

INTUITIVE A PRIORI KNOWLEDGE: RELIABILITY AND RATIONALITY

By

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A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

2009

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To Jesse, whose excellence inspires me

ACKNOWLEDGMENTS

I thank my parents, Zora and Dragan Simić, and my brother, Miroljub Simić, for their support in my academic pursuits. Such pursuits would not have been possible without my undergraduate advisor, and a friend, Mima Andjelković. I thank her.

I am especially indebted to my dissertation advisors, Kirk Ludwig and John Biro. Professor Ludwig's excellent advising strategy, numerous conversations, thorough reading of numerous drafts, and extensive feedback helped throughout the process of making this document. Similarly, without numerous conversations with Professor Biro, his feedback, and ability to help me navigate through various challenges at different stages of writing, I would have been lost. I am also grateful to Professors Ludwig and Biro for their encouragement and enthusiasm about the ideas I pursue in this study.

I thank Professor Robert D'Amico, also a member of my committee, for his helpful comments and suggestions. Lastly, I thank Professor Betty Smocovitis, the external member of my committee, for her good questions, as well as advice on practical matters concerning grants and fellowships.

I am grateful to College of Liberal Arts and Sciences for its support during the Spring of 2009 in the form of a Nutter Dissertation Fellowship.

Finally, I am greatly indebted to my husband, Jesse Butler, whose personal excellence helped me persist through this long and sometimes bumpy journey and whose philosophical excellence, as expressed in numerous conversations and helpful comments, contributed to the quality of this document.

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Abstract of Dissertation Presented to the Graduate School
of the University of Florida in Partial Fulfillment of the
Requirements for the Degree of Doctor of Philosophy

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May 2009

Chair: Kirk Ludwig
Cochair: John Biro
Major: Philosophy

Philosophical methodology and epistemology crucially depend on the use of a priori intuitions. In this study, I focus on a current debate in modal epistemology that concerns the nature of intellectual intuitions and their relations to a priori knowledge. The central question that I aim to answer is how intuitive a priori knowledge of modal truths is possible.

According to the traditional picture, intuitions are phenomenologically and epistemologically analogous to the sources of empirical knowledge (perception, introspection). They are seemings with the epistemic role of primary evidence and/or a priori justification for what they are about. I argue against the traditional view of the nature and the epistemic role of intellectual intuition. Centrally, intuitions' authority can come neither from being evidence (reasons) for what they are about. Adhering to the evidential (justification) theory of intuition leads to skepticism about modal knowledge.

I propose an alternative view about the nature and epistemic role of intuitions. On this view, having an intuition is being in a cognitive state classified in terms of its *etiology*, rather than phenomenology. On the etiological account (which is in a broad Platonic tradition, based as it is on an analogy with non-empirical memory and linguistic competence), intuition is a

manifestation of *conceptual know-how* that requires no more than one's mastery of the concepts. This means that a mental state is an intuition just in case it is a manifestation of antecedent knowledge, which, if expressed, is knowledge of analytic truths in Kant's sense. This is, I argue, a better way of characterizing the nature and epistemic role of intellectual intuition, the one that guarantees the epistemic authority of intuition regarding modal knowledge with respect to both reliability and rationality.

Since the broadly Kantian notion of analyticity, especially in the context of the traditional view of modality, which sees it as aligned with analyticity and a priority, has fallen out of favor in the contemporary discussion of these matters, I address alleged counterexamples to the traditional (Kantian) notion of analyticity as well as challenges to the traditional coextension thesis between the analytic, the necessary, and the a priori.

CHAPTER 1 INTRODUCTION

Intellectual intuition plays a central role in disciplines such as philosophy, mathematics, and logic. A distinctive feature of inquiry characteristic in such disciplines is that it can be done from an armchair without relying on the content of experience, save for the experience needed to acquire the relevant concepts. For an illustration, let us contrast armchair inquiry with the scientific inquiry.

In science, what motivates an inquiry is an attempt to gain knowledge about a puzzling phenomenon and to fit it into the existent body of the knowledge. A scientist, for example, has a guiding hypothesis that would explain why something is the case that she observed. Such hypothesis is often a product of her insight. To test the theory, the scientist engages in experimenting to see whether the theory correctly predicts the course of the experience. If so, the theory passes the test; if not, it gets revised or replaced by a new theory. For a scientist, an insight (intuition) is a heuristic that gives rise to a particular hypothesis (chosen from the pool of countless alternatives) and the theory gives the promise of explaining the puzzling phenomenon.

The questions central to armchair disciplines obviously cannot be answered in this fashion. For the domain of truths that a priori disciplines are concerned with is largely the domain of necessary truths. Consequently, we cannot perform the experiments to solve problems in this domain, for the puzzles are not *factual*, but rather *conceptual*. However, we can perform thought experiments that produce intuitions. And traditionally, philosophers rely on intellectual intuition to come up with a philosophical theory and such a theory then is tested against further intuitions. Such intuitions are often said to “test” philosophical theories. This is, of course, a metaphor. The challenge is to examine whether this metaphor is apt. Or better yet, can we dispense with the

metaphor and replace it with a theory of intellectual intuition that spells out the nature, epistemic role, and epistemic status of intellectual intuition in a priori inquiry?

If we can come up with an epistemologically illuminating account of intellectual intuition, then we are in a position to answer the question, which is central to this study, namely, how is a priori knowledge of necessary truths based on intellectual intuition possible?

According to a popular view among traditional and contemporary philosophers, the testing metaphor is apt. That is, it is usually acknowledged that philosophical inquiry, and a priori inquiry in general, is certainly different from scientific inquiry in terms of its content, but the *structure* of the inquiry and the model of progress is analogous to that of science.

In this study, I challenge this picture of armchair inquiry. Though a priori intuitions have epistemic authority regarding a priori knowledge, they do not do so by being evidence and/or justification. Thus, the central question is how is intuitive a priori knowledge of modal truths possible if intuitions are not some kind of evidence or a priori justification?

To answer this question, I divide the inquiry into three sub-questions: i) What is a priori (intellectual) intuition? ii) What is its epistemic role? and iii) What is its epistemic status?

Before I turn to analyses of ‘intuition’, I first introduce, in Chapter 2, the phenomenon of intellectual intuition by introducing a few examples that suffice for a preliminary, reference fixing definition of ‘intellectual intuition’. According to the definition, intellectual intuition is an answer elicited in response to the questions about the scenarios described by *thought experiments*. I distinguish intellectual from physical (or more generally empirical) intuitions.

In Chapter 3, I introduce and discuss the intellectual seemings model for thinking about the phenomenon of intuition. This model is an umbrella for a perceptual, introspective, and a dispositional analysis of a certain sort (namely the one that is still committed to intuitions

providing a priori justification and having probative force). Intuition, on this model, is characterized by way of a distinctive *phenomenology* (distinctive experience) associated with it that comes from things' *seeming* certain ways. Such seemings are *primary evidence/ reasons* in support of the content of the intuition and/or what can be inferred from it. And to account for the possibility of modal knowledge, the proponents of such a model, I argue, need to explain how it is that intuitions *reliably* track what is necessarily true (in the sense that there is a reliable connection between having an intuition with a certain propositional content, that *P* and its being the case that *P*).

In Chapter 4, I discuss the motivation for thinking that intuitions are evidence by showing that there is a special connection between the intellectual seemings model of intuition and the evidential theory of intuition. From particular accounts of error I isolate an argument form, which I dub "The Argument From Error," that connects the phenomenological conception of intuition with the possibility of error and the claim that intuitions are evidence. In the second part of the chapter I discuss explicit arguments to the conclusion that intuitions are evidence. In particular, I discuss George Bealer's (1993, 1996, 1998, 2000) and Joel Pust's (2000) arguments.

In Chapter 5, I argue that intuitions cannot be evidence. The argument is based on an analysis of the evidence relation. I show that intuitions and their contents (or what can be inferred from them) cannot be proper relata of the evidence relation. Worse, the evidential theory of intuition leads to skepticism about modal knowledge, because the puzzle about reliability is insoluble for this view. Naturally, if we give up the notion of a priori evidence, we must let go the notion of a priori justification. I argue for a subsidiary thesis, that the notion of intuitive a priori justification is incoherent, which suggests the need for rethinking the a priori / a posteriori

distinction that is typically drawn by invoking a special type of justification as a marker of the a priori.

In Chapter 6, I propose an alternative, etiological account of intuitions and their epistemic role. It is a non-evidential, competence (i.e., dispositional) account. On such a view, intuitions manifest *antecedently possessed knowledge* of how to apply concepts. Crucially, having an intuition is like playing chess or speaking English because it manifests a kind of competence—an ability to follow and apply rules governing predicates in a language. And what one recognizes in having an intuition is that the content cannot but be true given the meaning facts about the terms deployed. Though intuitive knowledge is primarily knowledge-how, it can be expressed propositionally, and if so expressed, it is knowledge of analytic truths (in Kant's sense).

This is, by and large, a Platonic account of intuitions and of the possibility of intuitive a priori knowledge in the sense that performing thought experiments and doing conceptual analysis draws on antecedent knowledge. Thus, the analogy I use to develop such an account is an analogy with a certain kind of memory.

There are a number of memory models, as 'memory' applies to heterogeneous phenomena. To see what notion of memory is relevant let us distinguish between three memory models in particular, the experiential, the non-experiential and the memory-how models. The experiential memory model is structurally analogous to other members of the family of intellectual seemings models.¹ On this model, the thinker uses the fact that it seems to her that P as a reliable indicator (evidence, justification) of the truth of P. Memory, on this model, is like perception of past as opposed to present events. Thus, I leave this model aside as it is not a genuine alternative to the intellectual seemings model and has the same problems that the intellectual seeming model has.

¹ Cf. Goldman & Pust (1999: 180)

The non-experiential memory model is rooted in the use of the verb ‘to remember’; to remember something entails that truth of that which is remembered. This is a veridical non-experiential memory model, according to which remembering that P is not a symptom of the truth of P, nor is it a clue for a thinker to believe that P. Rather that one remembers that P entails that P is true. From this, together with the fact that the function of the memory is to preserve knowledge, we get that remembering that P entails that one knows that P. This model looks attractive for understanding intuition because it leaves no room for treating intuitions as evidence. However, this model needs to be supplemented with the memory-how model, which allows for the intuitive knowledge to be nonpropositional (such as making inferences in accordance with *modus ponens*). For, the function of the memory-how is preservation of skills and habits, which are the wrong sort of thing to be evidence since they are nonpropositional.

Upon answering what I call “epistemological objections,” to the theory proposed that have to do with the implication of the view that there is no new conceptual knowledge that is the product of intuition, I turn, in Chapter 7, to what I call “metaphysical objections” that have to do with the presupposition of the account that there is a traditional line-up between a priori, analytic and necessary truths. I discuss some alleged counterexamples to this coextension thesis, such as the synthetic a priori, the necessary (analytic or synthetic) a posteriori, and the contingent (analytic or synthetic) a priori. I conclude that even within the Kantian tradition of thinking about analyticity and within the Kripkean tradition of thinking about how natural kind terms work, we can still defend traditional coextension thesis between the analytic, the a priori and the necessary and hence the account of intuition proposed.

I conclude this study in Chapter 8, where I summarize the master argument and what we have learned about the role of a priori intuition in relation to modal knowledge.

CHAPTER 2 THE PHENOMENON OF INTELLECTUAL INTUITION

In this Chapter, I discuss the phenomenon of intellectual intuition¹ and how it arises, as well as different kinds of intellectual intuitions. To bring to focus what is distinctive about intellectual intuitions, I contrast them with physical or empirical intuitions as exhibited in science. In the end I give a preliminary characterization of a priori intuition that fixes the referent of ‘intuition’.

Philosophical Intuitions. A species of an a priori intuition is a *philosophical intuition*. Philosophical intuitions are typically elicited as *responses* of a certain sort to the scenarios described by *thought experiments*, which are imagined scenarios that aim to provide a “test” for philosophical theories. If a theory is correct, it passes the intuitive test in the sense that it implies the intuitions in question. If the theory has counterintuitive results, then the theory is false. Similarly, if a philosophical analysis is correct then the conditions that it specifies as necessary and/or sufficient pass the intuitive test.

Let us consider paradigmatic cases of thought experiments and philosophical intuitions that get elicited in response to them. First, I discuss the thought experiment introduced by Kripke (1972) designed to test the philosophical hypothesis that the origin of a thing is essential to its being what it is. In particular, “if a material object has its origin from a certain hunk of matter, it could not have had its origin in any other matter” (Kripke 1972: 114). Second, I discuss Edmund Gettier’s (1963) thought experiment that aims to test whether the justified true belief analysis of knowledge is correct.

¹ I should point out that I use the locutions ‘intellectual intuition’, ‘a priori intuition’, and ‘rational intuition’ interchangeably.

In order to test his essentiality of origin hypothesis (EOH), Kripke introduces a thought experiment that asks us to consider *a particular table*.

In the case of this table, we may not know what block of wood the table came from. Now could *this table* have been made from a completely different block of wood, or even of water cleverly hardened into ice—water taken from the Thames River? We could conceivably discover that, contrary to what we now think, this table is indeed made of ice from the river. But let us suppose that it is not. (1972: 113-114).

Then we are presented with a question whether that table could have been made from a different block of wood and still be *that* table.

Then, though we can imagine making a table out of another block of wood or even from ice, identical in appearance with this one, and though we could have put it in this very position in the room, *it seems to me that this is not to imagine this table as made of wood or ice, but rather it is to imagine another table, resembling this one in all external details, made of another block of wood, or even of ice.* (Kripke 1972: 114, emphasis added).

Intuitively, this very table could not have been made from a different block of wood and still be the same table. On the basis of this intuition one comes to believe its content, which, if true, is a necessary truth. That is, that this table could not have been made of a different piece of wood or from a different substance, gives us reason to believe (EOH). The truth of the intuitive content, moreover, is entailed by (EOH). Typically, in such a situation we say that (EOH) passes the intuitive test by successfully accounting for the relevant intuition.

Let us turn now to the thought experiment introduced by Gettier (1963), to challenge the traditional analysis of knowledge as justified true belief.

The traditional definition of knowledge cites three conditions as individually necessary and jointly sufficient for knowledge. To test this analysis, Gettier (1963) described a scenario in which Smith and Jones apply for a job. Smith has strong evidence that (i) Jones will get the job, and (ii) Jones has ten coins in his pocket. Thus, by the principles of logic, Smith has strong evidence for the conjunction of (i) and (ii); that is, (iii) Jones will get the job and Jones has ten

coins in his pocket. Now, (iii) entails that (iv) the man who has ten coins in his pocket will get the job.

So, Smith has strong evidence for (iii) and (iii) entails (iv); thus Smith has strong evidence for (iv). Now, unbeknownst to Smith, he himself will get the job and not Jones. Also, unbeknownst to Smith, he himself has ten coins in his pocket. So, (iv) is true, Smith believes (iv), and Smith has strong evidence that (iv) is true. Yet, the evidence Smith has for the truth of (iv) rests on the false premise, namely (iii).

Now, we ask ourselves whether Smith knows (iv). The *intuitive* answer is ‘no’. Smith’s justification for (iv) is not properly connected to the truth of (iv) and his belief is true as a matter of luck. Given that knowing entails that one’s belief is not true by luck, anybody who possesses the concept of knowledge (or knows what ‘know’ means) must judge that Smith does not have knowledge. If this is correct, we are also warranted in judging that the three traditional conditions for knowledge are not sufficient for knowledge.

What I just described are clear cases of a philosophical intuitions being elicited by thought experiments. I turn now to the more general description of the structure and phenomenology of thought experiments.

The structure and the phenomenology of thought experiments. A general schema that describes the structure of a thought experiment that elicits an intuition can be summarized in the following stages.

First, there is a specific question the thinker is interested in. These questions are typically designed “to test” whether some proposed necessary and/or sufficient conditions are really necessary and/or sufficient or whether some philosophical theory is true.

Second, in order to test whether some set of conditions is necessary and/or sufficient, or whether a particular philosophical theory is true, one engages in *imagining* a scenario that describes a situation of some sort. One focuses her *attention* on a *particular imagined scenario*. For example, one focuses on the scenarios described in the previous section. However, such a scenario should be a *representative sample* and that one should think along the same lines about any other case that is relevantly similar. The judgment issued in response to a question asked exhibits *generality* because it is clear that if this particular table could not have been made of a different piece of wood, no other physical object could have been made of stuff different than it is.

Third, every time we consider the case we are *compelled* to make the same judgment. That is, there is a *feeling of necessity* and an impression that the content of the judgment with a contradictory content can't be true.

A canonical description of questions that one can ask with respect to a presented thought experiment has the following form:

Q1. If such and such is the case, must *P* be the case?

Since not all a priori intuitions are produced by elaborate imagined scenarios such as thought experiments, it may be helpful to focus on an example of intuitions that are not produced by explicitly invoking a thought experiment. Suppose I reading an epistemology text that cites the sentence 'nothing can be red and green all over at the same time' as an example of a priori truth. Suppose that a curious undergraduate student says: "This seems right because every time I imagine some surface as being red, I cannot imagine it being colored green at the same time. Of course I don't have to examine any particular object and its color in order to know this. I know this just by knowing what 'red' and 'green' mean—they are just different ways of being colored. And, of course, if something is colored it must be colored one way or the other, and not both

ways at once. Since it is inconceivable that something is colored two ways at once, I come to judge that nothing can be red and green all over at the same time”.

Thus, another canonical (and perhaps more fundamental) description of a thought experiment question that one can ask has the following form:

Q2. Is such and such conceivable?

Answers to the questions Q1 and Q2 are *intuitive* answers, or examples of *intuitions*.

Intuitions elicited as answer to these questions may have different roles. Intuitions can test certain conceptual connections that are the basis for some philosophical theory. In this way what gets inferred from these conceptual connections, a specific philosophical theory, can also be tested by appealing to intuitions.

For instance, that I am not willing to judge that a person in Smith’s situation knows that P, though his belief is true and justified, shows that the standard definition of knowledge is flawed. This intuition supports the conclusion that the standard definition of knowledge does not state a sufficient condition for the concept of knowledge. This is because the intuition reveals certain facts, namely a fact about the concept of knowledge—namely, that knowledge is incompatible with getting things right by luck. Consequently, any theory of knowledge that is underwritten by the (formerly) standard definition of knowledge must be false.

Mathematical intuitions. Thought experiments are neither used in all a priori disciplines, nor are they restricted to a priori disciplines. However, there is a methodological equivalent of thought experiments in other a priori disciplines—*the method of proof*.

A species of an a priori intuition is a *mathematical intuition*. The transitions between different stages in a mathematical proof, for example, are intuitively sound. Here is a simple example of the use of a method of proof that makes use of intuitions at various stages of the proof. Consider the parity theorem for two integers.

Theorem. If x and y are two integers for which $x+y$ is even, then x and y have the same parity.²

Proof. The contra-positive of this theorem is ‘If x and y are two integers with opposite parity, then their sum must be odd’. So we assume x and y have opposite parity. Since one of these integers is even and the other odd, there is no loss of generality to suppose x is even and y is odd. Thus, there are integers k and m for which $x = 2k$ and $y = 2m+1$. Now then, we compute the sum $x+y = 2k + 2m + 1 = 2(k+m) + 1$, which is odd since $2(k+m)$ is even and the successor of any even number is odd.³

At each stage of the proof we can detect the work of intuitions. For example, it is intuitively clear that the theorem is true iff the contra-positive is true. Further, each transition in the proof is intuitively sound. For example, the calculation of the sum is intuitively sound.

Logical intuitions. In addition to mathematical intuitions as a species of a priori intuitions, there are logical intuitions. For example, given the conjunction of A and B , the transition to the conclusion that A is intuitive. That is, one’s knowledge of the conditional ‘if $A \& B$, then A ’ is intuitive, so long as one knows what ‘and’ means.

Empirical intuitions. Now, we can contrast the examples of a priori intuitions with the cases of empirical intuitions, more specifically with a case of a physical intuition.

² Definitions:

An integer x is even (respectively odd) if there is another integer k for which $x = 2k$ (respectively $2k+1$).

Two integers are said to have the same parity if they are both odd or both even.

For the purpose of this example we will assume as proved that each integer is either even or odd.

³ There are some interesting similarities between the method of thought experiment (the possibility test), and the method of proof in mathematics and logic. Among other things, we use thought experiments in philosophy to test the theories and to point to some conceptual connections. Similarly, in the proofs in mathematics the conceptual connections are exploited to establish certain claims. Every mathematical truth can be demonstrated to be necessary by the reduction of a hypothesis contrary to the truth in question, which amounts to saying that one cannot conceive a scenario in which the proposition, P , is not true.

Consider the Coriolis effect⁴. Suppose one wants to test students to see whether they have correct intuitions about the physical world. We invite the students to do a thought experiment. The situation is described as follows. Suppose two people are throwing a ball and they are riding on a merry-go-round, sitting on the opposite sides. Now, the question is whether the friend catches the ball that the other friend throws straight ahead, relative to the thrower's position. Those who have the correct intuitions would say 'no'. For the ball one throws straight ahead curves to the side from a point of view of the person that is stationed on the merry-go-round.

Roughly, although both empirical and a priori intuitions may be about the world (or about some kind of facts), a major difference between empirical and a priori intuitions is that one's a priori intuition, or intuitive judgment, can be made from an armchair in any possible circumstance, that is *independently of experience*, while one's empirical intuitions depend on the course of experience. However, one must say that our last example, the case of a physical intuition, would pass the test of experiential independence. I can just reflect on the merry-go-round scenario and give the correct answer. One reason why the intuition elicited by the merry-go-round thought experiment is not a species of a priori intuition lies in that despite the fact that I do not have to rely on some particular experience to answer that the person who is attempting to catch the ball will not catch it, I do need to apply *some* empirical theoretical knowledge, itself dependent on experience, in order to come to know this.

It is a fact about a philosophical practice that philosophers rely on intuitions as basic grounds for *asserting* their contents. Yet not all the philosophers are on board regarding whether intuitions are good grounds for their claims. Skepticism about intuitions as good grounds for

⁴ The Coriolis effect is an apparent deflection of a moving object in a rotating frame of reference.

modal knowledge often lies behind naturalist programs in philosophy, which holds philosophy hostage to empirical investigation and denies its traditional autonomy from science.

In light of the foregoing examples and some facts about philosophical practice of doing conceptual analysis, we are in a position to give a preliminary characterization of intuitions so as to carry out the first task of fixing the subject matter we are talking about.

Intuitions are *judgments* (of the sort) produced in response to the scenarios described by thought experiments, and proofs with the role of grounding claims in what are traditionally thought of as armchair disciplines—philosophy, mathematics, and logic.

Now, what remains to be done is the more challenging task of giving a general characterization of intuition—providing a description that in some sense illuminates the phenomenon as well as a story why intuitions have epistemic authority regarding a priori knowledge. But to do so, it is important to flag an ambiguity in the term ‘intuition’, as well as in the term ‘grounds’.

Two ambiguities. The term ‘intuition’ is used in many ways. I am concerned here only with its technical uses (as used in philosophy) and leave aside common-sense notion of intuition. The reason for this is that this project is aims to provide a philosophical theory about the character and epistemic status of what is typically said to *ground* philosophical and a priori knowledge in general.

First, we should note that the term ‘intuition’ in its technical use is ambiguous between the process (act) notion and the product of such a process. In the act sense, intuition is a process that leads a thinker to acquire a belief. Linguistic formulas that capture this sense are: “it seems to me that P is the case,” “I feel a pull toward P’s being the case,” etc. In this sense, intuition is a type of experience and there is some phenomenology to this experience, as there is a phenomenology to any other kind of experience (sensory or introspective).

The view that there is a different, product sense of ‘intuition’, is also grounded in typical usage of the term ‘intuition’. For example, such usage is exemplified in ‘Intuitively, P’, or ‘My intuition is that P.’ Such phrases involve another sense of ‘intuition’, the product (object) sense, which is a judgment in the object sense (the thing judged). In the latter sense, intuition is a judgment with a certain content and what is of primary interest is the content and how its nature makes it suitable for being known / knowable a priori.

It is worth mentioning that the focus of the contemporary theorizing about a priori intuition is the (act) process notion of intuition. This is an artifact of thinking that intuitions form an evidential base from which the truth of a belief about their contents follows, by inference to the best explanation. And since the only evidential base that is uncontroversial for both a skeptic and a proponent of a priori knowledge is how things seem, it is often thought that the act notion is the more fundamental notion because the evidence constituted by the character of the mental states is the only one that is neutral between the different theories the truth of which is at issue.

Another reason that the act notion of intuition is primary, it is argued⁵, is that to find out which contents are intuitive, one needs to go through the process of intuiting. I should point out that it is not so clear that this line of reasoning is correct. For, it seems to confuse two questions, one, which is conceptual, with another, empirical (psychological) question. The question before us is what intuition is. That is, what is the proper characterization (analysis) of the term. To say that one must approach this question from the view of the philosophical practice is to be preoccupied with an empirical question about which contents we actually find intuitive. And indeed, to answer this question, the only way to go is to through the process of intuiting. Yet, this is not a question that concerns a philosophical theory about intuition. Our question is about

⁵ Cf. Pust (2000).

which contents are intuitive regardless of anybody actually believing them or finding them intuitive. Thus, these two questions must be distinct: the question what is ‘intuition’, in the sense of a proposition being intuitive, and the question which contents we actually believe to be intuitive. The approach from philosophical practice might be a useful heuristic but it has its limitations. For looking at the practice tells us only what particular thinkers at particular time believe to be intuitive, which, at best, can tell us something psychologically or sociologically interesting about the thinkers, but cannot tell us anything about why certain content is intuitive. For an answer to this question cannot be a given by taking polls of philosophers, for the question is conceptual, rather than empirical.

The contemporary literature on intuition, however, tends to construe ‘intuition’ as an episodic term for a determinate propositional attitude rather than a determinable propositional attitude that can be realized in particular determinate attitudes.

