be true, this weaker analysis requires only that most of the theoretical assessments as to the truth or falsity of those deliverances be true.[29] The previous remarks about approximations then carry over *mutatis mutandis*. Consider subjects (like ourselves) who are capable of processing their basic sources theoretically. The result of that processing, for elementary deliverances, provides in an approximate way the kind of pathway to the truth it would provide generally in the aforementioned high quality cognitive conditions. This is the sort of pathway whose reliability increases the more elementary those deliverances are.

This analysis does the job. It tells us in a natural and non-*ad-hoc* way what is common to our traditional basic sources—intuition and phenomenal experience. And it tells us what is lacking in all other candidate sources—those which are nonbasic and those which are not even sources of evidence, basic or nonbasic. Moreover, I can think of no weaker modal tie that does the job. (If there should happen to be a weaker tie that does the job, I expect that it too would be sufficiently strong to underwrite the applications we shall want to make.) Finally, there is nothing mysterious about this sort of modal tie; indeed, it is implied by the analysis of concept possession (see §3 below).

Some further features of the proposed analysis might be worth pointing out. Consider again some subjects who are in cognitive conditions like ours and who, like ourselves, are capable of processing their basic sources theoretically. We have seen that, when such a subject processes the deliverances of its basic sources, the pronouncements which the resulting theory makes on the those deliverances are increasingly reliable the more elementary those deliverances are. It does not *follow* from this that *any* of these deliverances, even maximally elementary deliverances, would be utterly demon-proof. But the more and more elementary the deliverances are, the fewer the potential sources of error. At the limit, the only surviving potential source of error would be a Cartesian evil demon or something on a par with one. If skeptical prospects like this are indeed genuine metaphysical possibilities (I need not take a stand on whether they are), then they would if realized undermine one's quest for the truth regarding even the most elementary deliverances. Faced with this worry, one could simply give up. But if one gives up, one is bound not to succeed. The way to keep open the possibility of success is to proceed as if this sort of skeptical prospect is not realized.

In this case, one would succeed as long as the skeptical prospect is not realized. And if it is realized, one would be no worse off for having tried. Relying on maximally elementary deliverances of basic sources is thus the best possible *general* strategy theorizers could have for obtaining a class of reliable beliefs regardless of the context they find themselves in: these deliverances are reliable in every possible context which is demon-free.[30] The situation is analogous when theorizers seek to enlarge this class at the risk of corresponding reductions in reliability: basic sources provide theorizers with the best possible general strategy for getting to such substantial classes of truths. This strategy is "context-free" (or "world-independent") in that it works for any subject capable of real theorizing no matter how the rest of the world is. One's basic sources may in turn be used as a yardstick for assessing whether candidate (nonbasic) sources qualify as genuine sources of evidence. Basic sources are thus by nature ideally suited to be "regress stoppers": they have their authority intrinsically, and it is an authority exceeded by no other. These features are precisely what one would want from basic sources of evidence.[31]

My claim is that something like the above analysis is right. Of course, the analysis (and others like it) would be vacuous if it were not possible for some subjects to be in cognitive conditions of the high quality indicated in the analysis and to arrive at the indicated sort of theory of the deliverances of each basic source (phenomenal experience and also intuition). In the case of intuitions, this possibility, and the modal tie to the truth which such a theory would have, are all that are needed to underwrite (the possibility posited in) the Authority and Autonomy of Philosophy. I will not elaborate this connection here, but I assume it is fairly clear in broad outline.[32] The foregoing, then, is the Argument from Evidence.

A shortcoming of traditional empiricism was that it offered no explanation of why phenomenal experience is a basic source of evidence; this was just an unexplained dogma. By the same token, traditional rationalists (and also moderate empiricists who, like Hume, accepted intuition as a basic source of evidence) did not successfully explain why intuition is a basic source of evidence. Modal reliabilism provides a natural explanation filling in these two gaps left by the traditional theories. The explanation is in terms of the indicated modal tie between these sources and

the truth. But why should there be such a tie to the truth? Neither traditional empiricism nor traditional rationalism provided a satisfactory explanation. The theory of concept possession promises to fill in this gap. Such a theory is at the heart of the Argument from Concepts.

3. The Argument From Concepts

There are at least two different but related senses in which a subject can be said to possess a concept. The first is a nominal sense; the second is the full, strong sense. The first may be analyzed thus:

> A subject possesses a given concept at least nominally iff the subject has natural propositional attitudes (belief, desire, etc.) toward propositions which have that concept as a conceptual content.[33]

Possessing a concept in this nominal sense is compatible with what Tyler Burge calls misunderstanding and incomplete understanding of the concept.[34] For example, in Burge's arthritis case, the subject misunderstands the concept of arthritis, wrongly taking it to be possible to have arthritis in the thigh. In Burge's verbal contract case, the subject incompletely understands the concept of a contract, not knowing whether or not contracts must be written. (Hereafter I will use 'misunderstanding' for cases where there are errors in the subject's understanding of the concept and 'incomplete understanding' for cases where there are gaps—"don't knows"—in the subject's understanding of the concept.) Possessing a concept in the nominal sense is also compatible with having propositional attitudes merely by virtue of appropriate attributions on the part of third-person interpreters. For example, we commonly attribute to animals, children, and members of other cultures various beliefs involving concepts which loom large in our own thought. We do so without thereby committing ourselves to there being a causally efficacious psychological state having the attributed content which plays a role in "methodological solipsistic" psychological explanation. Our standard attribution practices, nonetheless, would have us deem such attributions to be appropriate. Advocates of this point of view hold that these attribution practices reveal to us essential features of our concept of belief (and, indeed, might even be constitutive of it). Everyone should at least agree that people could have a word 'believe' which expresses a concept having these features. In what follows, the theory I will propose is designed to be compatible with this

practice-based view but will not presuppose it. These, then, are some weak ways in which a person can possess a concept. And there might be others belonging to a natural similarity class. This, too, is something which our theory will be designed to accommodate but not to presuppose.

With these various weak ways of possessing a concept in mind, we are in a position to give an informal characterization of possessing a concept in the full, strong sense:

> A subject possesses a concept in the full sense iff (i) the subject at least nominally possesses the concept and (ii) the subject does *not* do this with misunderstanding or incomplete understanding or just by virtue of satisfying our attribution practices or in any other weak such way.

In ordinary language, when we speak of "understanding a concept," what we mean is possessing the concept in the full sense. In what follows, this ordinary-language idiom will help to anchor our inquiry, and I will use it wherever convenient.[35] It will also be convenient to have available the technical term 'possessing a concept determinately', which is just another way of expressing the notion of understanding a concept (i.e., possessing a concept in the full sense).