Not only is ‘intuition’ in our starting question ‘how intuitions can be good grounds for a priori knowledge?’ ambiguous, but also the term ‘grounds’ is ambiguous between *source* and *justification*. We use the term in the following way: ‘What is the ground for your claim (belief, assertion)’—this is the justification sense. This question asks for evidence that what one claims is true. In another sense, however, which is also present in an ordinary use of the phrase, we are not interested in reasons for believing but rather in the truth of a belief. This is a sense of ‘grounds’ that pertains to a source that somehow guarantees the truth of a belief by its special link to the truth in the relevant domain. For example, suppose I assert that the gas prices went up upon reading it in *The New York Times*. A common challenge to such statements is “what is your source?”, which is directed not at finding out why I believe such-and-such but rather at why the

thing believed is true. Typically such challenges are responded by citing the newspaper, which is the authority in the domain goes on of such as gas prices.

Having flagged these distinctions, I turn to the mainstream model of understanding the nature and epistemic role of intuition—the intellectual seemings model.

CHAPTER 3 THE NATURE OF INTELLECTUAL INTUITION: THE INTELLECTUAL SEEMINGS MODEL

In this Chapter, I approach the question of what intellectual intuition is and its relation to a priori knowledge. Specifically, the question is how the phenomenon of intuition should be characterized so as to illuminate its epistemological role in a priori knowledge. What is in a need of illumination is the epistemic role and the epistemic status of intuition. In this Chapter, I review the traditional view about the nature of intellectual intuition.

On the traditional, intellectual seemings model, ‘intuition’ expresses an episodic concept that picks our mental states that are phenomenologically and epistemologically analogous to experiential seemings such as perception or introspection. ‘Intuition’ expresses an episodic concept and the nature of intuition is best characterized phenomenologically.

We can carve the region of logical space in which intuition is taken to be an intellectual seeming into subregions: one in which intuitions are *sui generis* perceptual intellectual seemings, the other in which they are introspective, and lastly the region of space in which intuitions are seemings but can be reduced to attractions to believe their contents.

On the *sui generis* view, ‘intuition’ expresses an episodic concept that picks out a mental state, the concept of which cannot be analyzed in terms of concepts that pick out other more basic mental states (most notably beliefs). On the reductive model ‘intuition’ expresses an episodic concept analogous to (perceptual and / or introspective) seemings that can itself be understood as a manifestation of a disposition to believe certain content. Though the *sui generis* and the reductive-seemings models provide different analyses of ‘intuition’, they conceptualize the basic phenomenon in a similar fashion; they both treat intuitions as some kind of seeming or attraction, such that we are phenomenologically aware of them and automatically justified in believing what they present to be the case. On this picture, the basic set of desiderata for an

adequate account of intuition includes that it exhibit intuitions as seemings, distinct from beliefs, that it treat them as evidence and/or justification, and that it show that they are fallible, though reliable. The central puzzle for such accounts is to explain how intuitions can reliably lead to modal truths and produce modal knowledge.

The intellectual seemings view of the nature of intuition should be contrasted with an etiological view. On etiological account, the basic concept of intuition is argued to be dispositional. A suitable analogy for developing such a conception is the analogy (in certain respects) with non-experiential memory (such as propositional memory, and memory how). This picture will be refined and fully defended in Chapter 7 of the. Suffice it to say that on the pure dispositional account, the set of desiderata for an adequate account of intuition is different from the set that guides the intellectual seemings model. Crucially, according to the etiological view, intuitions are not evidence and yet they exhibit a very high degree of reliability by their very nature. This will turn out to be a virtue of the account because it will be shown that the evidential theory of intuition destroys intuition's epistemic authority.

The Intellectual Seemings Model of Intellectual Intuition

Three models fall under the intellectual seemings model: the *sui generis*, the perceptual model, the introspective model, and the reductive seemings model. I take three claims to be central to the intellectual seemings model (i) intuitions are a certain type of *seeming* analogous to experiential seemings (perceptual, introspective); (ii) such seemings play the role of *primary evidence* for their propositional contents and what can be inferred from them (philosophical theories) in the sense that they provide a priori support for them, i.e., suffice for prima facie a priori justification; and (iii) whether intuitions have positive epistemic status, whether they provide, in particular, a priori support for their contents, depends on whether they are *reliable* in

the sense that there is a reliable connection between having an intuition with a certain propositional content, *P*, and its being the case that *P*.

The reason that there are these submodels of the intellectual seemings model lies not in the fact that the proponents of the intellectual seemings model disagree about what concept ‘intuition’ expresses. They agree that the occurrent sense of ‘intuition’ is primary. The main motivation for different seemings models lies in the fact that though the phenomenon of intuition can be captured by the analogy with experiential sources of knowledge, its reliability cannot be explained in the same fashion in which we explain the reliability of perception or introspection, for example. This is because objects of intuition neither can be cognized in the fashion in which objects of perception can be cognized because abstracta are causally inert, nor can be cognized in the manner of objects of introspection because there is no direct access to abstracta. Further intellectual seemings are epistemically evaluable unlike perceptual seemings, and (traditionally) introspective seemings are infallible, unlike intellectual seemings. This is the main reason that Sosa (2007a) gives in favor of replacing either perceptual or introspective model with the competence model. Thus, the main reason for different seemings models lies in the fact that there is a demand that any analysis be able to tell what about intuition makes it the case that it be a modally reliable guide to the truth.

In this Chapter we shall see a common pattern emerging from phenomenological individuation of intuitions, despite differences in the accounts of the reliability of intuition. As we shall see later on, all intellectual seemings models are alike in a crucial respect; they treat intuition as *evidence* and/or *justification*.

The *Sui Generis* Perceptual Seemings Model of Intellectual Intuition

Traditionally the phenomenon of intuition is conceptualized on the model of perception. To have an intuition that *P* is just to “see” that *P* is true. The use of ‘to see’ is somewhat

metaphorical. What the metaphor is supposed to point to is the analogy between seeing things with one's eyes and seeing things with the mind's eye. That is, as things seem to us perceptually, things can seem to us intellectually. (By 'perceptual seemings' I mean the seemings associated with the five senses.) As perceptual seemings are evidence for what they represent, so it is thought intellectual seemings are primary evidence for what they are about and they yield a priori justification if they are good evidence—i.e., they are reliable in revealing modal truths. On this model, intellectual seemings mediate access to necessary truths, as access to what is true about the world is mediated by perceptual seemings.

To understand the perceptual model of intellectual intuition, let's consider, first, how ordinary perceptual seemings arise and what their epistemic role is *vis-à-vis* empirical knowledge.

In perception, things are presented to us as thus and so, and often on the basis of what experience so presents us with we judge things to be thus and so. Typically, when I have an experience as of seeing medlars, for example, and the circumstances are normal, I use this experience of seeming to see medlars as evidence that there are some medlars in front of me. Also, it is traditionally thought that its seeming to me that there are medlars in front of me is evidence that there are medlars in front of me (because appearances are evidence for a reality they are appearances of) and that one is *prima facie* justified in believing what the evidence suggests. Needless to say, however, since evidence can be misleading, *prima facie* justification does not always lead to holding a belief on the basis of such evidence. For example, I may withhold judgment if I have a reason to think that how things seem to me is not how things really are. This could be due to having access to some evidence that is incompatible with the belief that there are medlars in front of me being justified. For example, it may still seem to me that there

are medlars there in front of me, though I don't believe it because I know that medlars don't grow in Florida. The things that I see (I conclude) just look like medlars, but they are in fact miniature pears. So, I do not believe that there are medlars in front of me because I know that such a belief would not be justified despite the evidence of my senses, the perceptual seeming, in light of my background knowledge.

Further, it may seem to me that there are medlars before me though I am merely hallucinating. In this case, it may be that its seeming to me that there are medlars in front of me prompts the belief that there are, and that I am justified in believing that. This is so because in normal circumstances there is a connection between these kinds of seemings and the corresponding reality. It is just that in this circumstance my evidence is misleading.

In light of these examples, we can see that perceptual seemings have a phenomenology (how things seem) that plays an *evidential* role in coming to believe what their contents present, on the basis of which one is *justified* in believing that. In normal circumstances, perceptual seemings are *reliable indicators* (symptoms) of the truth of their contents (if the circumstances are normal) and provide a *reason* for belief. Typically one believes what seems to be so because of the connection between how things seem and the truth of the beliefs formed on that basis, i.e., between how things seem and how things are. This is because there is a causal story that tells us how various objects, when affecting our senses, produce various seemings that prompt corresponding beliefs. In light of these points about perceptual seemings let us turn our attention to intellectual seemings and consider what they look like on this model.

If intuitions are analogous to perceptual seemings, then intuitions are seemings that indicate the truth of their contents (or what can be inferred from these) and constitute evidence for a thinker for believing what they present as being the case. For example, if this is right, the

fact that it seems that Aristotle could not have been a tea cup indicates the truth of the claim that Aristotle could not have been a tea cup and is evidence for the thinker for believing that Aristotle could not have been a tea cup.

If the perceptual model of intuitions is correct, then intuitions are like perceptual seemings in the sense that in both cases how things seem plays the role of *evidence* in coming to believe what one's experience presents.⁶ The proponents of the perceptual model of intuitions typically use the phenomenological analogy with perception in order to get to their conclusion about the epistemic role of intuitions—namely, that they are evidence. That is, they exploit similarities between perceptual and intellectual seemings in a non-epistemic respect in order to establish conclusions about their epistemic role. Good (reliable) intuitive evidence produces a priori justification and a priori knowledge just as perceptual seemings are reliable evidence in coming to believe their contents.

Intuitions on the perceptual model are evidence and provide reasons, that is, justifiers of beliefs. This is so either by virtue of intuitions' being reliable evidence or by virtue of their being self-evident (automatically justified).

Bealer (1996, 1998, 2000, 2002) and Pust (2000) are the most notable recent defenders of the perceptual model of intuition. Bealer (1996, 1998, 2000, 2002) offers the following analysis of 'intuition'.

[B] X has an intuition that p iff it seems to S that P (1998: 211),
where 'seems' is understood, according to Bealer (1996, 1998, 2000, 2002), as a term for a genuine kind of conscious episode with a distinctive phenomenology that distinguishes intuitions from beliefs, guesses, hunches, biases, etc. This kind of conscious episode is analogous to the

⁶ I explain this connection more fully in the next chapter.

kind of episode one undergoes when having an experience as of a red tomato in her visual field or when having a toothache, according to Bealer (1996, 1998, 2000, 2002). The difference between these seemings lies in the fact that seeming to see tomatoes and seeming to have a toothache are *empirical* seemings, while its seeming that the law of non-contradiction must be true is an *intellectual* seeming.

Pust (2000) shares the same basic conception of intuition as Bealer (1996, 1998, 2000, 2002). Yet, he anticipates objections regarding the requirement that the content intuited presents itself as necessary. There is a worry that children and unsophisticated thinkers are unlikely to be having modal thoughts when they have intuitions, which seems to make trouble for this style of analysis. Pust aims to amend this situation by modifying Bealer's analysis by not requiring anymore that the content intuited presents itself as necessary at the time but that the subject, S is only *disposed to have* it seem necessarily true.⁷ Pust's (2000) analysis goes as follows.

[P] S has a rational intuition that p iff a) S has a purely intellectual experience, when considering the question of whether p, that p; and b) at t, if S were to consider whether p is necessarily true, then S would have a purely intellectual experience that necessarily p.
(2000: 46)

In light of the examples, we notice that perceptual seemings have phenomenology (how things seem) that play an evidential role in coming to believe their contents on the basis of which one is justified in believing these contents. Seemings, in fact, play a dual role, that of a *reliable indicator* (symptom) of the truth of its content (if the circumstances are normal) or that of a *clue*

⁷ I should point out that it is unclear that this move actually helps because the relation between the content seeming necessary to one and a thinker being disposed to find it necessary is like the relation between occurrence of a manifestation of a disposition to possessing a disposition. In both cases the thinker must *possess* the disposition, that is the ability to have thoughts that involve necessity, which is precisely what drives the objection to Bealer's analysis. An example may help here. Consider mathematical intuitions. The contents of mathematical intuitions are mathematical truths that are paradigmatically necessary. However, one may have a mathematical intuition without having thoughts about the modal status of the proposition that is the content of one's intuition. For instance, it is intuitive for a child that $2+2=4$ but not that it is necessary that $2+2=4$. This would be also a counter-example to the clause (b) of the analyses [P] because one can have a purely intellectual experience that $2+2=4$, but one could not consider the modal status of the proposition, if one did not have the ability to have thoughts involving necessity.

for a thinker leading her to believe such content. Typically one believes the content of a seeming because of the reliable indicator relationship between the seeming and the truth of the belief. This is because there is a causal story that tells us how various objects when brought in sensory contact with us produce various seemings that prompt corresponding beliefs. Having said this about perceptual seemings let us turn our attention now to intellectual seemings and see what they look like on this model.

If intuitions were analogous to perceptual seemings, then intuitions are seemings that indicate the truth of their contents (or what can be inferred from these) and/or clues for a thinker leading a thinker to believe these contents. For example, the fact that it seems that Aristotle could not have been a tea cup is evidence of the truth of the claim that Aristotle could not have been a tea cup and/or evidence leading a thinker to believe that Aristotle could not have been a tea cup.

If the perceptual model is correct, then we need to distinguish sharply between intellectual seemings and beliefs, just as we distinguish between perceptual seemings and beliefs. According to Bealer (1996), however, intuition must be distinguished from belief because if they were the same, then whenever one has an intuition that P one must have a belief that P and vice versa. He argues that we cannot reduce seemings to beliefs, because believing that P is neither a sufficient nor is it a necessary condition for having an intuition. Furthermore, intuition is episodic in a way in which belief is not. For example when looking at Lyer-Müller illusion, two identical in length lines but with a different style ends (pointing inward or outward) seem to differ in length. Yet, an informed observer does not believe that this is so because she knows better—she measured them. In the same way when looking at the naïve comprehension axiom it still seems to me that it is true even though I know of Russell's paradox and don't believe it to be true. And there are mathematical theorems that do not seem to me one way or the other though I believe them

(because I know of proofs). This would be analogous to believing that that Rome is the capital of Italy, but without having an intuition to this effect. Or so Bealer (1996: 123) argues.

An important thing to notice about the perceptual seemings model is that the gap between seemings and beliefs reflects the gap between appearance and reality. The question then is how the reality (truth) behind the veil of seemings can be reached given that the domain intuitions are about is the domain of causally inert *abstracta*. That is, how is it that we reliably get things right by relying on the clues that intuition gives us given that abstracta cannot causally influence our faculties?

To sum up, on the perceptual model, the gap between appearance and reality opens room for truth-tracking and thereby for making mistakes while relying on intuition. Furthermore, this opens room a mystery regarding how, on this model, appearances of things occur in the first place, given that abstracta are causally inert. In particular, the question is how is it possible to reconcile a causal theory of knowledge with what such knowledge is about—abstracta, so that the practices of forming beliefs in this realm are reliable guide to modal truth. Therein lies the motivation for introspective model and the rejection of the perceptual model of intuition. The problem with the perceptual model can be summarized in the following argument.

Perception is a causal process and a source of knowledge. If Intuition were analogous to perception, then it would consist in causal connection between the realm of rationally knowable objects and the knower's cognitive awareness of them. But we know that abstracta have no causal powers and causal theory of knowledge is the only non-mysterious theory of knowledge. Thus, intuition is not a source of knowledge.⁸⁹

⁸ Cf. Goldman (1999: 7)

Reasoning of the sort spelled out above is the major motivation for rejecting the perceptual model of intellectual intuition. What appears to be a natural candidate for modeling intuition on is introspection, traditionally understood as a source of direct knowledge of the contents of one's mental states. I turn to the introspective model of intellectual seemings.

The Introspective Seemings Model of Intellectual Intuition

The introspective model is motivated by the problems that the perceptual model faces, especially the difficulty of seeing how (a) modal facts could be causally relevant to intuitions, and (b) consequently how we can tell a story about how they reliably connect us with the truth in the domain of necessity.

Introspection is traditionally understood as a process by which we come to have self-knowledge, or knowledge of the contents of our minds. On the traditional, Cartesian view of introspection, the relation between a mental state (thinking that P and the thought that P) and a belief formed on the basis of it is such that there is no inference from a mental state (thinking that P) to the self-attribution of the belief (that P). Belief so acquired is *self-evident* or *self-justified*. This is possible because there is no distinction between appearance and reality and hence no room for tracking or making mistakes. For example, all that there is to the mental state of being in pain is how it appears to one. A belief acquired on the basis of its seeming to one that one is in pain is automatically justified. For there is no more to pain than how it feels.

This model may appear promising because it may appear not to carry a commitment to evidential treatment of intuitions (and the possibility of error) and the issue about reliability is short-circuited by direct access to one's mental states that make one automatically justified in

⁹ There has been an attempt in the literature to defend the perceptual model from this style of objection by rejecting the assumption of this argument that causal theory of knowledge as the general theory of knowledge. Cf. Bealer (1998: 215-216)

believing their contents. I shall consider two introspective models, BonJour's (1998) and Goldman's (1999), because they deploy different notions of introspection underwritten by different conceptions of that which is the object of introspection—that is, the contents of one's mind.

BonJour's Introspective Model

BonJour (1998) is ultimately a proponent of the introspective model of reliability of intuition, though throughout his discussion in *In Defense of Pure Reason*, he uses the language of the perceptual model. However, when faced with the Benacerraff's puzzle he writes.

And if the analogy with sense-perception is taken sufficiently seriously, then it would seem to require that the abstract entities in question be after all involved in the causal chain in a way analogous to that in which ordinary objects are involved in the causal chains that occur in ordinary cases of perception – a requirement that is indeed incompatible with their abstract character. (BonJour 1998: 161)

According to BonJour (1998), objects of rational intuition must be directly accessible to a thinker and thoughts about them must not be mediated by something external to a thinker.¹⁰ That is, the thought content is intrinsic in nature rather than relational, according to BonJour. This, in turn, means that the symbolic conception of thought is false. The symbolic conception of thought is the view that thinking is essentially symbolic process that deploys a representational system analogous to natural language. The only things to which I have direct access, on this view, are such things as the mental words for 'red' and 'green.' The basic problem with the symbolic view of mental content, according to BonJour, is in that it is unable to accommodate the fact that the contents of our thoughts are, at least to some degree, accessible to us. Instead, BonJour argues, at least some of the elements of thought must be intrinsically meaningful. The intrinsic thought

¹⁰ This is helpful in explaining how the appearances occur in the first place.

content view is thought of as being able to provide a story about how the abstracta that are involved in a priori justification can be accessible to the mind without having causal powers.

Now, what we are looking for is the account of the connection between the intrinsic features of thoughts or thoughts constituents and (mind independent) abstracta, in virtue of which the thoughts can be about the abstracta in an internally accessible way. According to Bonjour's theory, the property in question must itself be involved in the intrinsic character of the thought. For example, my thoughts about the squares and squares (the objects) have something in common. They share SQUARENESS, according to Bonjour (1998). The form of squareness informs my mind when I think about the squares. Now, the *form* of the universal, SQUARENESS, that informs my mind is different from the form of SQUARENESS that informs the square things. The form that informs my mind when I think about the square things has *esse intentionale*, while the form that informs the square things has *esse naturale*. A plausible interpretation of this historically thomistic view is that the properties instantiated are the same, the property of squareness, while the relation of instantiation is different. Bonjour prefers, however, the view that the properties are different, though intimately related. The property instantiated by thoughts about square things is a more complex property than the property instantiated by the square things. The complex property is composed of squareness plus the kind of thought in question. Bonjour takes properties to be constituents of a thought that together with a mode of a thought yield a complex universal the existence of which explains our direct access to necessary features of reality. Intuitions are reliable not because they are indicators of reality, but rather because they share a form with the reality. Having an intuition is just grasping a

propositional content, which brings one in contact with universals. What happens, according to Bonjour, when one has an intuition is that one's mind is informed¹¹ by a universal.¹²

We should take stock now. It is unclear that this version of the introspective model does better where the perceptual model falters. This is because there still is an evidential relation between believing that P and the truth of P. The mind-independent realm of abstracta is known on the basis of knowing one's mind but there still is a gap between what is in the mind and what is in the world. If this is so, then the reliability and the Benaceraff's problem reemerge. The question about tracking still makes sense because we can meaningfully ask for an explanation of the kind of dependence between believing that P and the truth of P. This cannot be a nomological dependence between believing that P and the truth of P. The constituents of P are causally inert. It cannot be logical dependence. Believing that P is logically independent from the truth of P. That is, believing that P does not entail that P (where P is a modal truth), which is the only non-evidential relation between believing that P and P that I can think of.

On the other hand if there is no tracking and if the mirroring hypothesis is taken seriously—namely that the thoughts about squares share the form with SQUARENESS—(whatever this comes to), then it is unclear how this can be reconciled with the thought that rational intuition is fallible.

Lastly, there is an objection from those who accept introspective model but think of introspection in a nontraditional way. Goldman (1999) is a good example and I turn to his account of intuition based on introspection next.

¹¹ The verb 'informed' seems dangerously close to 'affected' or 'caused'. 'To be informed' can also be understood as 'to know' but the difficulty then is how something that one knows can be fallible in the sense a priori justification is fallible.

¹² I should point out that I find Bonjour's (1998) proposal hard to grasp and am concerned not with the details about his story about reliability but rather how it fits my taxonomy of intellectual seeming models. For the details of Bonjour's view, the reader should look at *In Defense Of Pure Reason*, Chapter 6.

Goldman's Introspective Model

According to Goldman (1999), the solution to the problem of causal inertness of abstracta that besets the perceptual model of intuition and direct observation model as well is to distinguish between *intra-mental processes* and *trans-mental processes*. Intra-mental processes occur wholly within the mind; trans-mental processes include links that are external to the mind, as well as links that are internal. According to Goldman (1999), by being intra-mental processes, warrant conferring processes are not about the objects external to one's mind, although the contents of their constituent states may refer to such objects. Thus, according to Goldman, a priori warrant does not require a sort of trans-mental perception-like process and thereby doesn't require abstracta to be causally effective. The warrant conferring processes are internal to one's mind, because in introspection, mind is directed towards itself, although the contents of specific mental states may be directed towards the mind-independent objects. Since mental states are causally efficacious, the problem of causal inertness of abstracta seems to disappear. How does this explain the reliability of intuitions?

On this, account, intuitions are as reliable as ordinary sources of knowledge, perception and introspection. This means that there is a causal connection between thinking that P and that P. Thus, it seeming to you that P is evidence of the truth of P only if P states are reliable indicators of the truth of their contents (or the truth of closely related contents), at least when the P-states occur in P-favorable circumstances. And P states are reliable indicators of the truth of their contents because there is a counterfactual dependence between M-states and the truth of their contents. Second there is a causal route from the family of states of affairs that make the M-contents true or false to the family of M-states.¹³

¹³ Cf. Goldman (1999) and Goldman & Pust(1998: 180)

However, a pressing question is why our thoughts are reliable indicators of extra-mental modal reality. The best our thoughts appear to track are contingent facts about us, psychological facts. What does the psychological fact about me, namely that a certain continent strikes me as necessary have to do with the necessity of such a content? Goldman (1999, 2007) agrees with this diagnosis and thinks that conceptual analysis is about shared concepts that are understood as psychological structures. The reliability problem is solved but on pain of losing a priority and the non-nomological necessity of what intuitions are about. For it turns out that intuitions track our concepts (psychologically construed) and of course, the method of empirical science, such as psychology becomes the relevant instrument for tracking such structures. But the science of psychology is neither a priori nor does it deliver non-nomological connections between the phenomena it studies. This is how we get reliability, but we lose a priority and non-nomological necessity, on Goldman's account.

We have learned from the discussion of the versions of introspective models that the introspective model is no better off than the perceptual model with respect to the issue about the reliability. The problem can be set up as a dilemma: either intellectual intuition is too reliable and mysteriously so or intellectual intuition is reliable but only contingently so.

Now, a pattern has emerged from the discussion of the different versions of the intellectual seemings model about thinking what a set of desiderata for a successful account of intuition must be. The set of desiderata has been summarized by Pust (2000: 44-45).

First, intuition is a non-inferential occurrent psychological state distinct from a belief, it is a primary evidence/justification, though fallible evidence/justification for what it is about. Intuitions must be occurrent states, according to this picture, because only occurrent states are

evident to thinkers when reflecting. Non-occurrent states cannot be evident in such a way. Pust (2000) summarizes the reason for thinking the process (occurrent) notion of intuition is primary.

I hasten to add that to affirm the occurrent nature of intuitions is not to deny that there is a sense of the term ‘intuitive’ which can properly be applied to propositions which are not the content of any current conscious state but which a person is disposed to find intuitive in the primary occurrent sense. Of course, the only way we have of finding out which propositions are intuitive, in that secondary dispositional sense is to actually consider them and see if we have the occurrent intuition. My claim is that this sort of nonoccurrent intuition is not evident to us. (2000: 44)

The theorists discussed so far, thus, argue that ‘intuition’ expresses an episodic concept, which dovetails with what they take to be an undeniable fact about intuition, namely, that they are evidence. Part of the critique of the reductive intellectual seemings analysis rests on what they take to be an undeniable fact about intuitions. For, it is undeniable, according to them, that intuition produces a priori knowledge. And the only way in which intuition can do so, on this model, is by being (a priori) evidence and /or justification . Interestingly, however, the proponents of the reductive analysis, such as Sosa (2007a, 2007b), in granting that intuitions are evidence, go on to attempt to reconcile the dispositional characterization with the evidential status of intuition. I will say more about this after I introduce the dispositional analysis in general.

The Reductive Intellectual Seemings Model of Intellectual Intuition

According to Sosa (2007a, 2007b), intuitions are seemings too and a source of a priori foundational justification. Yet, neither perceptual nor introspective models provide a good account of intuition, specifically its reliability and “probative force”. Specifically, they either cannot account for reliability or for fallibility of intuition.

Moreover, many truths known intuitively lie outside the causal order, unable to cause experience-like intuitions, even if there were such intuitions. Nor can such truths be tracked, not if tracking requires sensitivity. (Sosa 2007b: 51)

We see that Sosa's account is motivated by difficulties with the question how to reconcile the causal theory of knowledge with the nature of the object of a priori knowledge, namely *abstracta*. The analogy with perception does not work, according to Sosa (2007a) because perceptual seemings are not epistemically evaluable while intellectual seemings are.

Belief that there is a fire.

Intellectual seeming that here is a fire.

Visual experience as if here is fire.

The fact that here is fire.

Such visual experience is thought to yield foundational justification, being itself beyond relevant evaluation, beyond justification and unjustification. The intellectual seeming, by contrast, *is* thus evaluable. A reason can be assigned the wrong weight, as it attracts one's assent too much, or too little. (Sosa 2007a: 49)

In the case of intuitions, we can distinguish between *prima facie* seemings, which are relative to how things appear and *ultima facie*, or resultant seemings which are result of weight between different attractions of different propositions, Sosa points out that "it is *resultant* intuitive seemings that most directly justify intuitive beliefs" (2007a: 49).

Upon dismissing the perceptual model, Sosa (2007a) turns to the introspective, Cartesian model. On this model the truth of the proposition attracts a thinker to believe it. There are two problems with this model according to Sosa. First, it is unclear how truth can explain why one is justified in believing certain content. Second, "there are false intuitively justified attractions" (Sosa 2007a: 57), such as those that arise in contemplating the liar paradox, for example.

Instead of traditional perceptual and introspective models, Sosa (2007a) introduces his virtue or competence model. The account he proposes, Sosa thinks, is superior to both traditional perceptual and introspective models, because it can account for reliability of intellectual intuition but without of the expense of making it infallible, and the other way around, without making

intuition unreliable by making it fallible. The account has two parts and makes the seemings analyzable in terms of what is intuitive.

I. An intellectual seeming is intuitive when it is an attraction to assent triggered simply by considering a proposition consciously with understanding....

II. S rationally intuits that p iff S's intuitive attraction to assent to <p> is explained by a competence (an epistemic ability or virtue) on the part of S to discriminate, among contents that he understands well enough, the true from the false, in some subfield of the modally strong (the necessarily true or necessarily false), with no reliance on introspection, perception, memory, testimony, or inference (no further reliance, anyhow, than any required for so much as understanding the given proposition) (Sosa 2007a: 60-61)

On Sosa's model, intuition is a seeming but this is not the end of the story. Intellectual seemings can be understood as attractions to believe (feeling a pull toward) certain propositions and that such a belief is safe is explained by competence.

Though Sosa (2007a, 2007b) thinks that the fundamental notion of intuition is dispositional, intuition is still individuated phenomenologically. For the notion of attraction to assent to a proposition is phenomenological and a close cousin of introspective and perceptual models because that one has such an attraction is introspectively transparent to one and one uses it as a reason for believing its content.

The Intellectual Seeming Models of Intuition: A Family Resemblance

We can observe in the light of the foregoing discussion, that the perceptual, the introspective, and Sosa's competence models are close cousins. They individuate intuition phenomenologically, they agree that intuition's role in a priori knowledge is to supply evidence, or justification, they agree that intuition is reliable, though fallible.

An intuition is hence a representationally contentful conscious state that can serve as a *justifying basis* for belief while distinct from belief, not derived from certain sources, and possibly false. (Sosa 2007b: 52).

Though Sosa argues for a reductive account of seemings and analysis of intuition, we see that, on his account of intuition, the set of desiderata for an adequate account of intuition looks just like

Pust's, who defends the perceptual-model based analysis of intuition. Even a defender of the traditional introspective model, such as BonJour, accepts this set of desiderata, specifically the fallibility requirement.¹⁴

What these kinds of examples¹⁵ seem to show is that it is quite possible for a proposition (or inference) that seems necessary and self-evident to a particular person, even after careful reflection, and thus that seems to be the object of rational insight, to turn out nonetheless to be false. (BonJour 1998: 113)

In the contemporary literature on intuition, these two analyses exhaust the options that are out there. Yet, these two analyses do not exhaust all the options in the space of reasons. I introduce an alternative analysis, that I will defend in Chapter 6 as the preferred one in the light of the problems with the intellectual seemings model.

In the next few chapters I shall argue against the intellectual seemings model. Specifically, I shall argue that its commitment to individuating intuition phenomenologically entails the view that intuitions are evidence and/or a priori justification. Upon showing the connection between phenomenological individuation of intuition and evidential theory and commitment to a priori justification, I shall show why intuitions cannot be evidence and/or a priori justification. Such critique will open room for offering an alternative, etiological account of intuition, according to which intuitions are not evidence but manifest antecedently possessed knowledge.

¹⁴ I submit that I find this puzzling in BonJour because his explanation of reliability of intuition on the traditional introspective model (which is factive) seems to leave no room for error.

¹⁵ The examples that BonJour (1998) refers to in the quoted paragraph are claims often involved in paradoxes, such as the claim to self-evidence of the comprehension axiom of the naïve set theory, routine calculation errors and the like, etc.

CHAPTER 4 INTELLECTUAL SEEMINGS, ERROR, AND THE EVIDENTIAL THEORY OF INTUITION

In this Chapter, I address the question of the origin of the evidential theory of intuition, according to which, roughly in virtue of having an intuition that *P* one has prima facie evidence that *P* is true and *P* can be used as a premise in an argument to the conclusion that *Q* is true.¹

I explain the connection between evidential theory of intuition and the characterization of intuitions on the model of empirical intuition (the intellectual seemings model, either reductive or dispositional), and I spell out how the intellectual seemings model of intuition lends itself to the evidential or justification theory of intellectual intuition. That is, the claim (1) that I take to be central to the empirical model of intellectual intuition to the effect that intuitions are conscious episodes (states) such that if it seems to one that *P*, then it is the case that *P* entails the claim (2) that I took to be central to the view under examination and which says that the epistemic role of intuition is that of evidence. We may call this style of argument the “argument from error”. What is central to this argument is an explanation of (modal) error. Accounting for error is the focal point of arguing for the conclusion that intuitions are evidence because by characterizing intuitions phenomenologically (which commits one to indirect access to an object of intuition) one opens room, and a need, for explaining error. That is, if intuitions are in the business of tracking truth and are only a symptom of a reality hidden behind the veil of seemings, then the main puzzle is how to explain what about intuitions renders them reliable guides to modal truth and, hence, how they yield modal knowledge.

The second style of argument to the conclusion that intuitions are evidence that will be discussed in this chapter is what we may call “the hermeneutical arguments,” which can be found in Bealer (1993, 1996, 1998, 2000) and Pust (2000). The strategy is to claim that a default stand

¹ Cf. Bealer (1998, 2000, 2002), Goldman & Pust (1998).

is that the epistemic role of intuitions is how they appear to function (as evidence and source of justification) and shift the burden of proof to an opponent—a skeptic about evidential value of intuitions in the sense relevant for treating them as a priori justifiers. The strategy is to show that, falling short on relying on the source of justification she aims to repudiate as reputable, the skeptic cannot establish the claim that intuitions are not good evidence (justification).

I provide an interim assessment of each argument and indicate the problems with them that should make us suspicious of the claim the epistemic role of intuition is that of evidence. The problems with these arguments opens room for denying that intuitions are evidence but without at the same time committing ourselves a to the negative epistemic evaluation of intuition. However, I save the crucial criticism of the evidential theory of intuition for the subsequent chapter, where I give a principled reason for thinking that the evidential theory of intuition is false.

The Motivation for Thinking That Intuitions are Evidence: The Argument from Error

In this section I would like to highlight the connection between the claim that intuitions are seemings of some sort and the claim that the epistemic role of intuitions is that of evidence. Let me start with a common theme in the intellectual seemings camp, namely the claim that seemings are distinct from beliefs.

The main reason for distinguishing seemings (intellectual or experiential) from beliefs is that one may have a seeming and withhold a belief due to the possibility of mistake.² The possibility of a mistake comes from there being a gap between how things seem and how things really are. The proponents of the intellectual seemings model, in effect, by being committed to an appearance/reality distinction, are committed to the possibility of mistake based on *misleading*

² Paradoxes, such as liar and others provide *prima facie* evidence that intuition is not infallible. Cf. Bealer (1996, 1998, 2000) and Sosa (2007a, 2007b).

evidence. This is because intellectual appearances of truth (intellectual seemings) are only a clue or a symptom of what is necessarily true. A thinker is a truth-tracker who follows such clues in forming beliefs about various things. A reason why the theory of evidence goes hand in hand with the theory of error is due to the possibility of evidence being good or bad. If evidence is good it is a reason for a thinker for believing what it is evidence for and such evidence is typically explained by the truth of the belief. If the evidence is bad the belief based on the evidence in question is false and thus does not explain one's evidence. There are many ways in which this could happen and when it does we need an explanation of what has gone wrong. That is, we need an explanation of how the false belief came about relative to the process internal to one's perspective rather than to the process external to one's perspective. By a process external to one's perspective I mean the process that has nothing to do with one's reasons but rather to what's true about one's circumstances. For example, if one were judging that there were two moths in the closet because one received a head trauma capable of causing hallucination at the moment of looking, this would be a process external to one's perspective. If one judges so because there are two things that look like moths in the closet, then we have a case of a process internal to one's perspective.

Thus, errors (and thus mistakes) are slip-ups in pursuit of some goals, in this case the goal having a true belief. To see how the theory of error goes hand in hand with evidential treatment, let's examine first the case of empirical judgments.

Often, when tracking truth, cognizers make mistakes and fall into error because things often seem differently from how they are. Suppose I believe that there is a moth in the closet, while in fact there is none, although how things seemed to me was indistinguishable from how things would have seemed to me had the moth really been in the closet. I made a mistake. Let us

say that this mistake was caused because, for example, I saw a bit of papier-mâché shaped like a moth that is indistinguishable from the real moth and judged, on the basis of such evidence, that there was a moth. Another kind of mistake could have occurred if I had had an hallucination of a moth. Its seeming to me that there is a moth is a positive evidence for me for believing there to be a moth, and the fact that what caused this was a papier-mâché moth is defeating counter evidence. The nature of my mistake can be best explained by reference to there failing to be an appropriate connection between *what I relied* on in coming to believe that there was a moth and what was the case. This mistake is internally correctable, by which I mean a mistake that is correctable by using the *same kind of evidence*. If I had approached the closet in an attempt to annihilate the moth, I would have discovered that it was not really a moth, and although it would still have seemed to me as if there was the moth, I would not have continued to believe that there was a moth there.

What is going on in this case is that my evidence (a thing's looking like a moth) is not properly explained by there being a moth in this case, though generally, it is reasonable to believe things that look like moths are moths. However, there is no necessary connection between a thing's looking thus-and so-and its being a such-and-such. In this particular case the thing looked like a moth for a reason other than being a moth, and I was misled.

My evidence was not properly connected with the fact of the matter though it was the right sort of thing to rely on in establishing facts of this sort because typically moths cause seemings of moths. This explains my mistake.

Suppose now that I was hallucinating the moth. When I judged that there was a moth in the closet I relied on how things seemed experientially to me. Thus, that was my evidence. However, my evidence failed to be properly connected with how things were in the closet. This is because,

in this particular case, my evidence is not properly explained by there being a moth in the closet but rather by some fact about me. What explains the mistake is that though generally it is reasonable to believe how things are on the basis of perceptual seemings, in this particular case something other than a moth explains my seeming. This kind of evidence is misleading because my seemings, though generally reliable, in this particular case, are insensitive, to what is in the closet. This explains my mistake. This kind of mistake is also internally correctable. That is, after a couple of hours, when the cause of hallucination has been removed, I reconnect with how things are in the world.

For the sake of making a further distinction, suppose that after a couple of hours my experience continues by presenting events in the following fashion. The moth pulls a fork out of his pocket and asks in a polite fashion whether he can snack on my blankets.

Now, suppose that what my experience presents to me is just a scenario played in my brain by the representatives of the moth liberation army. Also suppose that my whole belief system is manipulated in this way, rather than just an isolated member of the belief system (that is, this is a total, life-like hallucination). How should we evaluate what's going on in this case? The error is caused in the similar fashion in which the hallucination of a moth is caused by something other than a moth. The explanation of error is the same. However, there is a difference between the first hallucination case and this case.

The kind of mistake pertinent to the second case—the systematic mistake—is not internally correctible. This is because there is no way to distinguish between hallucinating a moth and seeing a moth, on empirical grounds only. Any particular belief is a candidate for being a member of a corrupted set of beliefs. This mistake is only externally correctable—correctable

by relying on a different kind of evidence or correctable by an agent who has an independent way of testing the truth in this domain.

Another kind of a perceptual mistake is perceptual illusion. This is a case in which a normal human perceives two sticks submerged into the water as bent when they are in fact not. Or, to illustrate the analogy between perceptual error and intuitional error Bealer (1996, 2000) and Sosa (2007a) introduce the analogy between perceptual illusion and conceptual illusion. They compare the Müller-Lyer illusion and intuitions involved in considering the comprehension axiom of the naïve set theory or the paradoxes, such as the Liar.

When subject to the Müller-Lyer illusion, it still seems to one that one arrow is longer than the other even after we have convinced ourselves otherwise by measuring the lines. The perceptual illusion is explicable by the autonomy of the faculty that processes the material that the senses provide for the faculty of reasoning. In particular, in the Müller-Lyer illusion, we experience one line as longer because of the way visual information gets processed in the brain, which is relatively independent from the faculty of reasoning. What explains the Müller-Lyer illusion is the fact that part of the visual system that processes judgments of depth and distance interprets ‘angles in’ on the Müller-Lyer picture as a signal that the object is closer, while ‘angles out’ is interpreted as a signal that the object is farther. That is, the lines are processed by the visual system as three-dimensional scene. To judge the scene efficiently the brain also approximates angles as being 90 degrees and that in turn leads to illusion. This is brought about by way of the size constancy mechanism that works independently from the faculty of reasoning too. That is, the brain computes the sizes as different, because the same angle subtended on the retinal generates a different representation due to visual cortex’s generating a different representation of depth. And absolute size representation is a function of depth, angle subtended,

and represented angle of the edge with respect to the observer. This is how we get to see one arrow as longer than the other.

In the same way, Bealer (1996, 1998, 2000, 2002) argues, when considering the naïve comprehension axiom it still seems to one that it is true even though one knows of Russell's paradox and does not believe it to be true. We see that the intellectual *seemings* model of intuition, specifically the gap between appearance and reality, drives claim that intuitions are fallible and the error in the case of conceptual illusion is to be explained in the same way in which it is explained in the case of perceptual illusion, the failure of an appropriate connection between what one relies on (one's evidence) and the truth of the belief.

In the case of the naïve axiom of comprehension, we have a feeling that it is true, though we have learned about the paradoxes and we do not believe it, according to Bealer (1996, 1998, 2000, 2002). Bealer's choice of the example is infelicitous though and in the subsequent discussion we shall focus on the Liar sentence.

Before we explain the attempted analogy, we should point out a basic difficulty with this example. There is a difficulty with the claim what exactly *still seems true*.³ There are only two options, it is either individual instances of the axiom schema that still seem true, which are of the following form,

$$S \in S \leftrightarrow S \notin S$$

or that all instances of the general schema seem true,

$$(\exists a)(\forall x)(x \in a \leftrightarrow P(x)).$$

But, obviously, schema itself is not evaluable per se and it certainly does not seem to one that all instances of the schema are true once one learns about the paradoxes. Do, individual

³ This style of criticism can also be found in Charles Parsons (2000).

instances seem true then? Yes, but not all of them, because one knows of the Russell's paradox. So, when set S is the set of all sets that do not contain themselves the instance of the axiom does not seem true. So, how things seem is certainly influenced by what one knows to be the case and in the case of the axiom of comprehension, one does not have the prereflective seeming once one learns about the paradoxes.

To illustrate the analogy, we shall not rely on Bealer's (1996, 1998, 2000, 2002) examples involving the comprehension axiom of the naïve set theory, as we have seen that it does not quite serve the purpose that Bealer needs. Instead, let us try to corroborate Bealer's point by considering our initial intuitions about the Liar sentence. The point should extend to other of what Sosa (2007b: 56) calls "paradox enmeshed beliefs".

Let L be the sentence 'L is false'. Intuitively, L is, it seems, either true or false. But if L is true then it is false, and if false, then true. That is, L is true just in case it is false. Obviously, this is a contradiction. By relying on the intuition that this particular sentence is either true or false the thinker ends us with a contradictory beliefs.

Though generally, that it seems that a sentence is either true or false is reliably so, in this particular case I erred because the thing's looking like a meaningful sentence lead me to believe that it is either true or false. But the liar sentence is not like any other sentence, though it looks like a meaningful declarative sentence, just as the lines in the Müller-Lyer illusion appear incongruent. Thus how things appear (the sentence looks meaningful and the lines look incongruent), and which I relied on for evidence is what mislead me.

Following the analogy with explaining the perceptual error, Bealer could argue that paradoxical intuitions, such as the liar intuition, namely that the sentence L, which says that L is not true, must be either true or false. One could say that just as there is a faculty of mind that

processes visual information, so there is analogously a language faculty that processes judgments about interpretation of various strings, which works independently from the faculty of reasoning. Such a faculty processes language efficiently if the deliverances of it do not depend on explicit knowledge and reflection about the rules of the language. On the contrary, it suffices that the strings sound meaningful, upon hearing which one's interpretative faculty is put into motion. But since the whole operation is happening on the subpersonal level, and underneath the radar of reasoning, it happens that the pattern of expectation generated is that this sentence resembles other meaningful sentences we encountered in being truth-evaluable. Upon reflection however, the autonomy of this subfaculty is interrupted and we do not come to automatically believe that the liar sentence is true, though it may still seem that it is due to our unreflective expectation that the truth predicate is just like any other predicate in language.⁴

Though this analogy looks attractive, it may have some unpleasant consequences, such as that when one has an intuition one is not thinking and the phenomenon happens on the subpersonal level, independently of reflection. Though, spontaneous, intuition cannot be analogous to an automatic thought because intuitions come in response to reflective scenarios. Further, this analogy would commit Bealer to a domain specific faculty of intuition, analogous to the domain specific language faculty, which would be inconsistent with his general approach to intuition as a species of the general faculty of understanding (reason).

To further evaluate the analogy let us observe the fact that any particular perceptual experience could be non-veridical helps us make sense of the possibility of globally unveridical experience. The question that needs to an answer is whether we can make an analogy between intellectual hallucination and the perceptual hallucination case?

⁴ I am indebted for this analogy to Kirk Ludwig.

Even if there are some cases of conceptual illusion, it is unclear whether we can make sense of the possibility of globally unveridical intuition parallel to globally unveridical experience. If not, then we have discovered some important disanalogy between perceptual and intellectual experience that calls for an explanation.

It is much harder to think about a case of a conceptual illusion analogous to the total hallucination case. This is perhaps, because it is hard to imagine what could go wrong with the process external to one's perspective. One could imagine an evil demon scenario in which the demon changes the meanings of the words in L so that they don't correspond to the meanings of words in one's idiolect. A systematic conceptual illusion would come down to having one's idiolect being in discrepancy with the meanings in the public language L. In such a case, most of one's intuitions would be indeed wrong measured by the standards in L. But this is misleading (and in a way trivial). For, what we want is to keep the rules of L fixed and then ask whether one can make a mistake of this sort. This would be a case in which one appears to others to have a conceptual hallucination, but only temporarily; that is, only until one makes an adjustment in the conceptual scheme and figures out how one deploys concepts in her idiolect.

This suggests that the analogy with perception may be too strict or the analogy suggests that intuitions are good evidence because one cannot be systematically wrong when having intuitions (or this may reveal an interesting tension in the very analogy). To avoid the tension and restore the analogy one could argue for the principle of holism regarding empirical beliefs based on perceptual experiences to the effect that one cannot have systematically corrupted beliefs based on perception). Yet, this only guarantees that the system is veridical, not any particular member of that system of beliefs.

Something to notice about conceptual illusions, if there be any, is that the mistake is only internally correctable. This means the mistake is correctible by relying on the same kind of evidence (reflecting more). Bealer makes a great mileage out of this fact in his account of modal error, to which we turn next.

The Form of the Argument from Error

To assess the motivation for thinking that intuitions are evidence let us isolate the form of the argument that has as a conclusion that intuitions are evidence. The argument reveals how the seemings model of intuition lends itself to the conclusion that intuitions are evidence for what they are about. If access to the object of knowledge mediated by seemings is thus inferential in structure rather than direct, there is room for a gap between appearance and reality, and thus there is (or seems to be) room for mistakes. Call the following argument “the argument from error”:⁵

1. If one makes a mistake about whether it is the case that p using a mode of inquiry I , then the mistake is to be explained by appeal to there failing to be an appropriate connection between something one relies on and what one seeks to establish.
2. If it is possible when one judges about a domain of facts F , using the mode of inquiry I , to make a mistake, the explanation of which would be that one relied on a certain sort of fact, then in all cases in which one judges about a domain of facts F , using the mode of inquiry I , if that sort of fact is involved in using that mode of inquiry, then one relies on it in arriving at one’s judgment, whether or not one makes a mistake.
3. It is possible, when one judges about modal truths, using intuition, to make a mistake.
4. Whenever one judges about modal truths, using intuition, and makes a mistake, then the mistake is to be explained by appeal to there failing to be an appropriate connection between something one relies on and what one seeks to establish.
5. The only candidate what one relies on, when one makes a mistake, using intuition, in judging about modal truths, is an intellectual seeming that something is so.

⁵ For the details for running this argument successfully I am indebted to Kirk Ludwig.

6. Therefore, whenever one judges about modal truths, using intuition, and makes a mistake, the explanation of the mistake is the failing to obtain of an appropriate connection between an intellectual seeming that something is so and what one seeks to establish.
7. In all cases in which one judges about modal truths, using intuition, an intellectual seeming that something is so is involved in having the intuition.
8. Therefore, one always relies on intellectual seemings when using intuition, in arriving at judgments about modal truths.
9. If one relies on something in judging whether p using the mode of inquiry I , then that is evidence for one for whether p relative to mode of inquiry I .
10. Therefore, intellectual seemings are evidence for believing modal truths.

The intellectual seemings model plays a striking role in the reasoning exhibited in this argument. If indeed, intellectual intuition is analogous to an empirical intuition, then the explanation of mistake in an a priori judgment should parallel the explanation of a mistake in an a posteriori judgment. However, the argument from error is unsound and in what follows I explain what the problems with it are.

The Argument from Error is Unsound

We should first notice that premise (1) is very general and opens room for asking what the phrase ‘something one relies on’ means. Furthermore and relatedly, the phrase ‘mode of inquiry’ needs also some clarification. I turn to the latter first.

By mode of inquiry, we may mean a procedure one follows in pursuit of one’s epistemic goal (true belief). Plausibly, we individuate procedures by way of a kind of (evidence) that one relies on. When I inquire about the past, for example, what I ate for breakfast yesterday, my mode of inquiry is recollection. I rely on the faculty of memory and a mental episode as of eating muesli in coming to believe that I ate muesli for breakfast. Undergoing a mental episode as of eating muesli may be a reason for me for believing that I ate muesli for breakfast and in that sense I rely on it. Another sense of ‘relying’ is the case in which I rely on the faculty of memory

in coming to believe that I ate muesli for breakfast. There is a striking difference between these different senses of ‘relying on something’. Thus, we should distinguish two readings of the phrase “what one relies on”. One is broad and inclusive notion that lets in reasons for believing various things, faculties that one uses or other facts that one may use as something that a thinker relies on.

In the narrow sense “what one relies on” is the sense of evidence and only something that is a reason for a thinker to believe something using mode of inquiry I is what she relies on. In the broad sense, such as for example in relying on the faculty of memory, I rely on no more than a general capacity to remember things and thus this is not a reason for me (or evidence) for believing anything.

Upon making the distinction we come to see that premises (1) and (9) are in tension.

On the broad understanding of the phrase ‘what one relies on’, premise (9) is false because as the memory case shows, though I rely on the faculty of memory in some sense I do not rely on it for reasons but rather as a general capacity to remember things. If we take the phrase ‘ what one relies on’ in narrow, evidential sense, and take (9) to be definitional true, then (1) is false because memory case presents a counterexample to the premise (1). This is because I rely on memory not as evidence but rather in a sense in which I rely on my language skills when trying to speak it. To make a further and related point let us turn our attention to premise (2) that also looks problematic.

When one judges that p, using the mode of inquiry I, one relies on (in a broad sense) more than one sort of fact. So, when doing a proof for Pythagoras’ theorem, for example, one relies on intuition, perceptual experience, memory, introspection, etc. For example, the fact that one relies on memory is always present but it is not the case that one relies on *it for evidence* in arriving at

one's judgment. But if (2) is true then whenever one judges about F one relies on memory and the mistake can be explained by reference to failing of an appropriate connection between it and what one seeks to establish. But reliance on memory is not internal to a thinker's perspective, it is unclear how it could explain the error that could occur. And, again if we take 'relies on' in a broad sense then (9) is false.

Worse, yet, it looks like premise (2) admits of a counterexample. Suppose I rely on my visual experience in judging the color of a particular object. Suppose I judge it to be red while it is in fact white. I was misled because the object was illuminated by red light. This explains my mistake. Visual experience as of seeing red is present also when I do not make mistakes. I rely on it in judging about color and often I get things right. So, according to (2), in all cases in which I judge about color I rely on visual experience. Yet, this is false. Suppose now I was told that the light in the room is red and that the colors of the objects are given by way of tags attached to each object. Objects in the room still seem red to me but I judge the color by reading what the label says and reasoning that though the object looks red it would not be right to believe that because the label says something else and I was told that the label gives me the correct information about the color of the object. Thus, I come to judge that an object is white because the label says so. I do not rely on the perceptual seemings of red here though they are present. Thus, I am employing the same mode of inquiry (experience) but I don't rely necessarily on my visual experience (seemings of red).