Now just as a person can be said to understand a concept (to possess it in the full sense), a person can be said to misunderstand a concept or to understand a concept incompletely and so on. Similarly, a person can be said to understand a proposition, to misunderstand a proposition, to understand a proposition incompletely, and so forth.

Now, intuitively, it is at least possible for most of the central concepts of philosophy to be possessed determinately—substance, mind, intelligence, consciousness, sensation, perception, knowledge, wisdom, truth, identity, infinity, divinity, time, explanation, causation, freedom, purpose, goodness, duty, the virtues, love, life, happiness, and so forth. It would be entirely *ad hoc* to deny this. Later on, this possibility will be used as a premise—called *the possibility of determinate possession*.

We have characterized determinate possession informally—negatively and by means of examples, and we evidently have an ordinary-language idiom for this notion. We readily see what notion is, and it seems important theoretically. A legitimate philosophical project would therefore be to give a positive general analysis of the notion. Indeed, it cries out for one. I believe that a general analysis is feasible and, specifically, that concept possession is to be analyzed in terms of the very

kind of truth-tracking pattern in one's intuitions which figured in the modal reliabilist explanation of the evidential status of intuitions. My strategy will be to begin with a series of intuitive examples which serve to isolate some ideas which will play a role in the eventual analysis.

The Multigon Example. Suppose that a sincere, wholly normal, attentive woman introduces *through use* (not stipulation) a new term 'multigon'.[36] She applies the term to various closed plane figures having several sides (pentagons, octagons, chiliagons, etc.). Suppose her term expresses some definite concept—the concept of being a multigon—and that she determinately possesses this concept. Surely this is possible. By chance, however, the woman has neither applied her term 'multigon' to triangles and rectangles nor withheld it from them. The question has not come up. But eventually she does consider the question of whether it is possible for a triangle or a rectangle to be a multigon. When she does, her cognitive conditions continue to be normal—she is intelligent, attentive, possessed of good memory, free from distraction, and so forth—and she determinately understands the question. Now let us suppose that the property of being a multigon is either the property of being a closed straight-sided plane figure or the property of being a closed straight-sided plane figure with five or more sides. (Each alternative is listed under 'polygon' in my desk *Webster's*.) Then, intuitively, when the woman considers the question, she would have an intuition that it *is* possible for a triangle or a rectangle to be a multigon if and only if the property of being a multigon = the property of being a closed straight-sided plane figure. Alternatively, she would have an intuition that it is *not* possible for a triangle or a rectangle to be a multigon if and only if the property of being a multigon = the property of being a closed straight-sided plane figure with five or more sides. Intuitively, if these things did not hold, the right thing to say would be that either the woman does not really possess a determinate concept or her cognitive conditions are not really normal.[37]

The Chromic Example. Suppose a woman has through use (in, say, her diary) introduced a new term 'chromic'. She applies the term to phenomenal qualia, specifically, to shades of phenomenal color—red, blue, purple, etc.—but withholds it from phenomenal black and phenomenal white. Suppose the term 'chromic' expresses some definite concept—the concept of

being chromic—and that she determinately possesses this concept. Again, this is surely possible. Suppose, however, that the woman has not yet experienced any shades of phenomenal gray. When she finally does, it is a central shade of phenomenal gray, and the experience of it is clear and distinct—vivid, unwavering, and long-lasting. During the course of the experience, the question whether the shade is chromic occurs to her. When it does, her cognitive conditions are wholly normal (she is fully attentive, etc.), and she determinately understands the question. Suppose, finally, that the property of being chromic is either the property of being a nonblack nonwhite phenomenal color or the property of being a nonblack nonwhite nongray phenomenal color. In this case, intuitively, the following would hold: the woman would have the intuition that the shade *is* chromic iff the property of being chromic = the property of being a nonblack nonwhite phenomenal color. Alternatively, she would have the intuition that the shade is *not* chromic iff the property of being chromic = the property of being a nonblack nonwhite nongray phenomenal color. That is, just as in the multigon case, the woman's intuitions would track the truth *vis-à-vis* the relevant test question. As before, if this were not so, we should say instead that the woman does not really possess a determinate concept or her cognitive conditions are not really normal.

What is distinctive about the chromic example is that the woman determinately possesses the concept of being chromic at a time when the decisive cases involve items—namely, shades of phenomenal gray—which lie beyond her experience and conceptual repertory. She determinately possesses the concept of being chromic even though, prior to experiencing phenomenal gray, she cannot even entertain the relevant test questions, let alone have truth-tracking intuitions regarding them. Surely such a thing is possible. There is no requirement that, in order to possess a concept determinately, a person must *already* have experiential and/or conceptual resources sufficient for testing the possible extensions of the concept. Determinate concept possession is in this sense "Hegelian"—a present feature revealed only in the future.

Here is a variant on the example. It might be that it is *nomologically impossible* for the woman (or, for that matter, anyone else) to experience phenomenal gray: as a matter of nomological necessity, attempts to overcome this deficiency (e.g., electrodes, drugs, neurosurgery, etc.) only lead

to irreversible coma and death. But this would not prevent the woman's term 'chromic' from determinately expressing a definite concept, the concept of being chromic. Consistent with all of this, there is a certain *metaphysical possibility*, namely, the metaphysical possibility that the woman—or someone whose epistemic situation is qualitatively identical to hers—might have an increased potential for phenomenal experiences (viz., for phenomenal gray). This could be so without there being any (immediate) shift in the way the woman (or her counterpart) understands any of her concepts or the propositions involving them. In this improved situation, there would be no barrier to the woman's coming to understand and to consider the test question determinately. Intuitively, it is metaphysically possible for all this to happen.[38] And, intuitively, if it did , then just as in the original example, the woman (or her counterpart) would have truth-tracking intuitions *vis-à-vis* the test question.

Of course, the same sort of thing could happen in connection with nomologically necessary limitations on aspects of the woman's cognitive conditions (intelligence, attentiveness, memory, constancy, etc.): it could be that, because of such limitations, it is nomologically impossible for her to have truth-tracking intuitions *vis-à-vis* relevant test questions. It would nonetheless be metaphysically possible for her (or a counterpart whose epistemic situation is qualitatively identical) to have improved cognitive conditions. Intuitively, in such a situation, she would then have the relevant truth-tracking intuitions. She would determinately possess the concept iff such intuitions were metaphysically possible.

Finally, all this would hold *mutatis mutandis* if the examples concerned, not a solitary person (as above), but whole groups of people who determinately possess relevant concepts. These people would determinately possess a given target concept iff it were metaphysically possible for them to have the associated truth-tracking intuitions.