Turning to the premise (3), the phrase 'using intuition' that features in it is underspecified and it could mean using the faculty of intuition or using the experience. If the latter, then we have a strict perceptual analogy, Yet if the former is the case then the experience is irrelevant and what is the focus is the product sense of 'intuition.' I leave this issue aside as I have not prepared

grounds for a fuller discussion, which is to come in Chapter 6. Instead, I turn to premise (7), which is also false.

Suppose a theorem comes to me. I simply believe it. If I reflected a bit I may come to an impression of it seeming true to me. I may have an intuitive belief about modal truth without having a seeming.

In the light of these considerations we must conclude that the motivation for thinking that intuitions are evidence depends heavily on the ambiguity in the phrase ‘what the thinker relies on’ which could be read in evidential and non-evidential manner and the reasoning sketched in the argument above oscillates between the two uses. It does so for a principled reason, it seems. For, on each interpretation the argument is unsound, it is only that the culprits are different.

So, far we have been discussing a style of argument that is supposed to motivate the view that intuitions are evidence by utilizing the analogy with intellectual seemings. I presented and evaluated the argument from mistakes. I turn now to a different style of arguments. Let’s call them “hermeneutical arguments.” Generally, they aim to show that the claim that denies that intuitions are evidence (and hence a source of justification) cannot be established. The most notable proponents of such arguments are Bealer (1993, 2000) and Pust (2000), respectively

Hermeneutical Arguments in Support of Evidential Theory of Intuition

Hermeneutical arguments in support of the evidential theory of intuition are run in the background of the skeptical challenges to evidential value of intellectual intuition. They are hermeneutical because they aim to show that a skeptic is in a dialectically untenable situation. In particular, skepticism about intuitions is self-defeating, it is argued. In what follows I discuss two such arguments, Bealer’s (1993, 1998, 2000) and Pust’s (2000, 2004). In the end I explain why they are ineffective in defending the epistemic status of intellectual intuition.

Bealer's Master Argument that Intuitions Are Evidence

Bealer (1993, 1998, 2000) approaches the phenomenon of a priori knowledge through the notion of evidence and justification. Intuitions are, according to him, a “basic source of evidence”. This, in effect, means that intuitions are not only evidence but also good or reliable evidence and thus yield a priori justification. The theory that explains why intuitions are good evidence is modal reliabilism (MR), which is meant to be a *theory of a priori justification*. Specifically, modal reliabilism aims to offer a kind of a truth-based (reliabilist) explanation of why intuitions are good evidence and yield a priori justification.

Though standard justificatory procedure, or philosophical theorizing, *uses* intuitions as evidence, there have been some skeptical challenges to the value of intuitions in philosophical inquiry. In the light of a specific challenge, namely Quinean radical empiricism, Bealer (1993, 1996, 1998, 2000) sets out to show that intuitions are not only used but indeed are good evidence. To understand Bealer's strategy as well as the details of the argument we first need to explain how he sees the opponent's view.

A radical empiricist's argument of Quinean stripe runs as follows, according to Bealer (2000: 5-6):

1. If intuitions are a “source of a priori justification (evidence)”, they ought to be sanctioned as such by the simplest theory that systematizes the deliverances of the basic source of justification.
2. However, the only sources of justification (evidence) sanctioned by such a theory are experience and observation, which are according to such theory the only basic evidence and hence the only source of justification.
3. Thus intuitions are not basic evidence and a source of justification.

The argument is underwritten by the three principles that constitute radical empiricism:

- (i) *The principle of empiricism.* A person's experiences and/or observations comprise the person's prima facie evidence.

(ii) *The principle of holism.* A theory is justified (acceptable, more reasonable than its competitors, legitimate, warranted) for a person if and only if it is, or belongs to, the simplest comprehensive theory that explains all, or most, of the person's prima facie evidence.

(iii) *The principle of naturalism.* The natural sciences (plus the logic and mathematics needed by them) constitute the simplest comprehensive theory that explains all, or most, of a person's experiences and/or observations. (Bealer 2000: 5)

As a first step in engaging in the dialectic with a skeptic of a Quinean sort, Bealer needs to show that radical empiricism is false. Specifically, it is argued that radical empiricism is self-defeating and fails on its own terms. Bealer's (1993, 1996, 1998, 2000) master argument could be reconstructed as follows:

1. Standard justificatory procedure⁶ uses intuitions as basic evidence (or reasons): by virtue of having an intuition that *p*, one has a *prima-facie* reason or *prima-facie* evidence for *p*.
2. If we deny that intuitions are basic evidence, we are put in an epistemically self-defeating situation—that is, one is committed to either using intuitions as evidence in denying that they are good (basic) evidence or one has to rely on even more dubious evidence in arguing that intuition is not good evidence.
3. There is a reliabilist explanation of intuitions that renders them *basic* and therefore good evidence—modal reliabilism is such a theory.
4. Thus we are justified in continuing with our standard practice.
5. Thus, intuitions are basic (good) evidence.

If we are to accept Bealer's argument as establishing its conclusion, we need an independent reason for thinking that premises (2) and (3) are true.

⁶ The central feature of the notion of standard justificatory procedure is openness to dialectical critique.

...The standard justificatory procedure incorporates a mechanism for self-criticism by means of which any component of the procedure can be subjected to critical assessment that might lead to an adjustment somewhere in the procedure itself. Specifically, this mechanism permits one to challenge the legitimacy of any standing source of prima facie evidence (experience, observation, intuition, memory, testimony). The presence of this mechanism in the standard justificatory procedure keeps the procedure from being either obviously empiricist or obviously non-empiricist. It all depends on which sources of prima facie evidence survive the process of criticism. So in saying that the standard procedure counts intuitions as prima facie evidence, we do not preclude using the mechanism of self-criticism to eliminate intuition as a source of prima facie evidence. (Bealer 1993: 101)

To support premise (2) Bealer (2000: 6) argues that radical empiricism as spelled out is epistemologically and methodologically self-defeating. Though his argument has elements of a Moorean strategy when arguing against the skeptic in attempting to shift the burden of proof to a skeptic, unlike a Moorean, Bealer (2000) avoids giving a direct argument to refute a radical empiricist skeptic, as it would not accomplish the goal of convincing a radical empiricist. Direct refutation would involve listing various concrete case intuitions about what counts as evidence, which straightforwardly show that intuitions qualify as evidence, which, of course a radical empiricist would deny.

Instead, Bealer (1993, 1996, 2000) sets out to show that the dialectical situation of a skeptic is untenable—that is, that denying that intuitions are *prima facie* evidence is incoherent. The idea is that the dialectical situation in which a skeptic has a burden of proof in showing that intuitions are not good evidence leads to self-defeat. And the skeptic does have this burden of proof, according to Bealer (1993, 1996, 1998, 2000), because she arbitrarily departs from a standard justificatory procedure in philosophy.

Bealer (1993) gives three arguments against radical empiricism. However, since later on, Bealer (1993, 1996, 2000) most commonly refers to two of them, The Starting Points Argument and The Argument from Epistemic Norms, I focus on them in this study.

The Starting Points Argument

Recall that the radical empiricist argues that only experience counts as *prima facie* evidence. The starting points argument has a form of the *reductio* and aims to show that a radical empiricist's practice is contrary to radical empiricist claims that only experiences and observations count as *prima facie* evidence. For to argue for the principle of empiricism and the principle of holism a radical empiricist must rely on intuitions.

This evident use of intuitions leads to a serious problem for empiricists who would have us follow their procedure (i.e., the procedure associated with principles (i) and (ii)). Indeed, there is a special irony here, for in their actual practice empiricists typically make use of a wide range of intuitions. For example, what does and does not count as an observation or experience? Why count sense perception as observation? Why not count memory as observation? Or why not count certain high-level theoretical judgments as sense experiences? Indeed, why not count intuitions as sense experiences? Likewise for each of the other key notions that play a role in the empiricist principles (i) and (ii). What does and does not count as a theory, as justified (or acceptable), as an explanation, as simple? The fact is that empiricists arrive at answers to these questions by using as *prima facie* evidence their intuitions about what does and does not count as experience, observation, theory, justified, explanation, simple. In their actual practice, empiricists use such intuitions as evidence to support their theories and to persuade others of them. However, such use of intuitions contradicts the principle of empiricism, which includes only experiences and/or observations as *prima facie* evidence. So in their actual practice, empiricists are not faithful to their principles. (Bealer 1993: 105)

Bealer (1993) anticipates an empiricist's move to the effect that intuitions are a simple heuristic and though they are used as evidence to come to *discover* certain facts /theories, they play no *justificatory* role in one's coming to believe such theories. However, according to Bealer (1993: 106), this move does not help to radical empiricist because "they are caught in a fatal dilemma over the issue of their starting points. Either a person's intuitions regarding starting points are reliable or they are not".

But if radical empiricist's intuitions about what counts as observation, experience, theory, explanation, simplicity, etc, were not reliable then the whole radical empiricist's theory would be highly unreliable, according to Bealer (1993). This is because a standard method of correcting error by "bootstrapping"⁷ would be powerless here because if one cannot tell, in principle, what counts as observation and what does not, then observation cannot be that person's evidence).

⁷ What is meant here by the method of bootstrapping is simply an ability to correct error in a certain domain of judgment by relying on a reflective judgment instead of a spontaneous judgment that is prone to error. Bealer's (1993) astigmatism example illustrates the point. Astigmatism makes one's unreflective perceptual judgment about shape and length susceptible to error. The method of bootstrapping here amount to relying on the same kind of evidence, visual and non-visual observation (save the observations of shape and length), which helps such a person avoid error in the domain of shape and length.

And to be able to tell what counts as observation, one needs to rely on intuition, Bealer (1993) argues.

On the other hand, suppose that radical empiricists' intuitions about starting points are reliable. If so, Bealer (1993) argues, our intuitions, about what does and does not count as prima facie evidence, observation, etc., are reliable, as well. And we do, in fact have intuitions that intuitions are prima facie evidence, according to Bealer (1993), which would imply that intuitions are prima facie evidence and that radical empiricism is false. And if intuitions are prima facie evidence, then a radical empiricist's theory about modality is unreliable.

Bealer concludes that a radical empiricist has no way out of the dilemma that either intuitions are reliable or they are not reliable. On either horn of the dilemma, a radical empiricist's theory is highly unreliable, according to Bealer (1993).

Thus, taking the theory of radical empiricism as an alternative to the standard justificatory procedure we get the outcome that, though the theory is unreliable, one is justified in accepting the theory. This, of course, contradicts the claim that reliability is required for justification, and hence the radical empiricism cannot be an alternative to standard justificatory procedure, Bealer (1993) concludes.

The Argument from Epistemic Norms

The second argument that Bealer (1996) offers against a Quinean skeptic is the argument from Epistemic Norms. It is a two-stage argument. To set up the dilemma, both horns of which are unpleasant for a radical empiricist, Bealer (1996) first introduces a preliminary argument from the analogy with visualism.

We are invited to imagine a preposterous philosophical theory, visualism. According to such a view visual experience is the only evidence and nothing else (such as nonvisual

experiences). The argument aims to show that radical empiricism is similar to this obviously unjustified view about what counts as evidence.

Now, a radical empiricist dialectical situation is such that he must answer from a standard justificatory procedure, otherwise he just begs the question, according to Bealer (1993, 1996, 1998). If so, the question is whether upon reflection, (upon application of standard justificatory procedure's mechanism of self-criticism) intuition survives as basic evidence. Intuition obviously survives the test given by the principle of holism. Intuitions, just like observations and experiences, are largely consistent with each other. Further, according to Bealer, when there are inconsistencies, they are correctable by relying on the same kind of evidence. Further, though at times intuitions (observations) of different people conflict with each other, they are by and large corroborative. Lastly, unlike unreliable evidence (tea leaves, stars, etc.), intuition is seldom disconfirmed by observations and experiences. Being in conflict with a theory is not a problem either because observations can be in conflict with the theory too, yet that does not disqualify them as basic evidence. Now to show that radical empiricism is analogous to visualism Bealer invokes the following principle.

The standard justificatory procedure permits us to apply the present method against a currently accepted source of evidence if and only if *intuitively* that source is not as basic as the sources of evidence being used to challenge it. (Bealer, 1996: 126)

Thus, the radical empiricist move in excluding intuition as evidence would be warranted by this principle only if it were intuitive that intuition is less basic evidence than experience and/or observation. But as a matter of fact, it is not intuitive that intuition is less basic evidence than experience and/or observation.

But when we consider relevant cases, we see that we do not have such intuitions. For example, suppose a person has an intuition, say, that if P then not 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, all those 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... (Bealer 1996: 127)

Bealer concludes that in light of this, radical empiricism must be as preposterous as visualism and thus unjustified.

To show that radical empiricism is self-defeating Bealer makes the following move. He grants a radical empiricists' invitation to depart from standard justificatory procedure and epistemic norms that we in fact follow. If so, there would be room for a *prima facie* doubt about justification in making such a move. That is, suppose that a radical empiricist has a burden of proof of in showing that his theory is justified. When challenged by this reasonable doubt, a radical empiricist is committed to the fatal dilemma.

On the one hand, they could invoke theories arrived at by following the standard justificatory procedure, with its inclusion of intuitions as evidence. But, by the radical empiricists' own standards, these theories are not justified. So this avenue is of no help. On the other hand, they could invoke theories arrived at by following their radical empiricists' procedure. But this would be of no help, either. For, as we have seen, there is reasonable doubt that, by following their procedure, one obtains justified theories.. To overcome this doubt, one may not invoke the very theories about whose justification there is already reasonable doubt. That would only beg the question. Either way, radical empiricists are unable to overcome the reasonable doubt that their procedure leads to justified theories. So the reasonable doubt stands. (Bealer 1996: 127-128).

Having shown that radical empiricism cannot pass reflective scrutiny, Bealer (1996, 1998) has set the stage for giving a positive argument that intuitions are not only used as basic evidence but indeed are basic evidence. I turn to that argument next.

The Argument that Intuition is a “Basic Source of Evidence”

Building on the conclusion that radical empiricism is self-defeating, Bealer (1998) argues that intuition is a *basic source of evidence*, which means that intuition has a reliable tie to the truth and hence is good evidence. The idea is to show that since denying that intuitions have positive epistemic status, namely that they are basic evidence, is self-defeating, and given that intuitions are either basic or non-basic evidence, we must conclude that they are basic evidence

(which means good evidence because basic evidence has, according to Bealer (1998) an appropriate kind of reliable tie to the truth

In the positive argument that intuitions are good evidence, Bealer first makes an effort to convince us that the notion of “the basic source of evidence” is an intuitive notion. He offers the following examples in support of it.

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; and so forth. 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 its deliverances, as a class, play the role of “regress stoppers”. Although examples and principles like these serve to fix our attention on a silent intuitive notion, they do not constitute a definition. That is our goal in the text. (Bealer 1998: 235)

It is a background assumption that uncontroversial, *phenomenal experience* is a basic source of evidence. It is also intuitive that *intuition* is basic source of evidence. For example *intuitions* about logical connectives, Gettier intuitions, etc, are as basic as evidence gets, according to Bealer (1998). And they are as basic as different modalities of phenomenal *experiences*. For example *intuitions* are as basic as tactile experiences are basic when compared to visual experiences. And if basic, then intuitions are reliable about their self-pronouncements.

But it is worth mentioning that, at best, we get the conclusion that intuitions are basic evidence, not a basic *source* of evidence. To show that intuition is a basic source of evidence, Bealer (1998) argues from the basicness of different *intuitions* to its being the case that *intuition* is a basic source of evidence.

However, this argument is invalid. It trades on the ambiguity of ‘intuition’ as a noun that refers to a *mental capacity* faculty (general or domain specific) and as noun that refers to

particular intuitions, conceived as *mental states*.⁸ If we take the occurrent sense first, then intuitions can be basic evidence in support of some claims but they are not the source of evidence at the same time. To see the oddity of claiming intuitions to be a source of evidence and also evidence, it suffices that we reveal what this implies. Suppose that intuitions are evidence and a source at the same time. This means that each intuition is a source and evidence and thus that each intuition is a source of itself.

Now, if we mean by ‘intuition’ a general or domain specific capacity, the argument is unsound because capacities are just the wrong sort of thing to be evidence, though such capacity could be to be basic. The reason that such a capacity cannot be a basic source of evidence lies in that the phrase ‘basic source of evidence’ does not simply fail to apply to it, but rather does not apply to it.

Some tension in the very concept of the basic source of evidence is present in Bealer’s (1998) attempt to give the notion intuitive underpinning. The analogies that he uses suggest this ambiguity; namely, the calculator, though source of knowledge, is not evidence. Rather calculations can be evidence, but they are not a source.

To support the premise that it is intuitive that intuition is a basic source of evidence, Bealer (1998: 235f) writes that “Hume (1777) probably allows that intuition is a basic source of evidence for he holds that “intuitive certainty” is a primitive kind of knowledge.”

This footnote is revealing because Bealer is insensitive to a difference between a basic source of knowledge and basic source of evidence. While the former makes perfect sense, the latter cannot be parsed without equivocating on ‘intuition’ that makes the argument to the conclusion that intuition is a basic source of evidence invalid or unsound.

⁸ Cf. The Argument from Error from this chapter (53-57)

So, let's understand Bealer (1998) as arguing that intuitions are basic evidence because they are the product of a basic source of knowledge—intuition (understanding). This leads to a problem as well which I will turn to after spelling out Bealer's (1998) second argument that intuitions are “the basic source of evidence”, which exhibits the same problem of equivocating between ‘intuition’ and ‘intuitions’.

The second argument that intuitions are the basic source of evidence that is supposed to be capitalizing the results of arguing against radical empiricism suffers the same infelicity as the argument just discussed. It uses the problematic phrase ‘basic source of evidence’ in the context of intuitions being evidence. I shall first reconstruct Bealer's (1998) argument and then give it a reading that avoids this problem. Call the following the “BSE” argument for convenience:

1. Intuition is, according to an empiricist of a Quinean stripe, a derived source of evidence.
2. Intuition is a derived source only if there is an intelligible empiricist explanation of this.
3. There is no intelligible empiricist explanation of how intuitions could be a derived source of evidence.
4. Intuition is either derived or basic source of evidence.
5. Intuition is a basic source of evidence.

Now, in order for the BSE argument to go through, we need a reason that supports premise (3) of the above argument. Bealer (1998) gives such an argument. For convince, call it ‘subBSE’:

1. [S]omething is a derived source of evidence relative to a given subject iff it is deemed to have a reliable tie to the truth by the simplest comprehensive theory based on the subject's basic sources of evidence (Bealer 1998: 217)
2. For an empiricist, “the simplest comprehensive explanation of our empirical evidence is a theory that is free of all modals” (Bealer 1998: 217)
3. Empirical evidence, according to an empiricist, is the only basic source of evidence and intuition is a derived source.
4. Therefore, (by 2), for an empiricist, “that comprehensive theory will not deem there to be a reliable tie between our modal intuitions and the truth” (Bealer 1998: 217-8)

5. Therefore, there is no intelligible empiricist explanation of how modal intuitions could be a derived source of evidence.
6. If this is so for modal intuitions, it is so for intuitions generally.
7. Therefore, (by 4 and 5) there is no intelligible empiricist explanation of how intuitions could be a derived source of evidence.

Obviously, the BSE argument is sound if the subBSE argument is sound. However, it is striking that in both arguments Bealer (1998) uses the claims about ‘intuitions’ to support the claims about ‘intuition’. This is important because though it makes sense to talk about intuitions as evidence, and intuition as a source of knowledge (as the reference to Hume’s dictum shows), it makes no sense to talk about *intuitions as a source of evidence* (for in the sense of a general capacity it would be the wrong sort of thing to be evidence). If so, the dilemma basic vs. derived source of evidence does not get off the ground because it involves a category mistake.

Now, reformulating the argument by being sensitive to the distinction between the concept of the basic source of knowledge and the concept of basic evidence does not help. This is because it only reveals that talking about intuitions as products of intuition—a capacity that produces judgments that have the status of knowledge—as something that is a source, but also evidence, is in tension. For, evidence can be either good or bad, unlike knowledge. And this is a chief reason why we distinguish the concept of knowledge from that of evidence.

However, the foregoing criticism concerns only a problem with Bealer’s (1998) arguing against a Quinean, and is not a quarrel with his conclusion that radical empiricism (or better, naturalism) is methodologically self-defeating. For some argument to the effect that radical empiricism is self-defeating is probably right and the reason is probably dialectical. But even so, Bealer (1998) has at best eliminated only one kind of skeptic (a radical empiricist), but skeptical challenge has still not been answered because radical empiricism is not the only kind of skepticism about intuitions. The radical skeptic is a skeptic about a priori knowledge, according

to whom knowledge requires evidence and the only kind of evidence that there is is empirical evidence. If there is no nonempirical evidence (either good or bad) then one cannot have a priori knowledge. And, given the radical empiricist thesis, the only facts that there are are empirical facts. Thus modal knowledge is not possible. And this has nothing with the reliability issues. It is rather that there is nothing such knowledge could be about.

A different kind of skepticism is one based on the claim that even if there were abstracta, knowledge of them could not be explained with the causal theory of knowledge due to the fact that there is no causal-explanatory link between abstracta (even if there were any) and intuition, and hence they cannot figure in a causal explanation of a priori intuitions (beliefs). Call this skeptic an explanation skeptic. For illustration, consider Gilbert Harman's (1977) challenge to the epistemology of morality, which seems inferior to epistemology of science, in the following way.

We can test scientific theories by observation and experiment. If a scientific theory is correct, then invoking it is necessary to explain the occurrence of a particular event falling in its domain, which is produced by an experiment. However, moral theory, according to Harman (1977) is not tested in this way (which is the only way that guarantees objectivity). Moral theories are such that an occurrence of "moral intuition"⁹ can be explained without invoking any moral principle that is under consideration, and, hence, moral theories are not tested against what is objectively true (in the world). It is rather that such theories are tested against one's psychological make up or antecedent beliefs (theories) about the world, on this view.

⁹ Though Harman's (1977) argument concerns moral intuitions only, it can be easily generalized to intuitions in general. Cf. Goldman's (1987, 1989, 1992) skeptical arguments regarding metaphysical intuitions that are, as Pust (2000: 228) correctly notices, "informatively viewed as variations on a single argument schema."

To illustrate this, Harman (1977) introduces an example of a moral intuition (the analog of observation in the case of morality). He argues that the fact that you made a particular moral observation does not seem to be evidence about moral facts, only evidence about you and your moral sensibility.

You see that the children set the cat on fire and immediately think, “That’s wrong.” In one sense, your observation is that what the children are doing is wrong. In another sense, your observation is your thinking that thought. Moral principles might explain observations in the first sense, but not in the second sense...Moral principles do not seem to help explain your *observing* what you observe. (1977: 8)

By way of foreshadowing what comes later on, I should point out that I grant Harman’s conclusion and take it further. As I shall argue in Chapter 7, philosophical theoretical principles cannot feature in an explanation of either intuition (belief that P) or the intuiting (experience of P’s truth) to render these evidence.

I turn now to Joel Pust’s (2000, 2004) argument that intuitions are evidence. His argument engages in a dialog with a skeptic of Harman’s stripe.

Pust’s Argument that Intuitions are Evidence –The Argument from the Failure of the Explanationist Skepticism

When arguing that intuitions are evidence, Bealer (1998, 2000, 2002) is responding to a special kind of skeptic, a radical skeptic of the Quinean sort. However, radical empiricism is not the only threat to the view that intuitions are (good) evidence. Pust (2000, 2004) provides an argument that intuitions are evidence by fighting a form of skepticism that comes from another direction. A specific type of skepticism that concerns Pust (2000, 2004) comes from the view that abstracta (moral facts, modal truths, etc) are irrelevant to explaining why one makes a judgment with a such-and-such content and hence could not account for why one would be justified in believing such a content.

Pust’s (2000) master argument can be reconstructed as follows:

1. Contemporary philosophical *theorizing* relies on intuitions for evidence.
2. Explanationist skepticism about intuitions fails.
3. Thus, an intuition is evidence for believing its content.

Like the arguments discussed so far, this argument is not a direct argument but rather depends on a seemingly default stand that intuitions are evidence and the fact that the alternatives (skepticism) fail because of its inability to coherently argue for its thesis.

Pust (2000) identifies a common structure among skeptical arguments of certain sort against the use of intuitions as evidence for believing their contents in various branches of philosophy. We are presented with Harman's, Goldman's and Stich's argument against the epistemic worth of intuitions in moral theory, metaphysics, logic and epistemology. I should point out that I shall not investigate the question whether Pust (2000) has reconstructed these arguments so as to faithfully represent these philosophers' respective reasoning. Instead, I will take Pust's (2000) reconstruction of the argument schema on its own because it certainly represents an important challenge to the epistemic value of intuitions. The skeptical arguments that Pust is concerned with aim to show that intuitions, at best, can provide us with evidence that our psychological constitution is thus and so or that our inventory of beliefs (theories) is thus and so.

The central theme of these skeptical arguments is that they advance what Pust (2000) calls an *explanationist principle of the justified belief*;¹⁰ namely, one is justified in believing that *P* on the basis of evidence *E*, only if believing that *P* would best explain the evidence in question. It is worth mentioning that Pust correctly notices that the explananda are restricted to the occurrence of the psychological states rather than the truth of its contents. It is a different

¹⁰ Later on I shall show that this requirement is consistent with non-skeptical stand on the epistemic worth of a priori intuitions. It is possible, I shall argue, to be a skeptic about a priori justification without being a skeptic about a priori knowledge. (This, in effect means that a priori knowledge doesn't require a priori justification)

question whether the explananda construed as contents intuited could be explained by philosophical theories.