The moral is that, even though there might be a nomological barrier to there being intuitions of the sort we have been discussing, there is no metaphysically necessary barrier. (Remember: these intuitions need not be those of the original subjects; they may be those of people whose epistemic situation is qualitatively identical to that of the original subjects.) This leads to the thought that

determinate concept possession might be explicated (at least in part) in terms of the metaphysical possibility of relevant truth-tracking intuitions (in appropriately good cognitive conditions and with appropriately rich conceptual repertoires). The idea is that determinateness is that mode of possession which constitutes the categorical base of this possibility. When a subject's mode of concept possession shifts to determinateness there is a corresponding shift in the possible intuitions accessible to the subject. In fact, there is a shift in both *quantity* and *quality*. The quantity grows because incomplete understanding is replaced with complete understanding, eliminating "don't knows." The quality improves because incorrect understanding is replaced with correct understanding.

Using these ideas, I will now formulate a progression of analyses, each beset with a problem which its successor is designed to overcome—converging, one hopes, on a successful analysis.

3.1 Subjunctive Analyses

Our discussion of the multigon example suggests the following:

> x determinately possesses the concept of being a multigon iff:
> x would have the intuition that it is possible for a triangle or a rectangle to be a multigon iff it is *true* that it is possible for a triangle or a rectangle to be a multigon.

In turn, this suggests the following:

> x determinately possesses the concept of being a multigon iff:
> x would have intuitions which *imply* that the property of being a multigon = the property of being a closed straight-sided plane figure iff it is *true* that the property of being a multigon = the property of being a closed straight-sided plane figure.

We have been assuming that in the example x possesses the target concept determinately in all respects except perhaps those which would decide this sort of test property-identity. Suppose, however, that we remove this background supposition. We would then want to generalize on the above idea. The natural generalization is the following:

> x determinately possesses a given concept iff, for associated test property-identities p:
> x would have intuitions which imply that p is true iff p is true.

If f is the given concept, the associated test property-identities p are propositions to the effect that

the property of being f = the property of being A, or the denials of such propositions (where A is some formula).[39] When we transform this proposal into a direct definition of *determinateness*, the mode of understanding involved when one understands determinately, we obtain the following:

> determinateness = the mode m of understanding such that, necessarily, for all x and property-identities p which x understands m-ly,
>> p is true iff x would have intuitions which imply that p is true.

The intention here is that 'm' ranges over *natural* modes of understanding (i.e., non-*ad-hoc* Cambridge modes of understanding).

3.2 A Priori Stability

A problem with this analysis is that it relies on the subjunctive 'would', but there are well-known general objections to subjunctive analyses. The solution is to replace the subjunctives with a certain ordinary modal notion. I will call this modal notion *a priori stability*. Consider an arbitrary property-identity p which someone x understands m-ly. Then, x settles with a priori stability that p is true iff, for cognitive conditions of some level l and for some conceptual repertory c, (1) x has cognitive conditions of level l and conceptual repertory c and x attempts to elicit intuitions bearing on p and x seeks a theoretical systematization based on those intuitions and that systematization affirms that p is true and all the while x understands p m-ly, and (2) necessarily, for cognitive conditions of any level l' greater than l and for any conceptual repertory c' which properly includes c, if x has cognitive conditions of level l' and conceptual repertory c' and x attempts to elicit intuitions bearing on p and seeks a theoretical systematization based on those intuitions and all the while x understands p m-ly, then that systematization also affirms that p is true.[40] A diagram can be helpful here.

Levels of
cognitive
conditions

p is true

<c, l>

Conceptual repertories
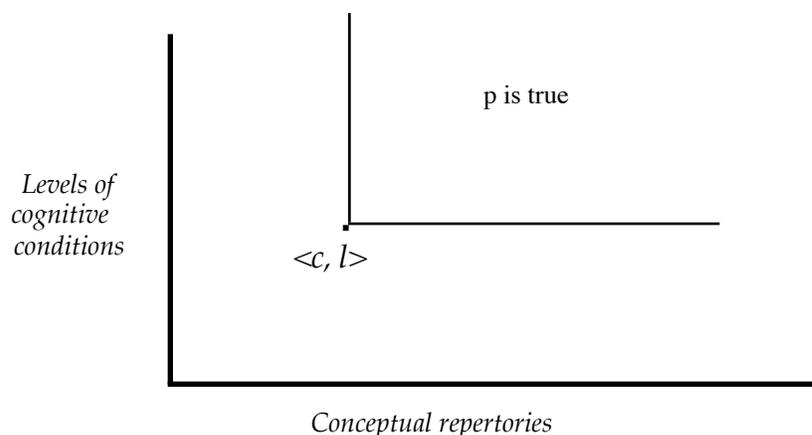
The idea is that, after x achieves <c, l>, theoretical systematizations of x's intuitions always yield the same verdict on p as long as p is understood m-ly throughout. That is, as long as p is understood m-ly, p always gets settled the same way throughout the region to the "northeast" of <c, l>. When this notion of a priori stability replaces the subjunctives in our earlier analysis, we arrive at the following:

> determinateness = the mode m of understanding such that, necessarily, for all x and property-identities p which x understands m-ly,
> p is true iff it is possible for x to settle with a priori stability that p is true.

The biconditional has two parts:

> (a) p is true *if* it is possible for x to settle with a priori stability that p is true.

and

> (b) p is true *only if* it is possible for x to settle with a priori stability that p is true.

The former is a *correctness* (or soundness) property. The latter is a *completeness* property. The correctness property tells us about the potential *quality* of x's intuitions: it is possible for x to get into a situation such that from then on x's intuitions yield only the truth regarding p, given that x understands p m-ly. The completeness property tells us about the potential *quantity* of x's intuitions: it is possible for x to have enough intuitions to reach a priori stability regarding the question of p's truth, given that x understands p m-ly. According to the analysis, determinateness is that mode of understanding which constitutes the categorical base for the possibility of intuitions of this quantity and quality.

A qualification is in order. As the analysis is stated, x must be able to go through the

envisaged intuition-driven process arriving at the conclusion that p is true. It is enough, however, that *an epistemic counterpart of* x (i.e., someone in qualitatively the same epistemic situation as x) be able to go through the envisaged process with that outcome, while understanding p m-ly. Let us understand the proposal and its sequels in this way.

3.3 Accommodating Scientific Essentialism

Even with this qualification, however, there is a problem with the completeness clause: it conflicts with scientific essentialism—the doctrine that there are property-identities that are essentially a posteriori (e.g., the property of being water = the property of being H_2O). Plainly, the completeness clause in the analysis goes too far, for it requires that such things can be settled a priori. The completeness clause thus needs to be weakened.