The skeptical argument that Pust (2000) isolates has the following form:

1. Other than propositions about the occurrence of an observation or intuition, S is justified in accepting a proposition p only if the truth of p plays a necessary role in the best explanation of the occurrence of one or more of S's observations or intuitions. (Premise)
2. Propositions of type X do not appear in the best proximal explanation of S's intuitings or observings. Instead, the unconscious application of tacit theories provides the best proximal explanation of S's observing and intuitions.
3. Therefore, if propositions of type X are to play a role in the best explanation of S's judgments, it must be because their truth contributes to the best explanation of the fact that S accepts tacit theories, the application of which caused the judgments or intuitions (from 2) and the transitivity of explanation).
4. The best explanation of S's tacit acceptance of such theories does not require the truth of propositions of type X. (Premise)
5. Therefore, propositions of type X do not play any role in the best complete explanation of S's observing or intuitions. (From 2-4)
6. S is not justified in accepting propositions of type X. (From (1, 5) (Pust 2000: 75)

Pust (2000) argues that the argument is unsound on the grounds that i) one is not and cannot be justified in believing premise (1), and ii) the explanation skeptic cannot argue for (1) in a manner consistent with the content of (1)—that is, (1) is reflectively self-undermining.

The argument against the premise (1). It is intuitively plausible, according to Pust (2000) that the premise (1) is true if we are concerned with justification of empirical beliefs. However, there must be an additional argument that this requirement applies across the board, i.e., to non-empirical beliefs, Pust (2000) claims.

Now, the two options available to a skeptic are to either argue that (1) is simply intuitive, or that (1) is inductively supported by our intuitions regarding particular cases of justified belief. According to Pust (2000), taking either horn of the dilemma leads to a dead end because each

claim is mistaken. Worse, yet, according to Pust (2000), either way of arguing for (1) is methodologically inconsistent with the content of (1).

First, Pust argues that (1) is counter-intuitive.

Against this I can report that it is not at all intuitive to me that (1) is the correct criterion of justified belief. This is especially plausible once one sees what seem to be its skeptical implications¹¹ (2000: 85)

Pust (2000) further claims that not even explanation skeptics find (1) intuitive because they try to argue for it by using an inductive argument based on intuitions about particular cases of justified and unjustified belief.¹² The argument goes as follows.

Upon being pressured with disagreement about premise (1), an explanation skeptic, as Pust (2000) represents her, must argue for the premise (1). The best she can do is to provide only an inductive argument from particular cases when particular actual and hypothetical beliefs are justified or unjustified. However, the method of intuitions about particular cases of justified belief is unlikely to support premise (1), Pust (2000) argues, because intuitive beliefs seem no less justified than empirical beliefs; in fact, they seem more justified though what justifies these beliefs cannot be the role of their contents in explaining the occurrence or act of believing such a content. Thus, according to Pust (2000), the explanationist argument from particular cases of justified belief fails. It actually clashes with our intuitions about particular cases of justified beliefs.

¹¹ This is a bit odd. First, it seems that Pust's intuition is theory driven (reluctance to accept skepticism). Second, it is not clear at all that there are skeptical implications of (1), unless one accepts Pust's view. But this would amount to begging the question against the skeptic.

¹² Pust (2000) seems to have forgotten the whole point of perceptual analogy, which, if correct, would secure the application of this criterion across the board without invoking the inductive argument. Ironically, given Pust's characterization of 'intuition', we have a reason to believe that he falls in the perceptual analogy camp and is thus committed to the truth of (1) on the grounds that it is an intuitive general truth about belief based on appearances of how things are that it is justified only if the truth of it would explain occurrence of the seeming experience.

Falling short of finding support for (1) in a representative set of our particular judgments about justified belief, an explanation skeptic would be forced to make an unwarranted generalization from a small subset of our intuitions about justified belief, Pust (2000) continues. This, however, amounts to nothing because the evidence would not suffice to establish the desired conclusion, namely that (1) is true.

Furthermore, as represented, an explanation skeptic is in a difficult dialectical situation. Not only can she not correctly claim anything about which way our (or Pust's) intuitions go but she cannot give us reason to believe (1) because she would be committed to arguing that the necessity of (1) (the content of (1) is evidence for believing a principle allowing only occurrences of intuitions to count as evidence. Thus, the skeptic would be committed to treating intuitions as justifying evidence for believing the conclusion that intuitions cannot be properly treated as evidence because the only evidence in support of (1), according to Pust (2000), is the evidence that the principle itself deems inappropriate.

Pust anticipates an explanation skeptic's objection in a form of a *reductio* by way of a disjunctive syllogism.

- a. Either intuitions are good evidence or they are not good evidence
- b. If intuitions are good evidence, then because [1] is intuitive, [1] is likely true.
- c. If [1] is true, then since their content is not required to explain their occurrence, intuitions are not good evidence.
- d. If intuitions are good evidence, then they are not good evidence.
- e. Intuitions are not good evidence. (Pust, 2000: 88)

Aside from Pust's problem with premise [b], he argues that the problem with this argument lies in the fact that, if successful, the argument undermines the explanation skeptic's position.

The conclusion of *this* argument is that intuitions are not good evidence. If that is true, however, then the explanationist cannot advance [1] in his argument on the grounds that it

is intuitive (directly or inductively) and I cannot see what other grounds she could have. (2000: 89)

If a thinker is not justified in accepting propositions of the type X, then they are not good evidence. But one cannot justifiably believe this claim, according to Pust (2000). Premise (1) is of that type, i.e., intuitively justified for a skeptic, and thus of the wrong type to be good evidence. If we are not justified in believing (1), then we should not accept skeptic's argument. Worse, according to Pust (2000), if the argument were successful, skepticism about all rational belief would follow, not only about intuition-based belief.

Pust (2000) goes on to point out an even worse outcome for the explanation skeptic. He argues that (1) cannot be justifiably believed even if the skeptic does not have to provide an argument for (1) because (1) is epistemologically self-defeating.

If true at all, (1) is supposed to be a necessary truth and it does not assert the occurrence of a judgment. Hence (1) cannot satisfy the explanatory requirement. But we are justified in believing only propositions that can meet such a requirement. Thus, we cannot be justified in believing (1), according to Pust.

Let us grant that Pust (2000) shows that skepticism about intuitions fails. Even so, this does not give us a positive reason for thinking that intuitions are evidence that their embedded content are necessarily true. Worse, this argument against the skeptic does not show that intuitions have positive epistemic status regarding a priori knowledge. Pust (2000) tries to generalize the results against skeptic and draw a general morale—namely, the principle of justified belief (PJB) must be a deliverance of intuition. But if skepticism about intuition is correct, then skeptics will be committed to treating intuitions as evidence after all. If so, the skeptical conclusion is self-undermining (by relying on intuitions as evidence they argue that intuitions are not evidence).

Interim Assessment of Bealer's and Pust's Arguments

One thing to notice is the similarity between Bealer's (1998, 2000, 2002) and Pust's (2000) arguments that intuitions are evidence. Their arguments exhibit a similar argumentative strategy. Start with the practice of philosophizing and making *philosophical claims*. Highlight the fact that when making philosophical *claims*, philosophers use intuitions as basic evidence or data. Since the fact that intuitions are used as evidence is distinct from the claim that intuitions are evidence, both Bealer and Pust aim to argue that they are indeed evidence. In doing that they need to address the skeptical arguments against the evidential worth of intuitions. Since the skeptic's dialectical situation is untenable (they must rely on intuitions to argue for their conclusion or arbitrarily depart from justificatory practices), Bealer and Pust conclude, it must be that intuitions are indeed evidence.

It is worth noticing that they share the phenomenological characterization of intuition and they take seriously (implicitly or explicitly) the analogy with empirical intuitions (perceptual seemings). This is expressed in their adherence to Kripke's assertion from *Naming and Necessity*,

Of course, some philosophers think that something's having intuitive content is very inconclusive evidence in favor of it. I think it is very heavy evidence in favor of *anything*, myself. I don't know, in a way, what more conclusive evidence one can have about anything, ultimately speaking. (1972: 42)

Now, it seems that Pust (2000) takes seriously Kripke's (1972) assertion. This by itself would not be a problem if taking it for granted did not obscure the fact that the explanation skeptic is not necessarily somebody who denies the epistemic authority of occurrences of intuitions. It seems that Pust overlooks a position that the explanation skeptic could take in response to the dilemma that either intuitions are good evidence or bad evidence. As I shall argue later, Pust (2000) overlooks an important option available to a skeptic about the evidential role of

intuitions that avoids this charge that the position is self-defeating. One may be a skeptic about the evidential role of intuitions, but not a skeptic about intuitive a priori knowledge. That is, one could argue (as we shall later on) that intuitions are neither good nor bad evidence, they are not evidence at all, that is principle of justified belief and its commitment to treating occurrences of intuitions as evidence is false when applied to basic a priori knowledge. Worse, the principle might be false even when applied to basic empirical knowledge because it is underwritten by an assumption that we do not have direct access to the facts of the relevant sort.

Further, as far as the question about justifiably believing premise (1) from the explanation skeptic's argument goes, one could respond that the question of justification simply does not arise here. One can know (1) on the basis of what I already know for certain—namely, the meanings of the terms involved in (1).

The Form of the Hermeneutical Arguments and why They Miss the Point

The arguments we discussed in this Chapter share a common strategy and a form in their respective attempts to defeat skepticism about positive epistemic evaluation of intuition. The form of the hermeneutical arguments is as follows:

1. We use intuitions as evidence in standard justificatory procedure (SJP).
2. Intuitions are either good or bad *prima facie* evidence (they are either a source of justification or not)
3. There would be a good reason to change the practice if there were a successful skeptical challenge to it.
4. There is no successful skeptical challenge to the SJP; Radical empiricism, explanation skepticism are (epistemologically/methodologically) self-defeating.
5. There is an explanation of intuitions that renders them reliable in coming to believe what's necessarily true—that is we have some (intuitive) evidence that intuitions are evidence.
6. Thus, we are justified in continuing to use intuitions are evidence.
7. Thus, intuitions are evidence.

A problem with the strategies deployed lies in the fact that though we rely on intuitions for evidence in philosophical theorizing, once we start reflecting on the nature of such reliance we cannot take for granted that intuitions are evidence anymore. To do so is to suppose that the nature of such reliance is exhausted by its function that intuitions have in philosophical practice, which is problematic. This in effect, means taking premise (2) for granted is unwarranted.

The hermeneutical argument is aimed at someone who thinks that intuitions are not a way of coming to *know* anything, and hermeneutical arguments of both sort presuppose only one (perceptual) model of how intuitions could be relevant to coming to know things, namely, as evidence for what we come to know on their basis.

An unanticipated option is that one may be a skeptic about the evidential role of intuitions, but not a skeptic about intuitive a priori knowledge. That is, one could argue (as we shall later on) that intuitions are neither good nor bad evidence, they are not evidence at all. And this is motivated by the problems that both skeptics and optimists are susceptible to. Assumption that intuitions are evidence leads to a dialectical dead-end. For either it cannot be shown that intuitions are good evidence (that is the optimist cannot give a positive argument against the skeptic), and skeptic cannot show that intuitions are bad evidence for she would have to rely on intuitional evidence to argue for such a point.

Any account of a priori knowledge based on intuition must account for how the a priori belief gets to the truth of the matter—that is, reliability is an important part of the story about intuitive a priori knowledge. However, how difficult it is to tell a story about reliability depends on how we think of intuition. The perceptualists cannot solve the problem and in fact inherit the problems of the perceptual model. The puzzle about reliability is a difficult puzzle and the central puzzle for the framework based on intellectual seemings model and perceptual

(introspective) analogy and the evidential treatment of intuitions. The main issue is to explain how is it that intuitions are good evidence in the sense relevant for yielding a priori knowledge. Since, the puzzle is underwritten by evidential theory of intuition it is now time to examine this shared assumption in the debate about the intellectual intuition—namely, the claim that the epistemic role of intuition is evidential.

CHAPTER 5 AGAINST INTUITIONS AS EVIDENCE

The analysis of intellectual in terms of intellectual seemings naturally lends itself to evidential treatment because on such a view, the structure of intuitive judgment is the same as the structure of empirical (perceptual, or introspective) judgment regarding the mind-independent reality it is about and the role of intellectual seemings is analogous to the role of perceptual or introspective seemings.

The main goal in this chapter is to spell out the evidential theory of intellectual intuition (ETI) and to show that intuition cannot be evidence *for* anything in the sense relevant for a priori knowledge. Specifically, upon distinguishing between different senses of ‘evidence for’¹ locution, we shall see respectively that neither sense allows us to make sense of the possibility of a priori knowledge being grounded in intuition. In one sense, treating intuition as evidence amounts to denying that there is any a priori knowledge. In another sense, the epistemic burden placed on intuition cannot be met because there is no conceivable relation between intuitions and what they are about that can meet such a burden. Since we do have a priori knowledge (or rather since we have a good reason to think that skepticism about modal knowledge is self-defeating and evidential theory invites it), we must conclude that intuitions are not evidence—that is, evidential theory is false. After arguing against (ETI), we extend the argument to a remaining possibility of intuitions’ being a priori justification for believing their contents and what can be inferred from them. Lastly, I argue for a subsidiary and more ambitious

¹ I approach to the topic of evidence by way of the evidence relation. This is because I think that when we talk about evidence we are not talking about any thing but rather about a relation between propositions or facts. Thus, the question about what is evidence should always be understood, on this view, as a question about when two propositions stand in the evidence relation. This is underwritten by a thought that the basic notion of evidence is propositional and that all other notions can ultimately be understood by reference to this notion. Cf. Williamson (2001).

thesis that the notion of a priori justification is incoherent and thus a priori knowledge should not be understood as a priori justified true belief.

Lastly, a diagnosis is provided about why philosophers are misled into talking about evidence and a priori justification in the context of a priori knowledge: the culprit is the phenomenological conception of intuition, namely the claim that ‘intuition’ expresses an episodic concept.

Before I turn to the argument, let us remind ourselves of where we are in the dialectic. There is a debate between “modal optimists” and skeptics about whether intuitions are good or bad evidence in support of what they are about. Modal optimists (Kripke (1972), Bealer (1998, 2000), Pust (2000), Bonjour(1998), Sosa (2007a, 2007b)) think that it is all right to use intuitions as evidence because intuitions are *reliable* in leading a thinker to believe what is necessarily true. In arguing with a skeptic, modal optimists attempt to shift the burden of proof to a skeptic aiming to show that the skeptic must end in a self-defeating position. Falling short of relying on intuitions, a skeptic cannot establish the conclusion of her argument without methodological and epistemological incoherence. Modal optimists are not a single species, as we have seen in the previous chapter. That is, some of the proponents of intuitive modal knowledge argue that we have modal knowledge because intuitions are produced by mechanisms that reliably indicate something about the thinker (that she possesses the relevant concepts), which itself has a reliable connection to extramental reality. Now, optimists differ in how they characterize the objects of thought, concepts; whether they are purely psychological or abstract entities. Consequently, optimists differ in how they characterize the connection between that fact and the extramental reality (whether it is a nomological or modal connection).

On the other hand, skeptics argue that intuitions are *bad evidence* in the sense that they often mislead a thinker into believing things that are not true. Skeptics are not a single species either. First, let's distinguish skeptics about intuitive a priori justification from skeptics about intuitive a priori (modal) knowledge. The debate about the intuitions is mostly focused on the former kind of a skeptic because the theory of knowledge, according to which knowledge is (at least) justified true belief, implies that if one is skeptic about justification, one is automatically a skeptic about knowledge. An example of a skeptic about a priori knowledge is Quine (1980). Skeptics about a priori justification can be classified in the following fashion: explanation skeptics, experimental philosophers and criterion skeptics.

As we have seen in the previous chapter, Quineans, by subscribing to the principles of empiricism, holism and naturalism, eliminate modal truths as having a place in the vocabulary of natural science. It follows from this that modal propositions cannot be known because modal knowledge can be grounded only in modal truths. Yet, there are not any such truths in natural science. And the traditional candidates famous for being the subject of modal knowledge, analytic truths, were delegitimized by Quine's attack on the analytic/synthetic distinction. Quine (1980) argued that there are no analytic truths because there is no clear non-question begging way of drawing the analytic/synthetic distinction. Further, even if we nominally distinguish between the two, nothing is going to pass the test of analyticity because any statement that is a candidate for being analytic will turn out to be rationally revisable and thus not analytic. The appearance of unrevisability and analyticity comes from the fact that the beliefs involving certain statements that are closer to the core of one's conceptual scheme are harder to revise than the ones that are on the periphery. If there are no modal truths distinct from scientific truths, we must conclude, according to Quine (1980), that modal knowledge is impossible.

A different kind of a skeptic is what Pust (2000) dubbed an *explanation skeptic*.

According to such a skeptic intuitions are not good evidence and a source of justification for modal knowledge because the experience of having an intuition does not track modal truths in the sense that postulating modal facts is irrelevant for explaining the truth of the content or why one has an intuition with such and such content. All intuitions reveal are facts about one's psychological constitution and one's background beliefs, rather than anything that is a modal fact.

The most recent kind of skepticism came to light within the movement of "experimental philosophers"² who think that intuitions are good evidence, but can only justify a posteriori claims about the folk concepts. Since they view concepts as psychological entities that determine one's intuitions (judgments), then the best way to figure out what philosophical theories are correct is to test them against the actual judgments that the folk make by taking a poll and applying other related techniques of social sciences. Though, on this view, intuitions do have epistemic authority, it is on pain of the judgments based on them losing the a priori status. On such a picture, there is no room for traditional method of philosophy as an armchair discipline.

Lastly, there is another kind of skepticism which is motivated by an observation that often certain experiences present themselves as intuitions though the content presented is false. This kind of skepticism is also underwritten by the seemings model of intuitions and evidential view of intuitions. Intuitions are on this view very unreliable because there is no phenomenological test or criterion that would distinguish real intuitions from only apparent ones. Further, it is possible for two fully rational thinkers too often reasonably disagree about what is intuitive. As I have not prepared the ground yet, I leave the treatment of this kind of skepticism

² Cf. Knobe & Nichols (2008), Nichols, Stich, & Weinberg (2003).

for subsequent chapters. By way of foreshadowing what is to come there, I should point out that sometimes due to inattentiveness, theoretical commitments, or lack of reflection, certain beliefs present themselves as intuitions. Once I introduce the non-experiential memory model, and the analogy with linguistic intuitions, it will become clearer how to handle this kind of skepticism.

Arguing that intuitions' epistemic role is not that of evidence is the first step in defeating everybody but a Quinean skeptic. The discussion from Chapter 7, where I discuss metaphysical objections to the positive account of intuition proposed in this study, should illuminate why we should not worry about a Quinean skeptic. The reason has to do with the conception of analyticity that underwrites Quine's skepticism, which will be criticized.

In this chapter, we take as our stalking horse the explanation skeptic.³ The explanation skeptic has a lesson to teach us. Her insight and complaint about there not being an *explanatory link* between the content of an intuition and the fact that one has an intuition is important. Without such a link intuitive a priori knowledge seems mysterious.

In other words, the explanation skeptic correctly claims that neither the truth of the content of an intuition nor the truth of a philosophical hypothesis based on that intuition could do the explanatory work we need because of the lack of either logical or nomological dependency between the facts about a thinker and necessary truths that are contents of intuitions. We should add that even if there were logical connection between intuition and its content, it would still be a mistake to call the revealing of such a connection an explanation, in the sense which would render the explanandum evidence. More about this later on in this chapter.

³ One may worry that the Quinean skeptic is a serious problem. However, as Bealer has argued, it is difficult to be skeptic of that sort. In addition to this point, as I will discuss later on in the next chapter, Quine's notion of analyticity is also problematic and it underwrites the argument against a priori knowledge.

Denying that the explanatory requirement is in place regarding intuition would be cold comfort (especially for those who embrace the analogy with seemings and with it the evidential theory of intuition).

A conclusion that modal knowledge is impossible would indeed be in place if we did not have an alternative.⁴ And we do have an alternative: reject the view that intuitions are either good or bad evidence. That is, one can be a skeptic about the evidential role of intuitions as a source of a priori justification and still be a modal optimist—namely, argue that modal knowledge, the source of which is in a priori intuition, is possible.

Examination of the structure of the evidence relation shows why intuitions cannot be evidence for the truth of their embedded contents or for believing their embedded contents or what can be inferred from them. I would like to emphasize that not only is this claim not a species of skepticism, but denying that intuitions are evidence is essential to defending intuitive a priori knowledge.

In pursuing the explanation skeptic and the lesson he has to teach us, I focus on Bealer's (1998, 2002) theory of intuition, because he has set the tone and the terms of the contemporary debate. According to Bealer (1998, 2002), intuitions track the truth of a philosophical theory because the occurrence of intuition tracks the truth of the proposition that is its content and such content is entailed by a philosophical theory.

(I)...By virtue of having an intuition that P, one has a *prima facie* reason or *prima facie* evidence for P. (Bealer 2002: 74)

(II)... 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. (Bealer 1998: 204-205).

⁴ Needless to say, the skeptical conclusion would also be hard to believe because it would be inconsistent with the practice of establishing conclusions of this *very* sort.

Let's call the conjunction of (I) and (II), the evidential theory of intuition (ETI).⁵

In section 1, in setting up the argument against (ETI), I distinguish two construals of (I) based on different senses of 'evidence for'. I argue that neither sense of 'evidence for' allows us to make sense of the possibility of a priori knowledge being grounded in intuition. Since skepticism about a priori knowledge is untenable, that is, it is default reasonable to think that we do have a priori knowledge, it follows that (ETI) must be false. The argument generalizes to all proponents of (ETI) because my disambiguation of 'evidence for' exhausts available possibilities.

Against Intuitions as Evidence

Before I turn to evaluation of ETI I will first point to initial problems with the logic of (I). This will be important for the overall argument. For, upon fixing the initial problem and distinguishing between two different evidential relations, the subjective and the objective, we see that neither allows us to make sense of a priori knowledge being grounded in intuition in the sense specified by (I).

Initial Problems with (I)

Whether (ETI) is defensible crucially depends on whether the occurrence of an intuition and its content can be the relata of the 'evidence for' relation as specified in (I).

(I) By virtue of having an intuition that P, one has a *prima facie* reason or *prima facie* evidence for P. (Bealer, 2002: 74)

⁵ Similar formulations can be found elsewhere. For example Goldman and Pust write,

An adequate reconstruction of philosophical methodology requires a two-step evidential route. In the first step, the occurrence of intuition that P, either an intuition of one's own or that of an informant, is taken as (*prima facie*) evidence for the truth of p (or the truth of closely related proposition). In the second step, the truth of p is used as positive or negative evidence for the truth of a general theory. (1998: 182).

Let's first note a problem with the use of the schematic letter 'P'. In its first appearance it clearly stands in for a sentence. But if we take it to stand for a sentence, the result of substituting in a sample sentence, for example, 'everything is self-identical', is ungrammatical.

(I[#]) By virtue of having an intuition that everything is necessarily self-identical one has *prima facie* evidence (reason) for everything is necessarily self-identical.

It looks as if what is wanted is a sentence nominalization in the place of the second occurrence of 'P'. This would give us (I^{##}).

(I^{##}) By virtue of having an intuition that everything is necessarily self-identical one has *prima facie* evidence (reason) for everything's being necessarily self-identical.

So it would seem that the schema Bealer really needs is (I*), where 'Nom(P)' stands in for a nominalization of 'P'.

(I*) By virtue of having an intuition that P one has *prima facie* evidence (a *prima facie* reason) for Nom(P).

There is still a problem. While there is a way of parsing the sentence in which the 'evidence for' is the relevant evidence relation (as we shall see shortly) followed by a nominal complement or a sentence nominalization, there is no way to parse the sentence if we instead have 'reason for' followed by a nominal or a sentence nominalization as its complement. The complement of 'reason for' must be an action or a cognition verb rather than a sentence nominalization. One can have reasons for getting up early or reasons for thinking something but not reasons for something's being the case. When we talk about 'reasons for' something we are always concerned with a person's reasons for acting or thinking. This can best be seen by contrasting the following two pairs of questions about reasons. Consider the following pair of questions:

- What is your reason for believing him?
- What is her reason for moving?

Now, contrast the above pair with the following two questions:

- What is the reason for its raining?
- What is the reason for her aging?

The first two questions are unexceptionable. We know what an answer to each looks like. In the case of verbs of action and cognition it makes sense to prefix ‘reason for’ with a name or pronoun referring to an agent or thinking. We can say: my reason for believing him is that he is an honest person, or, her reason for moving is that she wants change. But the second pair of questions are decidedly odd. What are they asking? It makes no sense to say that the reason for (or even my/his/her reasons for) its raining is that the pressure is low or that the reasons (or my/his/her reason) for her aging is that a lot of time has passed since she was born. If we hear questions like these, we will be inclined to reinterpret them as asking for reasons for believing it is raining or reasons for believing that she is aging.

It does make sense, in contrast, in answer to the question, ‘why is it raining?’, to say the *reason that* it is raining is *that* a weather front is moving through the area. Thus, we can see that *reasons for* are an agent’s practical reasons for acting or epistemic reasons for believing, while *reasons that* are facts that explain why something is so. We can call the former *subjective reasons*, and the latter are *objective reasons*. We shall come back to these reasons in the context of discussion of a priori justification. Now, we turn to a similar distinction in the notion of evidence.

The Subjective and the Objective Evidence Relations

Similarly, when we talk about evidence sometimes we have in mind a subjective notion. If we say in this sense that someone has evidence or reason for believing something, we mean that given his general picture of the world, something that he thinks is so would support the hypothesis that P because it would explain why he thinks it is so. But this sense of ‘evidence’

does not require that having evidence make it likely that what it is evidence in support of is really so. For example, a thinker may have evidence or a reason for thinking that the moon is in eclipse though the evidence does not objectively make it likely that it is true. ‘Evidence for’ and ‘reason for’, when followed by a verb of cognition (such as thinking, believing, inferring, concluding, etc.) express the subjective evidence relation. When we apply this to I^* we get (I_s) , which is in order.

(I_s) By virtue of having an intuition that everything is self-identical, one has prima facie evidence (reason) for believing that everything is self-identical.

We also have, however, an objective notion of evidence, where to have evidence does make it objectively likely that what it is evidence of is so. For example, having evidence that the weather front is moving makes it objectively likely that it will rain.

Hence we can parse (I^*) ⁶⁷ as (I_o) :

(I_o) An intuition that everything is self-identical is evidence (of its being the case) that everything is self-identical.⁸

⁶ Instead using the ‘evidence for’ formula in (I_o) , I switch to *evidence-of* or *evidence-that* despite the current tendency in English to give up the prepositional equivalent of the genitive case marker as expressed by ‘of’ in ‘evidence of’ phrase in favor of the prepositional equivalent of the dative case marker as expressed by ‘for’ in ‘evidence for’ phrase. For practical purposes of everyday English this is insignificant. But for the sake of the analysis of the evidence relation, we should keep these two distinct because these two relations have different directions (which we shall see shortly).

⁷ I am indebted here to John Biro for tuning my ear to the distinction between ‘evidence for’ and ‘evidence of’ locutions.

⁸ One may wonder what the relation between the propositional and the nominal formulation is. This connection has something to do to what we expect the concept of evidence to do. Namely evidence typically gives reasons for an inference to a hypothesis and in general such hypotheses (best) explains the evidence in question.

Evidence is closely tied to the concept of justification in the sense that how much evidence one has determines the degree to which it is reasonable to believe something. Since only propositions can be cited as reasons and any answer to the question ‘what is your evidence in support of that?’ has the form ‘my evidence is that _____’, we see that the basic notion of evidence is propositional.

Now, since in many cases the justificatory reasons go hand in hand with the explanatory reasons, the ‘evidence of’ locution is used to indicate not only that it is reasonable to believe the hypothesis on the basis of the evidence but that there is an explanatory relation between the two.

According to Bealer (1998, 2002), intuitions are not just *prima facie*, but also good evidence (or supply good reasons) for believing what they are about because they have a reliable (though fallible) modal tie with the truth in the domain they are about. And what explains the reliability of such a tie between intuitions and what they are about is his theory of concept possession (specifically, an analysis of what the concept of determinate concept possession comes to), while in general, philosophical theory explains the truth of intuitive content.

Before I turn to the details of Bealer's (1998) story, I should point out that there are in general two different ways in which evidence can be evidence in support of something, in the objective sense. First, the evidence can be an *indicator* of what it is evidence of. Second, the evidence can be a *manifestation* of what it is evidence of. Let's consider each in turn to prepare grounds for arguing that intuitions cannot be related to either evidence relation in the sense relevant for a priori knowledge.

Two Varieties of the Objective Evidence Relation

First, let's consider what is involved in evidence being an indicator of what it is evidence of. In the indication relation there are two distinct relata. What is evidence is a *symptom* of what it is evidence of. The following are the examples:

- His blushing is evidence of his guilt.
- That he is blushing is evidence that he is guilty.

In which sense is the first fact that is cited evidence of the second in the above statement? First, on the basis of the evidence (that he is blushing) it is *reasonable to believe* the hypothesis (that he is guilty) and the hypothesis, if true, provides an (the best) *explanation* of the fact cited as evidence. That is, the question 'why is he blushing?' that is a request for an explanation would be best answered by specifying events leading up to his blushing. Lastly, since it's possible that one blushes and is not guilty but rather undergoing some other emotion, the first proposition does

not entail the second. That is, the proposition that is evidence does not entail the proposition that is the hypothesis.

The relation of manifestation has a different structure and direction from the relation of indication. It is like a relation between a disposition and the occurrence of its manifestation as displayed by the following sentence:

- The shattering of a glass is evidence of its fragility.

In which sense (if any) is the first fact that is cited evidence of the second in the above statements? The occurrence of shattering manifests fragility and reflects possession of the disposition to shatter in appropriate conditions. Now, (the possession of) the disposition cannot explain why the glass shattered. Instead, a question about why the glass shattered would be best answered by invoking certain facts about the atomic structure of the glass rather than it possesses a disposition to do so. What does the explanatory work of an occurrence of that disposition's manifestation is the categorical basis of that disposition—a certain micro-structural categorical property that the glass has. Thus, strictly speaking, this is an evidence relation insofar as we understand it as obtaining between the occurrence of the manifestation of the disposition and the categorical basis of the disposition. This is evidenced by the oddity of saying that on the basis of the glass's shattering it is reasonable to believe that it is fragile. It is rather *obvious* that it is fragile! However, it sounds perfectly all right to say the following:

- The shattering of a glass is evidence that its microstructure is such-an-such.

In the stated example, it is reasonable to believe the hypothesis that the microstructure is such-and-such on the basis of evidence that the glass shattered, and the evidence makes it objectively likely that the hypothesis is true the truth of the hypothesis is a (the best) explanation of the evidence in question.

In the light of the foregoing examples we can distinguish a relation of manifestation that is a genuine evidence relation from the relation that is a Pickwickian evidence relation. The difference is in that the former has two distinct relata and there is an explanatory relation between them. The latter has only one relatum and is in that respect similar to the identity relation. For having the disposition to shatter or to manifest it just is fragility or the manifestation of fragility, rather than that the former tracks the latter.

What emerges from the foregoing examples is that the ordinary concept of evidence is wedded to the concept of *tracking* (evidence gives the thinker clues about what is reasonable to believe and the reasons the thinker has make it objectively likely that the hypothesis is true because the hypothesis, if true, (best) explains the evidence in question. In another words, the hypothesis (H) is the (best) answer to a why-question regarding evidence (E), in the form:

- *E* because of *H*.

However, since the notion of evidence is a specialized notion in abductive inference, it is typically thought that a relevant explanation must be able to state what is *causally* relevant to the evidence occurring, Bealer aims to extend ordinary notion of evidence by arguing that there is a basic kind of evidence of an a priori sort that has a modally reliable tie the truth. This claim is justified by reference to there being a special kind of explanation of this kind of tie, metaphysical explanation. The explanation is given by Bealer's analysis of determinate concept possession, according to which determinate concept possession is explicated in terms of

...the metaphysical possibility of this sort of *truth-tracking intuition* (*the one that reflects how well one understands the concept*): determinate understanding is that mode of understanding that constitutes the categorical base of this possibility". (Bealer 1998: p. 225)

In short, the main idea is that intuitions *track* truth of their contents by *reflecting* understanding of concepts⁹ that constitute such contents.

Can Intuitions Indicate (Track) the Truth of Their Contents?

If intuition reliably track (indicate) modal truths, then by virtue of having an intuition that P one has good evidence that P. This in effect means that if P were true, it would be the best explanation of the occurrence of an intuition that P. And ‘P’ is supposed to be, according to Bealer, a modal fact, such as that everything is self-identical.¹⁰

Can such modal facts explain an occurrence of a reliable intuition?

There is a worry started by Harman (1977) that modal facts are irrelevant to explaining occurrences of intuitions in the sense that it is unnecessary to invoke such facts to explain why a reliable intuition occurs. Harman (1977) invites us to imagine a situation in which one observes that the children set the cat on fire and immediately thinks, “That’s wrong.” The fact that one made a particular moral observation (judgments) does not seem to be evidence about moral facts, namely that certain moral theory is true, but only evidence about that person and her moral sensibility, according to Harman (1977). To explain why, he introduces a contrast with observations in science and how they are explained.

Facts about protons can affect what you observe, since a proton passing through the cloud chamber can cause a vapor trail that reflects the light to your eye in a way that, given your scientific training and psychological set, *leads you to judge* what you see is a proton. But there does not seem to be any way in which the actual rightness or wrongness of a given situation can have any effect on your perceptual apparatus. (1977: 7-8, my emphasis)

⁹ I should point out that the phrase ‘understanding of a concept’ that Bealer uses is a bit misleading. One can only understand meanings of the terms that express concepts. Now, Bealer is a Fregean about concepts and by understanding the meaning of term one understands (grasps) the concept it expresses (refers to).

¹⁰ This kind of relation between the occurrence of intuition and its content would be analogous to the relation of indication from p.89 where the occurrence of a manifestation of a disposition tracks facts about the microstructural properties of the thing that possesses that disposition.

Following Harman, we can charge Bealer that an explanation by invoking modal facts cannot do the job because modal facts are irrelevant in accounting for an occurrence of intuition (which is a psychological fact). The fact that one has an intuition only manifests something about S's cognitive architecture. Something about the thinker's conceptual configuration (dispositions to apply concepts in a certain fashion) is an explanation of why a thinker has an intuition she has.

Bealer has a ready response to Harman's worry which is an instance of a more general puzzle about how we can know necessary truths given that the objects of such knowledge are causally inert abstracta and the best theory of knowledge is a causal theory.

Goldman (1999: 4) summarizes the worry:

1. Perception is a causal process, in favorable cases, a process that causally connects a perceived object with the perceiver's mental experience.
2. If Intuition is understood on the perceptual model, it must consist in a causal connection between the realm of rationally knowable objects (abstracta) and the knower's cognitive awareness.
3. It is highly doubtful that such a causal connection could obtain because abstracta are causally inert.
4. The only non-mysterious theory of warrant is the causal theory of warrant.
5. Thus, either intuition is not a warrantor, or the perceptual model is inadequate.

Now, since the explanationist objection is underwritten by the worry that abstracta that are the object of a priori knowledge are outside of causal order and thus irrelevant to explaining the occurrence of a psychological state, Bealer could respond to both arguments in one stroke of a pen. He would deny premises (2) and (4). The idea is to show that the dilemma is not a genuine one because it rests on too narrow notion of an explanation, one restricted to causal explanations, and on the assumption that the causal theory of knowledge is a general theory of knowledge. However, the notion of causal explanation is out of the question here because it is not of the right

strength. The reason that causal explanation is inadequate is in that causal connections are contingent while we need a metaphysical (necessary connection between the occurrence of intuition and its content and what can be inferred from it).¹¹ The next step is to provide a non-causal theory of knowledge of abstracta, to which we turn next.

Bealer (1996, 1998, 2000, 2002) accounts for the reliability of intuitions by way of deriving this thesis as a absolutely necessary truth that follows from what is necessarily true about the concepts (the best theory of concepts) that are the subject matter of intuitions. It is worth mentioning that Bealer takes the analogy with perception seriously and invokes modal reliabilism as the theory that best explains the evidential status of intuition.

If one is conceptually competent, according to Bealer (1996, 1998, 2000, 2002), then one necessarily gets things right when relying on intuition, according to Bealer (1996, 1998, 2000, 2002).¹² This is just what “the essence of determinate understanding” of a concept comes to.

According to this view, then, essences can do such a job (this is a kind of an indispensability argument, or inference to the best explanation). Since we have knowledge of modal truths and such knowledge is not causal, what explains its possibility is the possibility of non-causal, essential connection between an (ideal) knower and the fact known.

But how do we have knowledge of essences that can do the explanatory work? To understand this, let us consider Bealer’s (1998, 2000, 2002) example of how this is supposed to work that eventually leads to what Bealer (1996, 1998, 2000, 2002) takes to be the explanation of the occurrence of the reliable intuition.

¹¹ Bealer (1996, 1998, 2000) argues explicitly against contingent reliabilism as inadequate because it fails to provide the sort of connection between intuition and what is intuited that is of the adequate strength.

¹² In effect, this is to say that the perceptual analogy is not the explanatory story about the intuition, only a heuristic for understanding its nature and epistemic role. The question about the positive epistemic status gets answered by invoking a kind of a competence account of why intuitions are good evidence.

First, Bealer (1998, 2000, 2002) introduces an example of what the concept of determinate understanding comes to and how possessing a concept puts a thinker in touch with necessity. We are invited to imagine a woman in good cognitive conditions who uses the term ‘multigon’ and applies it to various closed plane figures with several sides. Further she determinately understands the term in question and it expresses some definite concept, the concept of a multigon, which picks out the property of being a multigon. Then a novel question comes up. Are triangles and squares multigons?

Suppose that the property of being a multigon is either the property of being a closed straight-sided plane figure or being a closed, straight-sided plane figure with five or more sides... Then intuitively, when the woman entertains 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 being multigon = 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 being multigon = being a closed, straight-sided plane figure with five or more sides. That is the woman would have the truth tracking intuitions. If she did not, the right thing to say would be that either the woman does not really understand one or more of the concepts involved, or her cognitive conditions are not really good. (Bealer 1998: 223)

The example suggests the following, according to Bealer.

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 property of being a multigon = the property of being a closed straight-sided plane figure (1998: 225)

The suggestion is that an occurrence of a reliable intuition that P is evidence of its being the case that P is intuitive, and since, the conditions are ideal what is ‘intuitive’ and what is ‘necessarily true’ are coextensive, moreover necessarily so. If this is the suggestion, we can relate it to our discussion of the different evidence relations, namely the relations of indication and manifestation. The evidence in either sense is to be explained by the categorical basis of the disposition in question (a certain atomic structure or a certain conceptual constellation). What plays the role of the categorical base that explains the occurrence of the reliable intuition that P is

determinate concept possession of the concepts that constitute the proposition that P. If one is in a determinate mode of understanding, Bealer (1998) argues, then one's *thoughts indicate* the truth of a proposition that P (which is a Fregean *Thought*) by *reflecting* what is intuitive.

Now, if occurrences of intuitions (thoughts) are evidence that certain Thoughts are true, Thoughts must be relevant to explaining the occurrences of intuitions. And indeed, one may think that given the linguistic practices of an individual or a community, the determinate understanding of the meanings of the terms, such as 'multigon' is relevant to explaining the occurrence of the reliable intuition that triangles are not multigons in one's idiolect or in a public language. But this would be an empirical (linguistic) explanation that would render intuition empirical evidence.

However, Bealer is a meaning (concept) realist and thinks that meanings (essences) of concepts as displayed in the analysis of such a concept explain in a priori fashion why an intuition that P has a strong modal tie to the truth of P. That is, a particular philosophical theory about the metaphysics of concepts and contents they constitute underwrites his defense of the explanatory connection between intuitive content and the occurrence of an intuition.

Now, we have been given the theory about essence of determinate understanding but the question about whether essences (modal facts such as *Thoughts*) are relevant to explaining occurrences of intuitions can still be meaningfully asked. And it seems that only if we suppose realism about concepts, as Bealer (1998) does, we get the conclusion that facts that manifest something about the subject's conceptual repertoire are also truths about modal reality. But this supposition is unnecessary. Here is an alternative analysis of the multigon example discussed earlier that is not committed to concept (or a property realism)

X determinately possesses the concept of a multigon iff:

X would have intuitions which imply that 'multigon' applies to closed straight-sided plane figure iff it is true that a multigon is a closed straight-sided plane figure.

This explanation is better because it is based on what we have *direct* access to--truths about concepts, which are thought of as no more than a convenient way of talking about what different things have in common. But why is having a direct access to facts in this domain something that renders an explanation better, one may wonder? To answer this, let us first see how is it that Bealer must respond to our challenge to give a reason for thinking that thoughts (in psychological sense) reliably track *Thoughts* (in Fregean sense).

To make *Thoughts* relevant to explanation of thoughts he may say that in ideal conditions they coincide. That is, as we pointed out earlier thoughts reflect *Thoughts*. The trouble with taking this line is that if thoughts coincide with *Thoughts* in ideal conditions there is no room for an explanation. This is so for two reasons. First, this relation would not have two distinct relata as required for a genuine evidence relation, and hence it would be a relation similar to identity relation. Second, *Thoughts* do not need an explanation because they are abstract entities that cannot have reason distinct from itself in support of them. The only thing that could possibly be in a need of an explanation is taking such *Thoughts* as objects of attitudes, such a believing, thinking, etc. However, having such attitudes would not be best explained by the content as indicated in the next paragraph.

On the other hand, the relation between the thought and *Thought* is not that of identity but that of tracking or reliable indication. This means that we get in epistemic contact with *Thoughts* by inference to the best explanation from thoughts that are our evidence. There are two problems with this. First, I shall start with a less decisive one, namely, the one that offers a better explanation of why one has an intuition that multigons are such and such. Enter my simpler explanation (p. 99). The only objection to it is that it does not talk about deep metaphysical facts

but rather about semantic facts. But this is a virtue, which leads me to the second, more convincing explanation of why Bealer's story does not work and bolsters my simpler explanation.

Falling short of direct access to abstracta, we can know about them only by inference to the best explanation. Similarly, that thoughts track *Thoughts* might be knowable on this basis. But such a view leads to skepticism about modal knowledge because it renders inference to the best explanation as more basic than intuitive knowledge.

The general form of an argument that aims to be an explanation of reliability by invoking inference to the best explanation has the following form:

1. A theory T is the best explanation of an observation (intuition) of e iff T has a property (or a weighted sum) C ¹³ to a higher degree than its competitors.
2. The theory T , namely that necessarily, observation (intuition) is a source of modal knowledge (that it tracks modal truth) is an explanation of the pattern of observations (intuitions) we have and it has a C in higher degree than its competitors.
3. Thus, T is the best explanation of the pattern of observations (intuitions) we have. [1,2].
4. If T is *the best explanation* of occurrence of observation (intuition) of e , then T is true (probable).
5. Necessarily, observation (intuition) is a source of empirical (modal) knowledge.

In order to accept premise (4) one needs an independent argument for it. Such an argument can be either empirical (inductive, based on favorable track-record) or based on inference to the best explanation. And there are problems with both routes. The problem with using the method of inference to the best explanation in accounting for the reliability of intuition in indicating the truth of a *Thought* can be spelled out as a dilemma, both horns of which lead to a dead-end. The dilemma is that if we argue for (4) inductively (on empirical grounds) it is unclear how to extend induction to a domain of fact that we do not have independent access to. The domain of intuition

¹³ Such properties may be cohesion, corroboration, fecundity, simplicity, etc.

is unlike domain of perception. In most cases, we have independent access to the data that we get through visual experience. For example, I can see that the tomato is on the table, or I can smell it. Most of the sense modalities cross-cut each other's domains which secures this independent access. In case when there is not independent access by using the same mode of acquiring beliefs, one can always rely on a different mode, such as reasoning. So, on the basis of reasoning, I could know that most of my perceptions are not caused by an evil-deceiver, for example. Further arguing for (4) on inductive grounds presupposes that there is a way of knowing that is more basic than an a priori way.

Arguing for (4) on the basis of inference to the best explanation leads to infinite regress. For the truth of (4) needs to be accounted by (4[`]) which best explains (4). Then to account for truth of (4[`]), there is a need for (4^{``}), as on ad infinitum.

So, the explanation of reliability that invokes the inference to the best explanation either presupposes that there is a more basic way of knowing than a priori way (knowing based on the inference to the best explanation), or leads to infinite regress.

In the light of the foregoing discussion we can pose the following dilemma for Bealer, which, if our argument are sound is a dead-end one. Either intuitions cannot be evidence that their contents are true because we cannot have direct knowledge of essences that are supposed to do such an explanatory work, or if there is an explanatory relation, the linguistic or psychological one, it renders intuition empirical and not a priori evidence.

Yet, this unpleasant dilemma does not suffice to eliminate (ETI) from the stage, despite the fact that (ETI) was introduced as a conjunction of two theses (I) and (II) so that one would have expected that the falsity of (I) would suffice for the falsity of (ETI). This is not the case because “when I say that intuitions are evidence, I of course mean that the contents of the intuitions count

as evidence”, Bealer (1998: 205) writes. That is, it might be thought that he is immune to my criticism because it is not that occurrences of intuitions are evidence, but rather intuitive contents. That is, (I) is inessential to (ETI). It is only a contingent matter of fact that in order to find out which contents are intuitive one needs to go through the experience of intuiting which is reliable though fallible guide to necessity. In *ideal conditions*, the contents that a thinker finds intuitive are indeed intuitive (true) and a philosophical theory explains intuitiveness (the truth) of such contents. Thus, only (II) is (ETI) *qua* philosophical theory and (I) is irrelevant. In what follows, it remains to be seen whether a philosophical theory can explain why certain content is true. Thus, I turn to the statement (II).

Can Intuitive Contents be Evidence in Support of Philosophical Theories?

Let us consider an example, namely the intuitively true proposition that everything is self-identical and the analysis of identity as a relation that holds as a matter of necessity between a thing and itself and nothing else.

If the intuitive content and the philosophical theory (analysis) are the relata of the evidence relation, the theory must be able to explain why P is intuitive. This in effect means that the theory must be relevant to answering the question about why it is true that everything is self-identical (given Bealer’s (1998) commitment to these two coinciding in ideal circumstances).

We should first note that there is something odd about why-questions¹⁴ that involve necessary truths. One might think that since there is nothing that leads up to everything’s being self-identical, in general, a question ‘why P?’ where ‘P’ is a basic necessary truth is *out of place*. Yet, why-questions regarding necessary truths appear to be a part of ordinary practice of giving and seeking explanation. In fact why-questions may be asked in any context, though what counts

¹⁴ For an illuminating discussion of the concept of explanation see Van Fraassen (1980: Chapter 5).

as a good answer is determined by the interest that the question expresses—that is what is it that the thinker is requesting information about. Now, the question about why everything is self-identical is an odd question. Typically, if one asked such a question, she would be understood as requesting information about the meanings of the terms involved. For it is obvious why everything is self-identical, if one possesses the concepts or understands the meaning of ‘identity’.

So, in answering the question why everything is self-identical one could say that this is so because identity is a relation that holds as a matter of necessity between anything and itself and nothing else. This would help the questioner understand the term ‘identity’, or grasp the concept and explain why everything must be self-identical. But it would be a mistake to think that the proposition that everything is self-identical *is evidence* that identity is a reflexive relation. Though the explanatory relation must obtain between a proposition that is evidence and what it is evidence of, not any kind of explanatory connection renders the first proposition evidence.

An analogy may be instructive here. In mathematics, demands for explanations of necessary truths are, no doubt, appropriate. For example, we may imagine somebody asking why it is intuitive that $2+3=3+2$. This fact can be explained by reference to the Peano axioms¹⁵, the discovery of which was important for providing an axiomatic treatment of the principles of arithmetic that can explain the truths of arithmetic. Yet, it would be odd to say that this truth and other truths of mathematics are evidence that the Peano axioms are true. And note that invoking essences of numbers does not add anything to our explanation, if we don’t have direct access and knowledge of essences in the first place.

¹⁵ I am indebted for this example to Kirk Ludwig.

Further we can often provide mathematical explanations of natural phenomena. For example some mathematical facts explain some biological facts, such as why bee hive honeycombs have a hexagonal structure. Part of the explanation is, of course, evolutionary (using less wax and thus less energy is conducive for survival of that genotype), though such an explanation is not complete, because the question still remains what does the hexagonal structure of the honeycomb have to do with the increased chances for the survival and propagation of that genotype? We get a complete explanation of this biological phenomenon by invoking the so called honeycomb conjecture that states that hexagonal structure of the honeycomb is the most efficient way to divide space into regions of equal area with the least total perimeter. Though mathematical explanation can account for facts from the natural world, we do not think that the observed shape of bee hive honeycombs is evidence in support of mathematical truths.

We can conclude then that not all explanations are such that they render their explananda evidence. Notably mathematical and philosophical explanations are alike in this respect. This, of course, should not come as surprise because the nature of philosophical truths is of a kind with mathematical truths--they are necessary.

In the light of the foregoing reasons, we must conclude that intuitive content cannot be evidence in support of a philosophical theory because the explanatory relation that obtains between a theory and intuitive content is not of the right sort to render contents evidence. Thus (II) is false.

We can now summarize the argument in support of the conclusion that (ETI) is false. If (ETI) is true then there is some good answer to a why-question (or there is an explanation) concerning the occurrence of intuition or concerning the intuitive content. There are no such answers. The metaphysics of intuitive content is irrelevant to explaining the occurrence of

intuition on the one hand, and on the other hand the intuitive content cannot be the proper explanandum because the why-questions concerning necessity admit only of a superficial (non-substantive) answer that cannot render intuitions evidence.

That not every explanation (explanans) can render the explanandum evidence should come as no surprise. The reason is that the notion of evidence is conceptually wedded not only to the notion of explanation but also to that of tracking. And the concept of tracking is linked to an objective likelihood of the hypothesis, H, being true in light of the evidence E, though H could be false. Yet, not every explanation is a product of tracking—notably identity and functional explanations are of that sort.

Since (ETI) commits us to there not being a priori knowledge because intuition cannot be relevant to a priori knowledge as evidence and we do have a priori knowledge (we know a priori that everything is self-identical), we must conclude that (ETI) is false. There must be an alternative way in which intuition is relevant to a priori knowledge of their contents and philosophical theories.¹⁶ Before I turn to a positive story that explains how intuitions supply

¹⁶ The reasoning that rests on the premise that we do have a priori knowledge does not take seriously a skeptical challenge to this thesis. Consequently, one may argue that in the light of the falsity of (ETI), we should conclude that skepticism about intuitions follows. And to show that it does not, one must rely on intuitions that have been epistemically compromised by rejecting ETI. This kind of worry is, I believe, underwritten by two related false assumptions: i) the only way in which intuitions can be relevant to a priori knowledge is by being evidence, and ii) whether a proposition is evidence or not can be decided in principle before we settle the question which theory is correct. Such evidence is a “neutral arbiter between such theories”. Williamson (2007: 210) draws attention to ii) and calls it ‘the evidence neutrality’ thesis, which he correctly argues to be false. Evidence neutrality thesis, according to Williamson (2007) leads to psychologizing evidence. This is because skeptics and nonskeptics cannot agree what the extramental facts are. They at most agree that how things seem to one is evidence, not that things are as the seemings present them. However, I believe that we need to accept i) and thus ii). There is a class of (semantic) facts that one has direct access to so that one needs no evidence to know them. That is, there is knowledge that is not based on evidence and is hence immune to skeptical worries pertinent to evidence and justification. This removes the worry of a skeptic about justification. The worry about a knowledge (judgment) skeptic remains. Such a skeptic would challenge direct access to semantic facts or any facts. However, such a skeptic would be in a difficult dialectical position because he would be dialectically paralyzed. Not only that he could not argue for his thesis, but it is also hard to see how he could even state the challenge without a pragmatic incoherence.

positive epistemic status to thoughts based on them I briefly diagnose the mistake that underwrites (ETI).