Granted, we do not have a priori intuitions supporting such scientific essentialist property-identities. Even so, whoever determinately understands these property-identities should at least have associated twin-earth intuitions, that is, intuitions regarding twin-earth scenarios of the sort which underwrite arguments for scientific essentialism. For example, if someone determinately understands the proposition that the property of being water = the property of being H_2O, that person ought to have the following twin-earth intuition: if all and only samples of water here on earth are composed of H_2O, and if the corresponding samples on a macroscopically identical twin earth are composed of XYZ ($\neq H_2O$), then those samples would not be samples of water.

If the person has intuitions of this sort, the person also ought to have various modal intuitions concerning the sorts of *counterpart entities* that are possible. For example, the person ought to intuit that it is possible for there to be a twin earth on which there is a counterpart of water whose composition consists of counterparts of hydrogen, oxygen, and the sharing of two electrons. Naturally, this generalizes.

These considerations lead to the following idea. Although a person who determinately understands a given natural-kind property-identity cannot settle a priori whether it is true, nonetheless the person ought to be able to settle a priori whether there is at least a *counterpart* of the property-identity which is true. Being able to settle such things a priori is a necessary condition

for understanding the *categorial content* of the constituent concepts. And, of course, understanding the categorial content of a concept is a necessary condition for determinately possessing it. The idea is that this condition, taken together with the correctness condition, is jointly necessary and sufficient for determinateness.

This suggests the following analysis in which the completeness clause (b) is weakened so that it only requires categorial understanding:

> determinateness = the mode m of understanding such that, necessarily, for all x and property-identities p understood m-ly by x,
>
> (a)   p is true *if* it is possible for x to settle with a priori stability that p is true.
>
> (b)   p is true *only if* it is possible for x to settle with a priori stability that p has a counterpart which is true.[41]

Before proceeding, I should note that there is an important family of test propositions p which are entirely immune to scientific essentialism, namely, those which I call *semantically stable*: p is semantically stable iff, necessarily, for any population C, it is necessary that, for any proposition p' and any population C' whose epistemic situation is qualitatively identical to that of C, if p' in C' is the counterpart of p in C, then p = p'. (There is of course an analogous notion of a *semantically stable concept.*[42]) Thus, if p is a semantically stable property-identity, the weakened completeness clause in the revised analysis entails the strong completeness clause of the earlier analysis:

> (b)   p is true *only if* it is possible for x to settle with a priori stability that p is true.

This fact is significant for epistemology, for most of the central propositions in the a priori disciplines—logic, mathematics, philosophy—are semantically stable and, therefore, immune to scientific essentialism.[43]

3.4 Accommodating Anti-individualism

To avoid the clash with scientific essentialism, we weakened the completeness clause so that it bears on only the categorial content of our concepts. This weakening, however, creates a predictable problem having to do with the *noncategorial* content of our concepts. Suppose x is in command of nothing but the categorial content of a certain pair of concepts, say, the concept of being a beech and

the concept of being an elm. He would then be in a position resembling that of Hilary Putnam, who was entirely unable to distinguish beeches from elms. In this case, x certainly would not possess these concepts determinately (although the above analysis wrongly implies that he would). A symptom of x's incomplete understanding would be his complete inability—*without relying on the expertise of others*—even to begin to do the science of beeches and elms. What is missing, of course, is that x's "web of belief" is too sparse. An analogous problem of misunderstanding would arise if x were too often to classify beeches as elms and/or conversely.

In order for x to achieve determinate possession, x's web of belief would need to be improved. But how? We can answer this question by making use of the idea of *truth-absorption*. If x were to absorb ever more true beliefs related to beeches and elms (perhaps including relevant social and linguistic facts), eventually x's incomplete understanding (or misunderstanding) would shift to determinate understanding. And, in general, if an arbitrary person x has categorial mastery of certain of his concepts but nonetheless does not understand them determinately, then by absorbing ever more true beliefs x eventually will switch out of his deficient mode of understanding and thereby come to possess the relevant concepts determinately. By contrast, people who already determinately possess their concepts can always absorb more true beliefs without switching out of their determinate possession.

These considerations suggest the following revision:

determinateness = the mode m of understanding such that, necessarily, for all x and all p understood m-ly by x,

(a)   p is true *if* it is possible for x to settle with a priori stability that p is true.

(b.i)   p is true *only if* it is possible for x to settle with a priori stability that p has a counterpart which is true.   (for property-identity p)

(b.ii)   p is true *only if* it is possible for x to believe m-ly that p is true.
                            (for p believable by x).[44]

Why do improvements in the web of belief suffice to eliminate indeterminateness in the usual beech/elm cases? The reason (given the truth of scientific essentialism) is that there can be nothing else in which determinateness could consist in cases like this; the question of whether this is a beech or an elm is simply beyond the ken of a priori intuition. Absent intuition, web of belief is the

default position on which determinateness rides. But when there are a priori intuitions, they prevail.

3.5 The Final Analysis

In the course of our discussion, we found it convenient to shift from our focus from determinate understanding of *concepts* to determinate understanding of *propositions*. The analysis of the former notion, however, has always been only a step away:

> x determinately possesses a given concept iff$_{def}$ x determinately understands some proposition which has that concept as a conceptual content.

This analysis invokes the notion of determinately understanding a proposition. To understand a proposition determinately is to understand it in a certain *mode*—namely, determinately. The hard problem is to say what distinguishes this mode from other natural modes of understanding. My strategy for answering this question was to quantify over natural modes of understanding, including determinateness itself (much as in Ramsified functional definitions of mental properties one quantifies over properties, including the mental properties being defined). The goal in this setting was to isolate general properties which determinateness has and which other natural modes of understanding lack. My proposal was the following:

> determinateness = the mode m of understanding with the following properties:
> (a)   correctness
> (b.i)   categorial completeness
> (b.ii)   noncategorial completeness.

(a) A mode m has the correctness property iff, necessarily, for all individuals x and all propositions p which x understands in mode m, p is true *if* it is possible for x (or someone initially in qualitatively the same sort of epistemic situation as x) to settle with *a priori* stability that p is true, all the while understanding p in mode m. (b.i) A mode m has the categorial completeness property iff, necessarily, for all individuals x and all true (positive or negative) property identities p which x understands in mode m, it is possible for x (or someone initially in qualitatively the same sort of epistemic situation) to settle with *a priori* stability that there is some true twin-earth style counterpart of p, all the while understanding p in mode m. (b.ii) A mode m has the noncategorial completeness property iff, necessarily, for all individuals x and all true propositions p which x

understands in mode m and which x could believe, it is possible for x to believe p while still understanding it in mode m.