That (ETI) is false may come as surprise because it is the received view in the contemporary debate. The reason that ETI is entrenched is because we tend to approach the question about the nature and the epistemic role of intellectual intuition through reflection on the *practice* of doing philosophy. The proponents of (ETI) correctly observe that rational reconstruction of *philosophical theorizing* cites occurrences of intuition as something we *rely on* in coming to believe various things in the domain of modal truths. In virtue of being in the grip of the view that the concept of an intuition is individuated phenomenologically (intuition is a seeming of some sort), the proponents of (ETI) overlook an ambiguity in the phrase ‘relies on’. They become committed to the view that the only way in which intuitions can be relevant to modal knowledge is by being evidence just as empirical seemings are relevant to empirical knowledge by being evidence.¹⁷ Yet, there is another sense of ‘relies on’, as we indicated in Chapter 4. In this sense, when one relies on intuition, one relies on a *general capacity*, like the capacity to speak a language, play chess, or remember things. Reliance on intuition in this sense does not imply that intuitions are evidence. We shall come back to this in Chapter 6 when discussion the positive proposal for understanding the nature and the epistemic role of intuition. Now, let us turn our attention to the question about what implications our discussion in this chapter has for the notion of a priori justification. For the most prominent theory of justification, a priori or a posteriori, says that how much justification one has depends on the extent of one’s evidence. But if intuitions are not evidence, how can they be an a priori justification?

¹⁷ For example, see Bealer (1998, 2002), Pust (2000).

A Priori Justification

If intuitions cannot be proper relata of the evidence relation, then there cannot be a priori justification because the notion of evidence and the notion of justification are intimately related. The connection is the following. For a belief to be rational (justified) it must be based on good evidence. That is, there is a relation of dependence between evidence and justification, call this evidentialist theory of justification.

(ETJ) Whether one is justified in believing that P depends how much evidence one has for believing that P, so that the truth of such a belief would best explain evidence one has.

Whether P is justified for S depends on how much evidence, E, there is in support of P so that the truth of P would best explain the evidence, E.

If intuitions cannot be evidence and evidence determines justification, then intuitions cannot be the relata of the justification relation (that is, intuitions cannot yield a priori justification). Admittedly, (ETJ) can be reasonably denied.

However, there is a tradition of thinking that not all justification is based on evidence. In fact the viability of the foundationalist program in epistemology is grounded in the claim that there is a special class of beliefs that are *non-evidentially justified* or *self-justified*. The motivation for the class of beliefs that are justified in a non-evidential fashion comes from a tension between what is usually taken to be the best theory of a rational belief, evidentialism, a belief is rational (justified) only if it is based on evidence and the best theory of justification, namely foundationalism. The tension is in the following. Evidentialism requires that for every belief to be rational (justified) that it be based on evidence. This means that for every proposition that is a candidate for being justifiably believed there must be a further proposition that is evidence in support of it, and so on. For example, the belief that I exist, how things seem to me, etc. Presumably, these basic beliefs are rational. If so, then they have to be based on evidence and thus justified. In such a case, we run in the regress problem because justification cannot be

completed. Thus, the process of justifying and giving reasons has to stop somewhere. And, according to foundationalists, there is a class of beliefs with special epistemic powers. They are “regress stoppers”, which means that such beliefs justify all other beliefs derived from them but themselves do not require further justification by propositions distinct from them. This in effect means that a thinker does need no evidence or extended reasoning in order to be justified in holding the belief; such a belief is self-justified for a thinker.

Foundationalists deny that rational acceptability or justification of a foundational belief depends on its being based on any evidence (good or bad). This position seems forced on foundationalists because, it is often thought that evidence and justification are epistemically good things and without being based in, at least one of these ways, a belief is arbitrary and lacks grounding.

Having said this about foundationalism, we can anticipate a worry about extending the argument against intuitions being evidence to intuitions being a priori justifiers. The proponents of a priori justification (which is virtually everybody who has thought about a priori knowledge) could argue not all justification is evidence based and that intuitions constitute a priori justification for believing what they are about though they cannot be the relata of an evidence relation. According to this view, by virtue of having an intuition that P one has a non-evidential *prima facie* justification for P.¹⁸

Now, we have already prepared grounds for denying that intuitions can be the relata of the relation of justification by getting clear on the locutions ‘evidence for’ and ‘reasons for’ and the argument crucially depends on that discussion (cf. Chapter 5: 88-90).

¹⁸ Cf. Bealer (1998: 204-205)

We argued that that the formulas using the locutions ‘reasons for’, and ‘evidence for’, needed disambiguation to avoid grammatical infelicities. Consequently, we distinguished between a subjective and an objective evidence relations (‘evidence for believing that something is the case’ and ‘evidence that (of)’). Further, we argued that ‘reasons for’ should be understood either as referring to agent’s practical reasons or epistemic reasons (‘reason for P-ing’), while objective, ‘reasons that’ should be understood as relation between facts so that the facts that is an explanans explains why is it the case that the fact described by the explanandum obtains.

On the subjective reading of the justification relation the relata are the occurrence of an intuition that P which supplies justification for believing, judging, inferring, concluding, etc., that P. Let’s pick out as an illustration the relation that spells out an agent’s epistemic reasons.

(J) Occurrence of an intuition that P is one’s justification for in believing that P. The formula (J) as it stands is correct. For example, occurrence of an intuition that everything is self-identical is my justification for believing that everything is self-identical. However, the relata of this relation are contingent mental states of a contingent particular and thus the relation is not a priori but of an a posteriori sort. Thus, though (J) is correct, it is not an example of a priori justification of the proposition that P and clearly not what is wanted.

Let us try now the following relata: the occurrence of intuition and the content believed, motivated by the fact that ‘belief that P’ is ambiguous between ‘*believing* that P’ and ‘*that P* which is believed’. This must be an instance of an objective relation because we cannot use the ‘justification for’ construction. As we argued earlier this locution dictates a complement that is either an action or a cognition verb. Thus we have (J’):

(J’) Occurrence of an intuition that P is justification of (that) P.

In addition to (J’) sounding odd, it is also puzzling how the fact that P could explain in any sense the occurrence of an intuition that P (an actual episode). The explanandum and the

explanans are not of a piece. For, the former is a psychological fact about the thinker and the latter is a necessary truth. For there being an explanatory connection, it is minimally required that both explanans and explanandum are facts of the same sort. So let us turn to the justification relation between the proposition intuited and the content believed. We have the following:

(J[#]) That P is justification of (that) P.

On the objective reading the relation collapses into the identity relation, for there is only one relatum, namely that P. There being only one relatum is especially problematic because the explanatory requirement between the proposition that P and the content of intuition cannot be met. To illustrate the point, it suffices to ask ourselves what the answer to the question about what the reason that everything is self-identical is. We cannot answer this question without restating its presupposition, namely that everything is self-identical. To answer the question in an informative manner, we need to reinterpret what it asks. We need to understand it as an invitation to explicate the meaning of the term ‘identity’ and the concept it expresses. The reason that it is impossible to answer this question in an informative manner without reinterpreting it lies in the fact that there is nothing beyond the fact that P that makes it the case that P is true that one could cite as a reason that P is the case.

In the light of the foregoing discussion we can conclude that intuition and what it is about cannot be the relata of a justification relation of an a priori sort.

The remaining possibility in our quest for a priori justification to be considered is the relation of justification between the content of intuition and a philosophical theory as presented in the following example:

(J^{##}) That Oscar’s thoughts on Twin Earth are not about water but about twater is justification of the theory of meaning externalism.

The formula (J^{##}) however is odd and hurts the ear of a competent English speaker.¹⁹ A more natural thing to say would be to use the subjective justification relation and ‘reason for believing’ or ‘justification for believing construction’, as in the following example:

(J^{###}) That Oscar’s thoughts on Twin Earth are not about water but about twater is justification for believing (accepting, asserting) the theory of meaning externalism.

That (J^{###}) sounds good though (J^{##}) does not, should come as no surprise. For the ordinary concept of justification as expressed by the verb ‘to justify’ is typically used in the context of *practice* of giving reasons and responding to challenges. The challenges are typically epistemic, to the effect, how do you know that what you are saying is true, why do you assert that P, how do you know that there are no exceptions to P, etc. And any practice is contingent and facts about it are knowable a posteriori, not a priori.

If the foregoing discussion is on the right track, then it undercuts the following maneuver by the proponents of a priori justification. The idea is to argue that non-evidential justification is a type of a foundational justification of a propositional attitude which does not answer the challenge about *what justifies* such a propositional attitude, but rather what *makes* it justified, in the sense what makes the content justified for a thinker²⁰, which itself is beyond the question of justification and unjustification.²¹ Clearly our argument against a priori justification construed the relation of the justification relation propositionally and focused on what justifies the content of a propositional attitude. The distinction between what *justifies something* and *making something justified*, may be thought important because it avoids arbitrariness of the starting points because

¹⁹ And so does ‘That Oscar’s thoughts on Twin Earth are not about water but about twater is justification that the theory of meaning externalism is true’

²⁰ An immediate flag seems in place here because the relation of making something justified sounds causal, which seems hard to reconcile with the domain we are concerned with, namely, the domain of necessary truths that are causally inert.

²¹ Cf. Sosa (2007a: 50)

there is something that forces such a starting point but itself does not admit further justification or evidence. We, however, deny that there is anything that makes a propositional attitude justified—namely, there is nothing beyond P that makes P justified if ‘P’ is a basic necessary truth. However talking about the justification of a propositional attitude such as a belief is ambiguous between talking about the justification for believing that P and a justification that the thing believed is likely to be true (this is just a distinction between subjective and objective reasons). Since there is nothing beyond P’s being true that makes P true or justified (since it is a basic necessary truth), it must be that what is needed here is justification for *believing* that P. But any believing is a particular mental state of a particular individual and calls for no a priori justification but rather a posteriori one.

We conclude this discussion with the observation that though it makes no sense to talk about the justification of the fact that P, where P is a necessary truth, it makes sense to talk about its explanation (where the notion of explanation is construed broadly enough so that it includes noncausal explanations). That is, though the question what makes P justified is not sensible as understood asking for a reason that makes that P justified, it is a sensible question what explains the fact that P is true, for example.

A defender of a priori justification may object here that the dispute between us is merely terminological. For all he is talking about this justification of the practice of relying on intuition in coming to believe necessary truths. For all he needs for his starting points to be nonarbitrary and to support the superstructure of knowledge is to be explicable in some fashion, or that one can give a reason why such starting points have special epistemic powers. So, to say that P is self-justified is just a technical term for picking out a set of basic beliefs (in the object sense) that

form the foundation of the superstructure of knowledge and to have an explanation why beliefs of such sort are likely to be true.

Admittedly, the dispute is in part terminological, but not without a consequence. For this kind of broad usage of the term 'justification' obscures the important distinction between the concepts of justification and explanation. The concept of justification is normative and distinct from truth. On the other hand, the ordinary concept of explanation, as expressed by the verb 'to explain', which typically arises in the context of responding to challenges, is not an epistemic but a factual notion. For example, the question why are there tides, is distinct from the question why one should believe that there are tides. It is not only that these concepts are distinct, but also that the relations they constitute have different directions.

A proposition, A, is a justificatory reason for the proposition B when believing that A permits inference to B (and justificatory reasons answers the challenge about the truth of B, or why it is likely that B is true). Explanatory reasons go in a different direction, namely that B is an explanation of A if it answers the question about why A is the case. Explanatory reasons correspond to the *justification of* relation that we have seen cannot have intuitions and what they are about as its relata. This is the major reason why it is a mistake to talk about justification when we simply have in mind explanation or vice-versa.

In the light of the foregoing discussion, we can diagnose the putative linguistic evidence about a priori justification in the following fashion. The talk about justification concerns a practice of some sort. This is the reason that it makes sense to talk about justification only in the context of actions (either epistemic or non-epistemic; in the case of non-epistemic action we talk about reasons rather than justification). Thus any talk about reasons and justification needs to be followed by a verb of action or cognition and not by a nominal. However, when 'justification' is

followed by a nominal, then we typically have in mind *explanations* of some kind. For example, the demand for the justification of induction amounts to a demand for an explanation why by relying on the method in question one is likely to preserve truth if one starts with true premises. Similarly, the demand for justification of the claim that there is no greatest prime number amounts to a demand to explain why there is no greatest prime (on the assumption that one is interested not in one's claiming that there is no greatest prime, but rather in that which is claimed, namely that there is no greatest prime number).

In light of the reasons spelled out I conclude that intuitions cannot play the role of a priori justifiers on either evidential or nonevidential account. This is so because, on the one hand, intuitions cannot be evidence and the concept of justification presupposes evidence. On the other hand, intuitions cannot be nonevidential justifiers because there is no justification relation that has intuitions as its relata and that can yield a priori justification.

I have suggested that a way to get out of this predicament between evidentialism and foundationalism is to deny that the notion of justification when applied to basic beliefs makes sense because such beliefs, it might be argued, are epistemically stronger than that, they already have the status of knowledge which is to be explained in a certain fashion (I will come back to this later on in chapter 6). And such knowledge is not a matter of reasons, though it is rational.

So far I have argued that the concept of a priori justification is a symptom of confusion about how to think about a priori knowledge. If so, the traditional distinction between a priori and a posteriori knowledge by reference to a priori justification needs rethinking and with it the structure of a priori knowledge. Now, I turn to a more controversial argument that aims to show that the notion of a priori justification is not coherent when applied to basic judgments.

Is the Concept of A Priori Justification Coherent?

To argue that the concept of a priori justification is incoherent we shall deploy a *reductio* form of the argument. Assume the traditional theory of knowledge is correct and applicable to all kinds of knowledge—namely, that knowledge is justified true belief. A distinct type of justification turns true belief into a priori or a posteriori knowledge. Traditional candidates for a priori justifiers are analytic sentences. For example that all cats are felines and that no bachelor is married. Such sentences are good candidates for a priori justification because their truth is determined solely by what they mean. No matter of fact that can be an object of experience has anything to do with their truth, save for the experience necessary to acquire the concept. Such sentences are true no matter what the course of the experience is.

Now, the concept of justification is distinct from the concept of truth. As a matter of the concept of (a priori) justification, that P is (a priori) justified for a thinker, S, does not entail that P is true; that is it is possible that P, though justified, is false. But if a priori justification is analytic in nature, then the sentence that expresses the proposition that P is true in virtue of meaning alone or entailed by such statements and as a matter of the concepts of analyticity and entailment, the proposition that the sentence expresses, namely that P, could not be false. Thus, the concept of analytic a priori justification is incoherent because putting together the concept of analytic and the concept of a priori justified gives the result that though P is true in virtue of meaning or entailed by such truths, P could have been false. Consequently, if the concept of a priori justification is incoherent, a priori knowledge cannot be a priori justified true belief, and thus we need to rethink the a priori/posteriori distinction and the structure of a priori knowledge.

Before I get to some contemporary objections having to do with the claim that a priori justification is exhausted by analytic sentences, I would like to address a potential worry for the argument spelled out. The argument, it might be objected, is unsound because the principle that

says that if the concept of justification is applicable to a proposition it must be possible for it to be false is susceptible to counter examples, most notably from mathematics. That is, in the context of mathematics, it makes sense to talk about a priori justification, though mathematical truths are necessary.

To answer this objection, let us first distinguish between two kinds of mathematical justifications: mathematical justification in the context of mathematics, where one may, for example, seek justification that there is no greatest prime number, and mathematical justification in the context of empirical science (mathematical justification of a certain heuristic, for example). Let us start with the latter. This kind of justification can be understood either as ‘justification for’ or ‘justification of’.

Typically, scientists have mathematical justification for *believing* certain things or for *accepting* various heuristics or practices of modeling phenomena. Such justification is not a priori but a posteriori and hence is not a problem for our argument.

As far as ‘justification of’ relation goes, it concerns justification of practices and methods rather than propositions that can be true or false and necessarily true or false. This case, thus is not a threat to our principle about the concept of justification that featured in the argument against a priori justification. Though it is easy to think about mathematical justification in the context of science, such justification is either not epistemic or if it is, what is justified is an empirical proposition describing a certain practice (or action).

On the other hand, thinking about mathematical justification in the context of mathematics is much harder. For, presumably in the context of mathematics we are not interested in subjective reasons of a thinker for believing various mathematical truths, but rather in objective reason that there is no greatest prime number, for example. It could be said that such an objective reason that

there is no greatest prime is an argument or proof that there is no greatest prime. So, in the context of mathematics justification comes down to proof (good argument). There is a problem with this line of thought, however. For the concept of justification is fundamentally distinct from the concept of proof. Crucially, derivation by proof is a method of generating true sentences from true sentences, while derivation by justification is a method of generating rationally acceptable sentences from rationally acceptable sentences, though such sentences could be false. But mathematical truths are necessary. What could be false is only *claiming* (claiming, believing, asserting) that a proposition is necessary while it is not. But claiming anything, of course, is an empirical matter and supplies a posteriori and not a priori justification. I conclude in the light of the foregoing reasons that there is not a priori mathematical justification that something is the case that can be the counter-example to the strong principle from the argument against a priori justification.

Crucially, it is misleading to talk about the a priori justification of a non-basic necessary proposition derived from more basic ones because the relation between them is stronger than justification; it is the relation of entailment.²²

Two further groups of objections to the argument against a priori justification are on the horizon. First, Quine (1980) disputed the definition of analyticity as ‘truth in virtue of meaning,’ which was his interpretation of Kant’s (1787) conception of analyticity, according to which a statement is analytic just in case the concept of the predicate is contained in the concept of the subject. Second, Quine (1980) argued that on his preferred conception of analyticity, namely that

²² I should point out that we can talk about mathematical justification in the context of mathematics when we rely on experience to argue that certain mathematical truths obtain. For example, we can rely on tiling to prove Pythagora’s theorem, as the Babylonians did. However, such knowledge is not a priori but a posteriori. Similarly, we can get children to see that there is no greatest prime, by asking them to justify the claim by the method of examples. Their arguments, lacking generality and depending on various empirical claims about what they are doing, are a posteriori as well.

a sentence is analytic just in case it is either a logical truth or a can be transformed into one by substituting synonyms for synonyms, the distinction cannot be made sense of or is empty.

Philosophers, like Bonjour (1998) believe that ‘truth in virtue of meaning’ belongs to a family of what he calls “obfuscating notions of analyticity” and he argues that it is rather that Quine’s notion of analyticity is the right one. The argument turns only on showing that Quine (1980) was wrong in his argument against the analytic/synthetic distinction. I shall not address the issues concerning this problematic in this chapter, but rather in Chapter 7 after I lay out my account of intuition.

Further objection concerns potential counterexamples to the claim that the concept of a priori justification is incoherent—cases of a priori justification that make perfect sense. For example, synthetic a priori truths would do the job. I postpone the discussion of this until Chapter 7, as well as the objection from a posteriori necessities that states that assuming that ‘water is necessarily H₂O’, is a non-analytic sentence and justifies a philosophical theory that claims that composition of a thing is essential to it, we have a clear case of non-analytic justification.

Diagnosing the Confusion about A Priori Evidence and Justification

We have seen in the previous sections what the problem with treating intuitions as evidence is. The problem is that the way that the evidence relation is structured shows that intuitions cannot be evidence, because the evidential treatment destroys a priori knowledge. Intuitions cannot satisfy the traditional account of knowledge as justified true belief. Yet, intuitions are a source of knowledge. This means that something went amiss with the traditional picture.

I suggest that the assumption behind this pervasive confusion is that the structure of a priori knowledge is the same as the structure of a posteriori knowledge and that intuitive

judgment has the same (inferential) structure as perceptual judgment. This view of intuitions as seemings of a certain sort analogous to empirical seemings entails the view that the structure of intuitive knowledge is inferential and that intuitions play the role of basic evidence and/or justification. Thus, we have a reason to think that the phenomenological individuation and perceptual and introspective analogies it is committed to is the culprit and needs to be rejected. Specifically, the culprit is the characterization of intellectual intuition as a kind of seeming the content of which is a modal truth and which is the primary evidence for the truth of that content.

Now, there is no need to deny that intuition, in some sense, is a kind of a seeming, or a kind of experience. But it is a mistake to think that that experience of intuiting is some kind of guide to what is necessarily true that is analogous to perceptual (introspective) experience being a guide to extramental reality. However, there is a temptation to take this analogy seriously, which leads to the conception of the structure of an intuitive judgment on the model of perceptual (introspective) judgment one is thereby committed to the view that the intuitive judgment has inferential structure, analogous to perceptual judgment. The kind of inference in question is the inference to the best explanation (as it is the case in with perceptual judgments). Such a model, by opening the gap between appearance and (extra-mental) reality, implies that intuitions are fallible in the same way in which perceptual (scientific intuitions) are fallible, though they are reliable enough and thus a good heuristic in formulating philosophical (scientific) theories.

Now, if intuition comes to a thinker in the guise of the intuition-like experience which may or may not represent how things are, there is a need for a procedure for weeding out the judgments that are indeed intuitions from the spontaneous judgments that are not. This requires taking a reflective stand. Upon reflection (a theory that systematizes intuitions that we have) we

can find a criterion for distinguishing good from bad evidence. This is done by abductive reasoning, by postulating philosophical theories that makes sense of a certain pattern of intuitions and which is consistent with other things we believe we get to dismiss some intuitions and grant others (as it is the case, according to such theorists, in the Liar or Sorites intuitions). In systematizing intuitions one attempts to come up with a general theory that predicts such intuitions and the ones that do not fit, that is the one's that do not survive reflection and systematization and do not vindicate themselves in the light of the best theory, are rejected as only apparent but not real intuitions. Thus, the model of philosophical knowledge championed in this tradition is the modal of inference to the best explanation.

Part of the reason why inference to the best explanation is seen as appropriate model for describing the structure of intuitive judgment and/or philosophical knowledge lies in an attempt to see philosophy on the modal of science and model philosophical theory on a scientific theory. In science, for example, intuition has a heuristic value in producing theories that have explanatory success and make sense of the large body of data. Scientific knowledge gets increased as a consequence of this practice. So, one might think that if there is progress in philosophy, it ought to have the structure of progress in science, so the question is whether we increase philosophical knowledge in the same way. It is tempting to think that we do, thinking that we gain philosophical knowledge by introducing hypotheses (such a theory of proper names or a theory of personal identity) that explain the pattern of intuitions on the matter and the correctness of which is "tested" against such intuitions. For example, in the domain of metaphysics, Kripke glances over his methodology and asserts the following.

Of course, some philosophers think that something's having intuitive content is very inconclusive evidence in favor of it. I think it is very heavy evidence in favor of *anything*, myself. I don't know, in a way, what more conclusive evidence one can have about anything, ultimately speaking. (1972: 42)

Philosophers who thematized methodological and epistemological status of intuitions took on board the Kripke (1972) dictum, since it seems to describe the exact procedure that philosophers use when arguing for or against various philosophical theories and so left the metaphor of ‘testing’ unexamined. I suggest that these are the two major culprits for the view that intuitions are evidence being dominant in the contemporary debate about intellectual intuition.

Yet, seeing philosophical inquiry on the modal of scientific inquiry and taking for granted Kripke’s (1972) assertion about intuition has two shortcomings. First, any serious theory about intuition needs to clarify the notion of ‘testing’²³. This, in turn, requires explaining how the procedure of testing, which is the method of inference to the best explanation can be applied in the domain of philosophy, that is in the domain of necessary truths. The worry is that, seeing philosophical, and, more broadly, a priori inquiry on the model of inference to the best explanation is a mistake. We have seen its shortcomings in attempts to show that intuition is reliable (cf. Chapter 5). Further, it is unclear how there could be an epistemologically transparent explanans of the sort required by such a model. Before we explain why this is the case, let us first see what abduction is and what is its logical form.

Abduction has been introduced as a third way of reasoning, in addition to deduction and induction. Abductive judgments are answers to question about how to classify a certain individual (phenomenon) based on the various properties it exhibits, so that we can to replace the multiplicity of predicates that apply to such individual (phenomenon) with a more inclusive predicate. The multiplicity of the properties picked out by the multiplicity of the predicates in

²³ Sometimes, in the literature, we find a locution that “intuition has a probative force” Sosa (2007: 51), which aims to replace the testing metaphor. However, it is unclear what it adds to clarifying the basic phenomenon that the metaphor points to.

question are constituents of a more basic property picked out by a more general predicate. For example, we can introduce the predicate 'is water' to subsume and explain the presence of the heterogeneity of the properties of water, such as that it is liquid, clear, discoverable in the lakes and oceans, thirst-quenching, etc. The idea is that the features that the predicate attributes to the given sample can be best explained by assuming that the given sample belongs to such and such a kind. This form of reasoning is different from inductive reasoning only in what the object of generalization is. In inductive reasoning, on the basis of the observation that a certain number of objects that we know belong to a certain kind, we infer that all unobserved objects that belong to that kind have that feature. Inductive judgment is thus based on generalization conducted on objects in the domain where the domain is the set of things that belong to the same kind. But how do we figure out to which kind an individual belongs? This is where abductive judgment comes on the stage. In abductive judgment, we generalize over the properties that a thing exhibits and subsume it under a kind that would (best, or reasonably) explain the observable features of a thing.

Now, let us apply this structure on intuitions. What is observable in this case is that one has an intuition that P—that is, it seems to one that P. Now, to determine whether the content of this seeming is true, stepping back and reflecting is in place. Typically, one considers how such and such intuition fare with other seemings/beliefs one has. Further, one considers what follows from the judgment based on such an intuition and whether it can survive a critical reflection and fit in some theoretical systematization that would explain the intuition in question.