Of course, this analysis might need to be refined in one way or another.[45] The thesis I wish to be committed to is that some analysis along these general lines can be made to work.[46]

Conclusion

At the beginning of section 3 we characterized the notion of determinate possession informally—negatively and by means of examples. With this informal characterization in view, intuitive considerations then led us to *the possibility of determinate possession*, the premise that it should be at least possible for most of the central concepts of philosophy to be possessed determinately.[47] Our ensuing discussion of examples then led us to the idea that this informal notion of determinate concept possession might be analyzed in terms of the possibility of a certain high level of cognitive conditions such that, when one is in such cognitive conditions, one's intuitions would acquire correspondingly heightened quantity and quality. Given our earlier finding that it should be possible for most of the central concepts of philosophy to be possessed determinately, we are then led to the conclusion that it should be possible for there to be intuitions concerning the behavior of philosophically central concepts which have this heightened quantity and quality. Now, on the one hand, this heightened quantity will be enough to ensure the Autonomy of Philosophy—a sufficient supply of intuitions regarding the behavior of philosophically central concepts to allow one to answer most of the answerable central questions of philosophy without having to rely substantively on the sciences. On the other hand, the quality is heightened enough to ensure the Authority of Philosophy—intuitions approximating the truth to such an extent that empirical inquiry would, by comparison, always be subject to greater risks or error. This in outline is the Argument from Concepts, our second argument for the Autonomy and Authority of Philosophy. Of course, to be convincing, this outline will need to be filled out in its details. But that must await another occasion.

I will close by sketching the connection between our two arguments—the Argument from Evidence and the Argument from Concepts. The Argument from Evidence, our first argument, also

led to the Autonomy and Authority of Philosophy. In the course of giving that argument, we noted a shortcoming in traditional empiricism and traditional rationalism, namely, that neither successfully explains why intuition and phenomenal experience should be basic sources of evidence. Modal reliabilism filled this explanatory gap: the explanation is that these two sources have the right sort of modal tie to the truth. In the case of intuitions, this strong tie was sufficient to underwrite (the possibility posited in) the Authority and Autonomy of Philosophy. We saw, moreover, that neither traditional empiricism nor traditional rationalism successfully explains why there should be such a tie between these basic sources and the truth. The analysis of determinate concept possession fills this gap: In the case of intuition, determinate possession of our concepts entails that there must be such a tie. But determinate concept possession also guarantees that there be a corresponding tie in the case of phenomenal experience. Our intuitions are what seem to be so concerning the applicability of concepts to cases presented to pure thought. If our intellectual seemings have the indicated modal tie to truth, then we could hardly be mistaken regarding what seem to be the contents of our phenomenal experiences. In this way, the analysis of determinate concept possession promises to complete the picture begun by our two main epistemological traditions—rationalism and empiricism. If this is so, the fact that one and the same analysis can play this dual role provides additional reason to accept it.

Burge, T. (1979) "Individualism and the Mental." *Midwest Studies in Philosophy* 4: 73-122.

Cohen, L. J. (1981) "Can Human Irrationality be Experimentally Demonstrated?" *The Behavioral and Brain Sciences* 4: 317-331.

Cohen, L. J. (1986)*The Dialogue of Reason*. Oxford: Clarendon Press.

Sosa, E. (1996) "Rational Intuition: Bealer on its Nature and Epistemic Status," *Philosophical Studies* 81: 151-162**.**

Warner, R. (1989) "Why Is Logic *A Priori*?" *The Monist* 72: 40-51.

[1]For example, Wason, Johnson-Laird, Rosch, Nisbett, Kahneman and Tversky.

[2]The Autonomy and Authority of Philosophy view—and the arguments supporting it—are thus far more moderate than the views of L. Jonathan Cohen (1981, 1986). Cohen is committed to the impossibility of empirically testing for significant patterns of irrationality on the part of individual human beings (and groups of human beings), I am not. Indeed, the kind of modal tie to the truth I posit is consistent with the possibility of persistent error in intuition-based theories arrived at by humans engaged in a civilization-long intellectual project. Nonetheless, there are two weaker points on which Cohen and I would agree. First, whether the possibility just mentioned is truly realized is something for which there are no *empirical tests* performable by *that* civilization. I think that there is a conceptual barrier to this. (This does not rule out the possibility of a superior species performing such a test on a given civilization.) Second, even if our intellectual culture were always to fail to arrive at comprehensive intuition-based theories which are largely true, that would not refute Autonomy and Authority theses and the thesis of the strong modal tie which underlies those theses. The cognitive conditions of human beings working collectively over historical time might fall short. That would not show that the requisite cognitive conditions are not possible for other beings. No empirical tests could ever rule out this mere possibility. (Scientific essentialism is the only hope for empirically ruling out mere possibilities. We will see that it provides no threat in the present case.)

[3]In "Philosophical Limits of Scientific Essentialism" (1987) I adopted this overall argument strategy and, in particular, defended the concept-possession account of intuition's tie to the truth. In that early paper I did not yet see how to formulate a noncircular general analysis of the notion of concept possession and so was unable to show in detail that concept possession implies the indicated truth tie. In "Why Is Logic *A Priori*?" (1989) Richard Warner advocates a concept-possession approach to our *a priori* knowledge of logic. In *A Study of Concepts* (1992)

Christopher Peacocke offers a series of piecemeal strategies for analyzing what it is to possess particular concepts or families of concepts, but he suggests no method for how to give a noncircular general analysis. In subsequent work Peacocke adopted a concept-possession approach to *a priori* knowledge, but he now has backed away from that approach. In "Philosophical Theories and Intuitional Evidence" (this volume) Alvin Goldman and Joel Pust defend a concept-possession account of intuitional evidence. Although they do not take up the question of how to analyze what it is to possess a concept, they argue convincingly that the concept-possession approach is inevitable.

[4]I have presented a portion of the material in this section in "The Incoherence of Empiricism"; I can see no way to present the rest of the present paper without reviewing it again here. I will, however, use the occasion to make a number of additional points and further clarification.

[5]This example is adapted from Alvin Goldman, "Discrimination and Perceptual Knowledge," *The Journal of Philosophy* vol. 73, 1976, pp. 771-791.

[6]Empiricists should not object to this practice. After all, if something counts as evidence, it also counts as a reason that is evident. At the same time, empiricists believe that only experiences and/or observations qualify as reasons that are evident. Finally, empiricists would count a person as justified only if the person's has taken into account the evident reasons.

[7]I defend this claim in "On the Possibility of Philosophical Knowledge," *Philosophical Perspectives* 10, Oxford: Basil Blackwell, 1996.

[8]It is commonly said that intuitions are easily shaped by experience. This claim is ambiguous. Meant one way, it is surely right. Various experiences are needed in order to possess our concepts determinately, especially concepts which are introduced in connection with empirical theories. Without such experiences, we would not possess various concepts, or at least would not possess them determinately. (In Burge's arthritis example, the person possesses the concept of arthritis insofar as he has various beliefs involving the concept, but he does no possess the concept determinately.) Understood another way, however, the claim is questionable. Here the claim is that experiences cause us to shift from intuiting various affirmative propositions to intuiting their

negations, or conversely, and these shifts are not associated with coming to possess (or ceasing to possess) our concepts determinately. My view is that, necessarily, this kind of shifting is severely constrained at least as the subject's cognitive conditions (intelligence, attentiveness, constancy, etc.) improve.

The indicated ambiguity in the notion of shaping-by-experience is associated with an ambiguity in the terms 'empirical' (or '*a posteriori*') and '*a priori*'. A theory may be said to be empirical insofar as experience is required in order to possess determinately the concepts involved in the belief or theory. Alternatively, a theory may be said to be empirical insofar as experience is required to justify the theory. The Autonomy and Authority theses pertain only to the second sense of 'empirical': answers to most central philosophical questions can be arrived at without substantive reliance on empirical theories, and in most cases it is possible for there to be answers arrived at by standard philosophical methods which have an authority which is greater in principle than that which answers provided by empirical theories could have.

[9]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.

[10]Ernest Sosa ("Rational Intuition: Bealer on its Nature and Epistemic Status," *Philosophical Studies* 81, 1996, pp. 151-162) has considered the idea of a *general* reduction of seemings to a certain sort of unprompted inclination to believe. A special attraction of this reduction is that, if correct, it would work, not just for intellectual seemings (intuitions), but also for sensory seemings (appearances). Unfortunately, there are counterexamples. Suppose someone S is looking at a duck-rabbit drawing in normal observation conditions. As it happens, S has two dispositions. The first concerns what would happen if S were coached in a certain way (i.e., if he were told to look for the duck): if told to *look for the duck*, it would appear to S that this is a *duck*. The second disposition concerns what would happen if S were coached in *no* such way (this is the kind of disposition central to Sosa's proposal): if S is not coached in any way (e.g., if not told to look for the duck), it would appear to S that this is a *rabbit*, and S would accordingly believe that this is a rabbit. Clearly,

S could have both dispositions simultaneously. Now suppose we tell S to *look for the duck*. This would trigger the first disposition. Accordingly, it appears to S that this is a duck; it does not appear to S to be a rabbit. All the while, however, the second disposition (the sort of inclination featured in the proposed reduction) is still there: if S were not coached in any way, he would believe that this is a rabbit. So we have a case in which the inclination occurs and the appearance does not. But, according to the analysis, the appearance (sensory seeming) is supposed to consist in the inclination.

In reply, advocates of the counterfactual analysis of seemings might strengthen their analysis by adjoining introspection as a further condition: not only must S have the indicated sort of inclination-to-believe-absent-coaching but also S must be introspectively aware of having it. There are three problems with this strengthened analysis. First, is it really plausible that unsophisticated subjects (infants, animals) can have an appearance (a sensory seeming) only if they have an introspective awareness of an inclination-to-believe-absent-coaching? Second, suppose that S is told to look for the duck; accordingly, it appears to S that this is a duck. All the while, however, S is disposed absent coaching to believe that this is a rabbit; moreover, S could all the while be introspectively aware of this disposition. If so, the original counterexample stands. Third, introspection is itself a kind of seeming: I am introspecting that S iff it *seems* (i.e., seems reflectively) to me that S. (Like other seemings, reflective seemings can occur in the absence of the corresponding beliefs. E.g., it can seem to me that I am thinking rapidly even though I believe I am not—say., on the grounds that I believe that I have taken a drug that distorts one's subjective sense of time.) So, if this condition were adjoined to a general analysis of seeming, it would trigger a vicious regress.

[11]Hilary Kornblith, for example, advocates such an approach.

[12]Or immediate consequences of beliefs they already had.

[13]There is one way in which this assessment might turn out to be false: if a certain very bold metaphysical thesis were true (a kind of Leibnizian identity of indiscernibles for universals),

namely, if there were natural asymmetries throughout the space of universals, then conceivably every universal would have an implicit-turned-direct definition (perhaps infinitary) whose underlying constants were all logical notions (in a rich sense of 'logic' which includes as logical the notion of a natural property and kindred notions). If so, then every necessary truth could, by substitution of such definitions, be converted into a necessary proposition all of whose constituents were logical notions. This necessary proposition would be a logical truth on one construal of 'logical truth' (i.e., a proposition is a logical truth iff every proposition having the same logical form—i.e., the form determined by the constituent logical notions—is a necessary truth). Thus, if 'logical', 'logical truth', and 'definition' are understood in the indicated ways and if the bold metaphysical thesis were true, every necessary truth could be converted into a logical truth by substitution of definitions. So on that construal of 'analytic', every necessary truth would be analytic. In the text I will write as though this view is mistaken.

Of course, there are other construals of 'definition', 'logical', and 'logical truth' according to which there would still be necessities which cannot be converted into logical truths by substitution of definitions. And so in those senses, there would be necessities which are not analytic.

[14]Suppose, on the other hand, that 'consistent' is taken to mean having no contradiction as a semantic consequence. Then, the Gödel theorem problem is avoided. But, assuming that logicism is mistaken, there is still Kant's original problem: individual arithmetic falsehoods (e.g., that $5 + 7 \neq 12$) would be consistent even in the semantical sense and would therefore be wrongly counted as possible according to the present view. Moreover, even if logicism were correct, we would get to virtually the same conclusion by considering—not numbers and addition and multiplication on them—but rather equi-spaced instants on the time line and associated operations on them. The relevant instants and operations could be referred to with primitive names, i.e., rigid designators, introduced by means of reference-fixing descriptions. Even if the latter involved standard arithmetic vocabulary, the associated primitive names would have no such content.

[15]This would not hold if all true scientific essentialist impossibility statements æIt is impossible that AÆ were consequences of scientific definitions and 'consistent' were understood so as to take into account definitions (including scientific definitions).

[16]Some people think that modality reduces to probability: æIt is possible that AÆ is equivalent to æThe probability that A is nonzeroÆ, and æIt is necessary that AÆ is equivalent to æThe probability that A is oneÆ. But this is quite mistaken. On an objectivist conception, causal or physical necessities have probability of one, but they are not logical or metaphysically necessities. On a subjectivist conception, the subjective probability of an *a posteriori* natural kind identity—say, that water $= H_2O$—is less than one, but this proposition is metaphysically necessary.

[17]Here are two unsuccessful responses to this problem. First, the proposed explanation might be emended thus: any *immediate modal consequence* of the nonconscious empirical theory can be raised to consciousness, and when it is, the result is an intuition having that modal content. But this emended explanation would at most explain modal intuitions such as the following: possibly p; possibly possibly p; and so forth—where p is a *nonmodal* proposition which is an immediate consequence of the nonconscious empirical theory. The problem is that this class of possibility intuitions does not include the possibility intuitions which are most important philosophically, namely, possibilities which are not actual.

Second, advocates of the proposed explanation might try to exploit the notions of consistency, inconsistency, and logical truth, somehow using them as proxies for the modal notions of possibility, impossibility, and necessity. The advantage of this approach is that, unlike modal notions, the notions of consistency, inconsistency, and logical truth might be empirically acceptable. But our earlier reflections about the differences between possibility and consistency spell defeat for all versions of this proposal.

[18]*Philosophical Perspectives*, 1 (1987): pp. 289-365.

[19]Oxford University Press, forthcoming.

[20]Testimony-based justification thus seems to be a problem for the sophisticated ("normal worlds") theory proposed by Alvin Goldman (section 5.5 "Reliabilism," in *Epistemology and Cognition*, Cambridge, Mass.: Harvard University Press, 1986), at least as I understand his theory. The reason is that our telling of systematic lies to an isolated individual is compatible with a world's being "normal" in Goldman's sense.

[21]This notion of a basic source of evidence is an intuitive notion which can be picked out with the aid of examples and rough-and-ready general principles. The following examples are typical. Depending on one's epistemic situation, calculators can serve as a source of evidence for arithmetic questions; tree-rings, as evidence for the age of trees; etc. It is natural to say that these sources are not as basic as phenomenal experience, intuition, observation, and testimony. By the same token, it is natural to say that testimony is not as basic as observation, and likewise that observation is not as basic as phenomenal experience. Phenomenal experience, however, is as basic as evidence can get. Here are some typical rough-and-ready principles. A source is basic iff it has its status as a source of evidence intrinsically, not by virtue of its relation to other sources of evidence. A source is basic iff no other source has greater authority. A source is basic iff its deliverances, as a class, play the role of "regress stoppers." Although examples and principles like these serve to fix our attention on a salient intuitive notion, they do not constitute a definition. That is our goal in the text.

[22]This account of nonbasic sources is perhaps only an idealization. See Christopher Peacocke ("Rationality Requirements, Knowledge and Content," in *Thoughts: An Essay on Content*, Oxford: Basil Blackwell, 1986) for a suggestive discussion of how idealizations might function in epistemology. Note that I need not commit myself to the account of nonbasic sources in the text. For an alternative account, see note 30. What is important for the present argument is that there be *some* account consistent with a reliabilist account of basic sources.

[23]Anti-Panglossian examples and also Swamp-Man examples show that it does not provide a necessary condition, either. But I will not go into that matter here.

[24]Appealing to intuitions in judging this question is in no way circular. For it has already been established that intuitions are evidence. All we are doing here is appealing to intuitions to adjudicate the question of which sort of evidence intuition, basic or nonbasic.

[25]Hume probably allows that intuition is a basic source of evidence, for he holds that "intuitive certainty" is a primitive kind of knowledge. See Section IV, Part I, *An Enquiry Concerning Human Understanding*. Hume's radicalism in this area arises in connection with his views the nature of the modalities and the extent of our intuitions concerning them.

[26]Once it is agreed that intuition is a basic source of evidence, there is another point we can make against contingent-reliabilism. It makes an (otherwise avoidable) mystery of the fact that our intuitions actually have a reliable tie to the truth. If contingent reliabilism were correct, it would be a

contingent fact that our intuitions have such a tie. How could this (allegedly) contingent fact be explained? The most promising explanation would be one provided by an *evolutionary psychology*: just as evolutionary pressures selected in favor of perceptual mechanisms that track the truth rather than ones that do not, so also evolutionary pressures select in favor of intuitional mechanisms that track the truth rather than ones that do not. The unwarranted Panglossianism aside, there would still be a problem. Assume (for reductio) that contingent reliabilism is correct. Then it would be possible for intuitions—specifically, modal intuitions—to have been systematically in error. It is easy to describe a possible species like this whose biological fitness would be wholly equal to ours (specifically, their means/ends reasoning as fit) but whose modal intuitions would be systematically shifted in such a way that these intuitions would usually be mistaken. From an evolutionary point of view, it would then be an unexplainable mystery why these alternative beings do not exist and why, instead, only we beings with reliable modal intuitions exist.

[27]In this and the succeeding paragraphs I benefited from a critical exchange with Ernest Sosa.

[28]For the sort of theorizers who are able to engage in end-game self-approving theorizing, these cognitive conditions would perhaps need to be even higher, and so in turn the class of relevantly elementary propositions would be larger. Of course, what counts as "elementary" and "approximate" is vague. Although the lines are fuzzy, the larger explanatory point is clear.

[29]I require only that *most* of the indicated assessments made by this *a priori* theory be true. I do not say *all*, for I do not want to rule out in principle unresolvable logical and philosophical antinomies. Nor do I want to rule out the possibility that Burge-like incomplete understanding might contaminate selected intuitions. What is ruled out is that this sort of thing could be the norm.

[30]Maximally elementary deliverances of basic sources thus have the following characteristic: either they are demon-proof and so necessarily reliable; or else they are the next best thing—reliable in every possible context which is demon-free.

Incidentally, I provisionally defined one's nonbasic sources of evidence to be those deemed reliable by one's best theory based on one's basic sources. There is an alternative approach. Just

now, when I tried to explain the role basic sources play, I reasoned thus: if there were an evil demon, I could have no success in my quest for the truth, so I might as well suppose that there are no demons; that way I maximize my chances for succeeding in my quest. Perhaps this style of reasoning could be applied a series of times, once for each kind of relative basicness. First, for completely basic sources, where the only sort of threat would be an evil demon (or something on a par with one). Second, for observation, where besides evil demons there is a threat from bad observation conditions. Third, for testimony, where besides demons and bad observation conditions, there is a threat from liars. And so forth.

[31] And these features are precisely those given by the general principles invoked in note 21 to help single out the intuitive concept of a basic source of evidence. Notice that the above discussion is itself context-free in the sense just isolated: regardless of context anyone engaged in real theorizing (especially end-game self-approving theorizing) cannot but feel its intuitive pull.

Incidentally, William Alston worries that all efforts to show that observation has a tie to the truth are guilty of "epistemic circularity" in the sense that they must appeal to observation as evidence right in the course of the argument. But this is not so, for we can show the reliability of observation using our basic sources of evidence—phenomenal experience and intuition. Can we show without an analogous "epistemic circularity" that phenomenal experience has a tie to the truth? Yes, intuition-based arguments show it. Can we show without "epistemic circularity" that intuitions themselves have a tie to the truth? No, any argument to that effect must, I believe, use intuitions as evidence. (For example, the sort of argument in the text did.) But there is nothing vicious about this "circle." For, by the argument of section 1 and other arguments in that vein, denying that intuitions are evidence leads to epistemic self-defeat; it is impossible to have a coherent epistemology without admitting intuitions as evidence. (We can also show it is impossible to have a coherent epistemology without admitting phenomenal experience as evidence.) When one does admit intuitions as evidence, the kind of tie to the truth one is able to show for intuitions and phenomenal experience is a strong *modal* tie. (Note that phenomenal experience cannot show this

even for phenomenal experience.) The fact that this is a strong *modal* tie to the truth entitles these basic sources to serve as the general touchstone for evaluating the reliability of candidate sources of evidence.

[32]The only serious reason to doubt that the implication holds comes from scientific essentialism, the doctrine that there are essentially *a posteriori* necessary truths (e.g., water $= H_2O$, etc.). In Bealer (1996a) I argue that this provides no barrier. The reason is that scientific essentialism holds only for semantically unstable terms ('water', 'heat', 'gold', 'beech', 'elm', etc.)—that is, terms which could mean something different in some population of speakers whose epistemic situation is qualitatively identical to ours. An expression is semantically unstable iff the external environment makes some contribution to its meaning. By contrast, the terms used to formulate (most of) the central questions of philosophy are semantically stable; the external environment makes no contribution to their meaning in this way: 'is identical to', 'is', 'necessarily', 'possibly', 'true', 'valid'; 'property', 'quality', 'quantity', 'relation', 'proposition', 'state of affairs', 'object', 'category', 'conscious', 'sensation', 'pleasure', 'pain', 'emotion', 'think', 'believe', 'desire', 'decide', 'know', 'reason', 'evidence', 'justify', 'understand', 'explain', 'purpose', 'good', 'fair', 'ought', etc.

[33]This notion of conceptual content is defined in *Philosophical Limits of Science*. In the simplified setting in which all propositions are hyper-fine-grained we would have the following more familiar analysis: x possesses a given concept at least nominally iff x has natural propositional attitudes (belief, desire, etc.) toward propositions in whose logical analysis the concept appears. Incidentally, if you question whether there really is this weak, nominal sense of possessing a concept, you may treat the analysis just given as a stipulative definition of a technical term. Doing so makes no difference to the larger project.

[34]Tyler Burge, "Individualism and the Mental," *Midwest Studies in Philosophy* 4, 1979: 73-122.

[35]It is not essential to our inquiry that the ordinary-language idiom fit exactly the informally characterized notion of possessing a concept in the full sense. If it does not, my eventual proposal

should be viewed an analysis of the informally characterized notion, what I will call "determinate possession." There is a long tradition of isolating a theoretically important notion informally by means examples and then turning to the theoretical project of giving a positive general analysis of it. Indeed, there is a tradition of doing this even when there is no ordinary-language idiom which exactly fits the notion in question. We see this kind of project in Aristotle in connection with the notions of substance, eudaimonia, etc.; in St. Augustine and Russell in connection with the notion of acquaintance; in Kripke in connection with his notion of epistemic possibility; and so forth. If need be, my project should be viewed in the same way. Having made this qualification, however, I will assume that the ordinary-language idiom does fit the notion of possessing a concept in the full sense, and I will proceed to use this idiom whenever convenient.

[36]This example is taken from Bealer (1997).

[37]What would happen if the person had one of these intuitions—say, that a triangular multigon is not possible—but upon seeing a triangle the person formed a perceptual belief that the presently seen triangle *is* a multigon? Would this go against what I say in the text? No. For the person's cognitive conditions would clearly be *abnormal*.

[38]In the present example we can be sure that the envisaged conditions are metaphysically possible, for *we* are beings in such conditions. But this is only an artifact of the example. When we generalize on the above set-up, facts about actual human beings drop out. Thinking otherwise would be a preposterous form of anthropocentrism.

[39]There is a residual question regarding the restriction to property-identities p. Concerning this restriction, the formulation might be exactly right just as it stands. On a certain view of properties, however, an additional qualification would be needed. I have in mind the view according to which (1) all necessarily equivalent properties are identical and (2) for absolutely any formula A (no matter how *ad hoc* and irrelevant A's subclauses might be), a property is denoted by all expressions of the form: the property of being something such that A. If this view were correct, there would be true property-identities of the following sort: the property of being f = the property of being f such

that P, where P is any arbitrary necessary truth. In this case, the proposed analysis would commit us to the possibility of settling a priori *every* necessary truth. This is too much. This undesirable consequence can be avoided in one of two ways. The first is to deny (1) or (2) or both; there are some interesting arguments supporting this move. The second way is to accept (1) and (2) but to adopt an enriched logical theory which is able to mark the distinction between property-identities which are *ad hoc* in the indicated way and those which are not. There are already several logical theories of this sort in the literature. In what follows I am going to assume that the unwanted consequence can be avoided by one or another of these means.

[40]When I speak of higher level cognitive conditions, I do not presuppose that there is always commensurability. In order for the proposal to succeed, I need only consider levels of cognitive conditions l' and l such that, with respect to *every* relevant dimension, l' is definitely greater than l.

[41]The notion of counterpart is defined as follows: p' is a counterpart of p iff$_{def}$ it is possible that there is a population C such that it is possible that, for some population C' which is in qualitatively the same epistemic situation as C, p' plays the same epistemic role in C' as p does in C.

[42]These notions were isolated in "Mental Properties" (1994) and examined further in "*A Priori* Knowledge and the Scope of Philosophy" (1996a) and "On the Possibility of Philosophical Knowledge" (1996b).

[43]This theme is explored further in the papers just mentioned and in *Philosophical Limits of Science*.

[44]Perhaps 'believes' should be strengthened to 'rationally believes' and p restricted to propositions which x can rationally believe. In this connection, bear in mind that the testimony of a trusted informant is often sufficient for rational belief.

[45]We have identified determinateness as *the* mode m of understanding that has both the correctness and completeness properties. Plausibly, there is not just one mode m like this. (For example, if there is a relation of acquaintance like that posited in traditional epistemology, there is presumably an associated mode of understanding; if so, it would have both the correctness and completeness

properties.) But such modes of understanding would be species of a genus, and that genus would be the general mode of understanding, determinateness. This would lead us to revise the analysis one last time as follows: determinateness = the genus of modes m of understanding with the correctness and completeness properties.

[46]If you have doubts about the analysis, bear in mind that the analysis is compatible with the idea that determinateness might come in degrees, achieved to a greater or lesser extent. What the analysis aims at is the notion of completely determinate possession. If you find yourself disagreeing with the analysis on some point or other, perhaps the explanation is that you have in mind cases involving something less than completely determinate possession.

[47]Since, as mentioned in note 32, the terms we use for expressing the central concepts of philosophy are semantically stable, environmental factors play no role in the determinate possession of these concepts. Accordingly, the special restrictions which have bearing on concepts expressed by semantically unstable terms have no bearing here.