Yet, as we have argued in this chapter neither the content of intuition nor the truth of a philosophical theory can do the explanatory work. Thus, seeing philosophical inquiry on the

model of the inference to the best explanation destroys philosophical knowledge because we cannot defend the epistemic authority of intellectual intuition.

Now, taking for granted that intuitions are evidence because they are used as evidence in philosophical theorizing reveals another important feature of the contemporary debate about intuition. The subject of the debate is the act of intuiting. Pust (2000) articulates this as a need to focus on particular acts of intuiting in order to find out which contents are intuitive. The idea is that what particular acts of intuiting reveal as intuitive would give us some idea about intuition generally speaking (or what is intuitive). This is a confusion, however, and is underwritten by thinking about the concept of intuition as primarily expressing a phenomenological concept. This, however, does not mean that the act notion of intuition does not have an important role to play in philosophical theorizing about philosophical inquiry and a priori knowledge in general. We can keep this perspective but we should approach to the concept of intuition as a member of a family of, what Gilbert Ryle (1949) calls 'intelligence concepts'. Such concepts indicate the possession of a skill to do something in a certain manner. That is, one's performance exhibits the features of an action that manifests an exercise of a skill, which can be described by the rules that describe what counts as success.

Having said this about the act notion of intuition, we are in a position to specify a serious shortcoming of the evidential theory of intellectual intuition. It makes intuitive knowledge too *intellectualistic*; it makes it *propositional*. This is a crucial way in which seemings and intuitions are disanalogous: seemings are propositional, intuitions (as remains to be shown in the next chapter) need not be propositional, though they can be expressed propositionally.

Subscribing to the propositional model of intuitive knowledge and to the model of abductive reasoning, it is easy to overlook different senses of 'grounds' or that which a thinker

relies on (cf. Chapter 4) when believing various things. The term ‘grounds’ is ambiguous between ‘evidence’ (‘justification’, ‘reasons’) in support of a judgment or something more broadly such as ‘source’ or ‘faculty’ that produces the judgment. Confusing these two senses of ‘grounds’, or, better, becoming obsessed with one, justification sense, typically leads to confusion about the structure of empirical and a priori knowledge.

A priori knowledge is not grounded in evidence and we have argued why this is so—namely intuitions that are the only candidate for playing the role of evidence cannot do so as they cannot be related in the evidence relation between evidence and justification. If it is not evidence that grounds one’s knowledge and such knowledge is not grounded in non-evidential analytic justification and yet we have a good reason to think that such knowledge is obtainable, then there must be either something special either about the propositions known in such fashion or something special about believing them or both. What could be special about intuitions is that they are epistemically better off than evidence; they *manifest* knowledge, though different in kind from propositional knowledge.

In light of this hypothesis, which will be argued for in the chapter to follow, it should come as no surprise that the empirical model for understanding the possibility of a priori knowledge cannot be appropriate if these two kinds of knowledge have indeed different structures.

An interim conclusion is that that the scorecard for the evidential treatment of intuitions is bad. Its central thesis that intuitions are evidence for their contents and/or philosophical theories is false. There is no evidence relation the related of which can be intuitions in the sense relevant for yielding a priori justification and a priori knowledge.

Now, getting away from the evidential view that makes it impossible to defend the epistemic authority of intuition opens room for exploring the concept of intuition as the expression of a kind of antecedent knowledge. We turn to this alternative account next.

CHAPTER 6
ETIOLOGICAL ACCOUNT OF THE NATURE, EPISTEMIC ROLE AND POSTIVE
EPISTEMIC STATUS OF INTELLECTUAL INTUITION

In the preceding chapters we have seen what intellectual intuition is not. In this chapter, I offer a positive account of the nature and epistemic role of intuitions. The central claim is that intuition reveals *antecedently possessed knowledge* of conceptual (analytic)¹ truths. The major focus of the chapter is to explicate the character of such knowledge. According to the view to be developed here, intuitions are manifestations of one's knowledge that originates one's *conceptual mastery* or (ideal) *competence* with the predicates expressing such concepts. I call this account of intuition *recognitional* to highlight a basic platonic² feature of the account—namely that there is *no new conceptual knowledge*³ that is the product of intuiting, but rather intuition transforms knowledge one antecedently has into occurrent propositional knowledge. The role of the act of intuiting is to move from one's non-occurrent knowledge-how to apply concepts to full propositional knowledge of modal truths involving such concepts.

The recognitional account of intuition to be developed here belongs to a family of competence accounts. But unlike the other members of a family, it is not committed to the analogy with perception or introspection and evidential/justificatory treatment of intellectual intuition.

¹ A sentence is analytic iff it is true in virtue of meaning alone or entailed by true meaning statements. The way I use 'analytic' in this dissertation is as a predicate that applies to sentences. We can extend this usage to propositions (contents). A proposition (content) is analytic just in case there is some analytic sentence that expresses it.

² Being Platonic, the account may immediately look worrisome because of the so called of 'paradox of inquiry', also known as the paradox of analysis, for, paradox, in its traditional form, has a form of a dilemma. If something is antecedently known there is no need philosophical (and more generally a priori) inquiry, such as conceptual analysis. If there is a need for inquiry then in order for an inquiry to start one must be in the possession of knowledge. Over the course of developing the analogy with memory I shall also develop the resources for answering this worry. The dilemma is seen to be a false one once we distinguish different kinds of knowledge.

³ The statement that there is no new conceptual knowledge that is produced by intuition should be taken to mean that there is no new knowledge of how to apply the concepts in question. The sense in which there is some knowledge to be produced is the sense of propositional knowledge. The phrase 'antecedent knowledge' is ambiguous between ability and propositional knowledge just as 'knowledge' is ambiguous between knowledge how and knowledge that.

By not treating intuitions as evidence, the account dissolves the puzzle about reliability. Reliability is guaranteed because a necessary condition on classifying a mental state as intuition is that it has the right history (origin). This is a very strong form of reliability because there is a conceptual dependence between something's being intuition and its content being true which is like the dependence between a belief's being classified as what I call non-experiential memory and its content being true, and at the same time it is causally non-mysterious.

It is not only that intuition is reliable, but by revealing antecedent knowledge, intuition also reflects rationality. For, it is certainly rational to rely on something one knows and recognizes as true.

The account may be thought to have a crucial weakness, namely the assumption that the only kind of modal truth that is knowable a priori is analytic in character. I deal with this objection in Chapter 7 by building on the conclusions of the Chapter 5. I take it that the attack on the traditional line up between the analytic, the necessary and the a priori is underwritten, on the one hand, by an acceptance of Quine's (1980) challenge to the project of philosophy in his arguments against the concepts of meaning, analyticity, and thus a priority, and on the other hand, by a commitment to a notion of meaning divorced from the notion of analyticity and instead anchored in what Kripkeans call metaphysical necessity. Yet, the arguments for that kind of necessity seem to rest on a view of intuitions and philosophical inquiry in general that was criticized in Chapter 5—namely, the view that intuitions are evidence and the view that philosophical inquiry has the structure of inference to the best explanation. I will come back to this in Chapter 7 when I deal with the rest of counterexamples to the traditional view.

Given the platonic nature of the account, a model that lends itself to understanding the nature and epistemic role of intuitions is a model based on the non-experiential memory, which

is grounded in the use of ‘remember’ that entails the truth of that which is remembered or which is tied to the success in remembering.

Since in order to understand the non-experiential memory model that I propose, it is necessary to understand what the non-experiential memory is and how a belief based on it derives a positive epistemic status, I turn in the first section of this chapter to an explanation of the non-experiential memory. Then I develop the analogy. Knowledge of grammar will be crucial for developing such analogy. I highlight the connection between knowledge of grammar, knowledge (understanding) of meaning and knowledge of concepts (or concept possession).

Non-Experiential Veridical Memory

There are two species of the genus of non-experiential memory, propositional (semantic) memory and memory-how. The concept of propositional memory pertains to retaining propositional knowledge while memory how pertains to retaining skills and habits, such as playing chess and driving a car, for example. I will explain each concept in turn.

Propositional memory retains propositional knowledge and can be captured by that use of the verb ‘to remember’ that takes as its grammatical object a sentential complement. For example, I remember that I ate muesli for breakfast; I remember that Tallahassee is the capitol of Florida; I remember that my e-mail address is ‘isimic@phil.ufl.edu’, etc. An important feature of the concept of propositional memory is that it must be *veridical*. That is, the concept is grounded in a use of the verb ‘to remember’ that entails the truth of that which is remembered. The reason why propositional memory must be veridical is that non-experiential memory preserves knowledge, and knowledge entails truth of that which is believed. Thus a belief that we classify as a memory belief must be true.

The concept of memory-how is grounded in that use of the verb ‘to remember’ that takes a direct object as its complement, and pertains to preservation of skills and habits. For example, I

remember how to play chess, how to spell ‘Tallahassee’, etc. Such knowledge manifests a possession of an ability to do something (a competence). Propositional knowledge is not required for exercising the skill, though one could describe propositionally what is involved in exercising a skill in action or one could give instructions for exercising it. In most cases, propositional knowledge is not only unnecessary, but also insufficient for doing the action. For example to exercise the skill of playing chess I do not need to know what the chess manual says. In fact one could memorize the whole manual and absorb all the propositional knowledge and still lack the skill of playing chess. Suffices it to consider a child who learns how to play chess by watching and studying the games of competent players. The child would be able to play competently after some time without having explicit knowledge of the rules. Yet, we are willing to judge her competent because her way of playing chess is the same as that of a competent player. On the other hand, we are willing to say that if one knows what the manual says but cannot apply that when playing, that is, if one’s *modus operandi* does not conform to the standards of what we consider to be a clear case of a competent chess player, we are not willing to ascribe knowledge of how to play chess to that person. In fact we are more willing to ascribe knowledge how to play chess to a player who is incapable of spelling out the rules of the game but whose playing, in fact, exhibits the mastery of the norms of competent chess playing. Similarly, in the case of habitual knowledge how, such as knowing how to spell ‘Tallahassee’, one need not know any rules for spelling. It suffices to know how to spell ‘Tallahassee’ to have muscle memory, or simply being able to do it even without knowing *that* it is spelled ‘T’^‘a’^‘l’^‘l’^‘h’^‘a’^‘s’^‘s’^‘e’^‘e’.

The shared feature of the non-experiential memory models that looks attractive for modeling intuition is that beliefs that are classified as memory don’t have positive epistemic status in virtue of being based on adequate evidence but rather because of their *etiology*. A

mental state is classifiable as memory if it is produced (grounded) in another mental state that is a state of knowledge. For to say that one knows something is to evaluate one's belief as getting at its aim, the truth. To say that one remembers something is also to evaluate one's belief. And given that the function of memory is to preserve knowledge it is fair to say that the mental state generated by the mental state that is a manifestation of the dispositional state of knowledge must itself be a state of knowledge. What is antecedently known automatically gives the same positive epistemic status to the belief grounded on (or derived from) it and so such a belief is knowledge. The positive epistemic status comes from the fact that the term 'memory' applies to mental states only of certain sort. They have to be generated in a specific fashion, that is, they have to be grounded in beliefs that manifest knowledge. Then on conceptual grounds, the belief has to be true. For we know that there is a constitutive connection between knowledge and the truth. And the positive epistemic status is inherited from the state that the occurrent state originates from. We see that the norm for the evaluation of the belief is its history and how the belief is produced. In the situation in which all goes well, in the sense that the belief has the right history, then the thinker is entitled to it in the sense that ascribing her knowledge of the content of the belief would be in place.

The memory-how model (especially skill rather than habit memory) looks very attractive because it leaves no room for an evidential treatment and a priori justification.⁴ If propositional knowledge is not required for the exercise of the skill, then there is no room for evidential treatment of intuitions in the sense relevant for a priori justification. For only propositions can be reasons and justifiers. Skills and abilities are the wrong sort of thing to play the role of evidence and/or justification.

⁴ Cf. Chapter 5 for the discussion why evidential treatment and a priori justification fall together.

We should distinguish between knowing how to play chess and knowing how chess is played. These are two distinct kinds of knowledge. They are both instances of know-how, but they are about different things. The former is knowledge of a *procedure* while the latter is the knowledge of the *product* of the procedure. For example when one knows how to play chess in the former sense, the procedure that constitutes playing chess successfully is the one she follows. It is second nature for that person to play that way, to borrow Ryle's (1949) apt metaphor. If one knows about the product, this can be merely propositional knowledge. The distinction is important. For *knowledge of chess* (the skill) puts one in a position to *know about* the product, the game played.

Knowledge of chess can be deployed in reflection in order to achieve propositional knowledge that chess is played thus-and-so. In the same way in which the active voice is prior to the passive voice of a verb, knowledge-how in the procedural sense is prior to the knowledge of the rules that specify the procedure. The rules are derivative and gotten by the rational reconstruction of successful practice of playing chess. Reflection on the nature of the skill puts one in the position to have propositional knowledge of the product of the skill. That is, if one is competent with chess and reflects on the nature of the chess playing, one puts oneself in the position to gain proposition knowledge of the rules that specify the product of the skill.

I should point out that knowledge of the procedure is not about the mechanism that embodies (realizes) the skill but about what the skill produces or the effect of the skill. This characterization of the skill is *functional*, in that that its structure is characterized in terms of the nature of the product of the skill. For example, though playing chess is a reflective act, the object of a competent player's reflections are not rules that govern the game, but rather particular moves and strategies that constitute planning and anticipating moves. Since there is a no single

procedure that counts as a competent chess playing but rather this skill can be manifested in many different ways, we say that playing chess manifests a complex rather than a single track disposition, such as walking or running, smoking, etc.

Linguistic Competence, Semantic Competence and Concept Possession

An analogy that looks especially apt for developing the account of intuitions of the sort suggested at the outset (namely, the one that hooks up the semantic competence with getting things right in the appropriate domain) is that with the implicit knowledge of grammar of a language. One who has such knowledge is minimally linguistically competent. It guarantees that one gets things right when spelling ‘Tallahassee,’ or when sequencing tenses, for example. So, let us start with implicit knowledge of grammar.

Generative linguistic theory links the structure of competence with the truth in a domain in question in the following way.

... according to generative linguistic theory, your ability to detect syntactic ambiguities, distinguish well-formedness from ungrammaticality, respond selectively to the noun-phrase that has been topicalized, and so forth are to be explained by reference to *what is entailed* by grammar that you learned when you learned your language. In short, your linguistic capacities explain your verbal behavior, and are themselves explained by reference to the *content of your beliefs*. You can spot the ambiguity of ‘they are flying planes’ because, so the story goes, (i) you have learned grammar of English, and (ii) it follows—deductively—form what you have learned that ‘they are flying’ planes has two well-formed parsings. (Fodor 1983: 7)

Intuitions about grammar reveal competence with the rules that govern the formation of phrases and sentences. One thing to notice at the outset is that phenomenology is irrelevant in getting the positive epistemic status of a belief based on this kind of competence. Even if there is a phenomenology (that something seems grammatical) it is not what gives the positive epistemic status to a judgment that a sentence is grammatical. Though there could be a distinctive phenomenology of such a judgment it is epistemically inert because one has *direct access* to grammar facts by virtue of being a competent speaker. This kind of access is what is sometimes

called a “Cartesian” access to the facts. According to such picture, one has privileged access to these facts because they are *represented* in the mind of an agent. Though the competence with grammar is a useful analogy that I will rely on, I do not have in mind a Cartesian access to the facts about concepts in the case of intellectual intuition. Rather, what I have in mind is that the rules of grammar (language) are realized but not represented. The rules are realized in the sense in which the rule that when turning with a car one should turn hand over hand on the steering wheel is realized in someone who does that as a matter of course. Yet, this example, though good for our purposes falls under habits or single-track dispositions. For there is no other way to turn than turning hand over hand.

I should point out that examples of the skills that are single track dispositions should not distract us from the crucial point, namely that that intuition manifests a skill in the sense of a complex disposition. Thus we need an example of a disposition that is not a mere habit but also a skill. Take for example an ability to make good jokes. When making a joke or when conversing competently, one is not representing the rules for such actions to oneself as she is acting, though one could, in principle come up with such rules. For example, suppose one asks a comedian how he makes good jokes. Coming up with an answer might be tricky. In a sense, the comedian does not follow any rules when he is doing what he is doing. Yet, on reflection, when he rehearses in his mind what he does when performing he can come up with some general things. For example he may suggest to project yourself into the audience and pick a topic of a joke. Select a surprise topic. Make sure that the audience’s attention is nailed to the topic and upon sufficient build up of the narrative, startle them with the surprising change of meaning of the main phrase. Or hide the real subject of your story until the very end of the joke and surprise the audience with revealing the subject with is typically the opposite from what they expected. However a

competent comedian need not recite the rules himself. In fact the rules are just a rational reconstruction of what one does when making a joke.

Direct access in the sense indicated is what guarantees that one's judgment gets things right in the domain of what is funny, grammatical, etc. If one has privileged (direct) access to facts of the relevant sort by being competent in a relevant domain, then no one is in a good position to know such facts propositionally as well. That is, we have an expert in that domain who can *deduce* the truth of the matter from the knowledge she is already in the possession of. What explains why she can do this is that competence is individuated by a rule that describes its *function*. And the truth of the judgment is entailed by the rule in question.

What distinguishes linguistic competence playing chess, making a joke, or conversing is that it is expressed in making judgments rather than making moves or telling stories, etc. So the knowledge-that so produced is not arrived at, in the first instance, by reflection. Reflection on judgments does lead to rules that generalize over cases judged. But the product itself in this case (knowledge of grammar as embodied in linguistic competence) is propositional judgment (and knowledge)

Intuition as Semantic Competence

Just as knowledge of grammar is revealed by linguistic intuition, semantic knowledge is revealed by intellectual intuition. That is, intuition manifests *antecedent knowledge* grounded in conceptual mastery, which is (an ideal) competence with the predicate that expresses such and such a concept in a language. And if one is conceptually competent (and some background conditions are met, one engages in reflection and is interested in the truth of the matter, then one is in a position to gain explicit knowledge of conceptual truths.

For example, suppose one asks oneself whether circles are ellipses. To answer this question one considers her concept of a circle and an ellipse respectively. The concept of a circle

applies to a figure that consists of a set of points on a plain that are equidistant to some point.

The concept of an ellipse applies to geometric figures such that they are a set of points on a plain such that the sum of the distances between two fixed points (foci) be constant. If the foci coincide, this condition is trivially met, so we can deduce that circles are just special ellipses. So, there is a special link between competence with concepts⁵ (semantic competence) and conceptual competence, which are linked with the truth in the domain in question. This connection remains to be explicated.

Let me try to highlight the feature of analogy between competence that is at play in concept mastery and that at play in competence regarding grammaticality that is supposed to help us explicate the connection between competence in a domain and the truth about it. That is, let us turn to the analogy between the knowledge of grammar and the knowledge of meaning. They are both forms of *implicit knowledge* of rules. In the former case, the rules are the rules of syntax, and in the latter case, the rules are semantic rules. Recall that I have insisted that in the case of grammar rules, though an agent has privileged access to the rules, they are not represented. Similarly, semantic rules are not represented either, though one has direct access to them. Knowledge of semantic rules is knowledge how, rather than propositional knowledge, though, in principle, one could explicate propositionally the content of such knowledge.

A useful analogy to illustrate the point above is to think of intuitions as having the function of transducers. They take the know-how component of conceptual knowledge as an input and return propositional knowledge as an output. Since no knowledge gets produced, and it is only

⁵ By 'concept', I roughly mean a reified predicate meaning, which is useful heuristic for keeping track of sameness and differences of thoughts. To be competent with a concept is to have true non-empirical beliefs that contain such a concept. This in turn implies the ability to correctly apply it actually and counterfactually. The highest degree of competence is conceptual mastery.

that there is a transformation of one form of knowledge into another, one is guaranteed to get things right because one relies on knowledge in coming to believe what one does.

We are now in a position to state an alternative, non-evidential dispositional account of intellectual intuition.

An intellectual Intuition that P is a disposition to judge that P grounded in full competence with the concepts that are involved in P.⁶

The Etiological Account and the Epistemic Authority of Intellectual Intuition

On the etiological view, the phenomenology of intellectual intuition is inessential to the epistemology of intuition, just as the phenomenology of non-experiential memory is inessential to the epistemology of it. Intuitive belief constitutes knowledge because it draws on knowledge of concepts alone (conceptual mastery), which is just a full competence with the predicates that express such concepts. That is, one is the master of the language and knows the meanings of the terms in the public language in the sense of knowing how to properly use them. This is an important feature of the account because, as we have seen in earlier chapters, the phenomenological characterization of the nature of intuitions invites the evidential treatment, which we have shown to misconstrue the epistemic role of intuition and drives the problems with accounting for its reliability. Since on my alternative view competence gives one direct access to the facts in the domain, there is no room for tracking truth in this domain, which in turn eliminates the possibility of error.

Lastly, the puzzle about the reliability is easily solved as soon as we reject evidential treatment and the thesis that intuition in this dispositional sense are in the business of tracking

⁶ This obviously captures a non-occurrent (dispositional) sense of 'intuition', which I take to be primary. The episodic notion would be characterized as a manifestation of the disposition to judge that P that is fully explained by the full competence with concepts in P.

anything. On the non-evidential dispositional account, beliefs that we classify as intuitions don't have positive epistemic status in virtue of being based on adequate evidence but rather because of their *etiology*. The positive epistemic status comes from the fact that the term 'intuition' applies to mental states only of certain sort. They have to be produced in a specific fashion, that is, they have to be grounded in beliefs that manifest knowledge. On this account, that intuitions reach the truth then falls out of the concept of intuition. That is, if one exercises semantic competence, a judgment that draws solely on the competence must be true. The correctness of the output is built into the characterization of the competence in the same way in which correctness of output is built into the competence with chess or language. To return to the analogy with non-experiential memory, what accounts for the positive epistemic status of a belief that is classified as memory is its etiology. Since the function of memory is preserve knowledge it is fair to say that a mental state generated by a mental states that is knowledge inherits its positive epistemic status from it and is itself knowledge. This why relying on memory of this sort necessarily gets things right is a special (conceptual) link between the origin of a belief and the truth of the matter.

Analogously, what explains why relying on intuition is reliable way of getting to modal truth is what we mean by 'intuition' and which implies that there is a special link between competence with the concepts (semantic competence) and the truth in this domain. That is, the facts about the domain intuitions are about necessitate that if a thinker is conceptually competent, she is guaranteed to get things right. What is special about such a domain is that it is a domain of necessity. Now, all necessities that are knowable a priori reside in concepts. One has privileged access to semantic facts simply by virtue of being competent and is thus guaranteed to reach the

truth in this domain. Thus, it is a *conceptual truth* that: intuition has a positive epistemic status, for it cannot fail to be true.

Lastly this account allows us to understand the sense in which conceptual analysis is informative and the sense in which it is not informative. There is no new conceptual knowledge that we gain by way of conceptual analysis in the sense we do not acquire new skills, rather exercise the ones we already possess. However, there is some new knowledge that we gain, namely the knowledge of which proposition or which concept a certain sentence or a predicate expresses and thus we move from partial mastery to full conceptual mastery manifested in full understanding of the relevant terms.

Some Anticipated Objections

I distinguish between two groups of objections: i) objections to the account of the nature and epistemology of intuition, and ii) objections to metaphysics of intuitive content. This should come as no surprise for the questions about the nature and epistemology of intuition are intimately related to the issues about the metaphysics of intuitive content, which came to light in Benacerraf's puzzle about how to reconcile the nature of truth in some domain with its epistemology.

As far as the first group of objections goes, I consider what I call "an objection from unconsidered thought experiments" that aims to challenge the view that the concept of an intuition is primarily a dispositional concept. Further, there is an argument that dispositional account collapses into evidentialism if we assume that knowledge how(ability) reduces to knowledge that as Jason Stanley and Timothy Williamson (2001) argue. Lastly, I consider objections that challenge the claim that intuitions are infallible in the light of apparent disagreements about basic premises in an argument, which if it admitted resolution would imply

that one of the disputant's intuitions are mistaken. And we have a reason to think that such disputes can be settled unless we are epistemological relativists.

Objections from the metaphysics of intuitive content can be summarized as a list of alleged counterexamples to the thesis that all intuitive a priori knowledge is knowledge of modal truths (which are conceptual (analytic) truths). Typically, objectors to the identification of modal and analytic truths point out that the notion of 'analytic' is problematic and needs to be explicated and defended from Quine's (1980) criticism. Connected with this is a worry that even when we explicate the notion, there is a class of synthetic propositions that are knowable a priori. And lastly, more recent challenges state that there are possibility intuitions that are not analytic but are instances of modal knowledge as well as that there are contingent analyticities.

In what follows, I first address the epistemological objections and leave the metaphysical questions for the subsequent chapter.

The Objection From Unconsidered Thought Experiments

One immediate worry about the characterization of intuition in terms of implicit knowledge and a disposition to judge (believe) the content of an intuition lies in what we may call 'the objection from unconsidered thought experiments.' For example, take a student fresh to the study of philosophy who has never encountered a thought experiment. Suppose we ask her to consider the Ship of Theseus, the planks of which are gradually replaced over the ship's sailing time. The discarded planks are hoarded by a museum worker who reconstructs the ship and puts it in the museum with the tag that says "The Ship of Theseus". The crew of the original ship, however, claims that they are on the Ship of Theseus. We know that they cannot both be right because no object can be at two locations at the same time. Suppose we ask this student which ship is the Ship of Theseus, the one that is being sailed still with all new planks or the reconstructed ship in the museum that has all the original planks. Also, suppose the correct

answer is that the ship that has the same origin as the original ship is the Ship of Theseus—that is, the sailing ship. If the competence account of intuition as outlined is correct, then this student, by responding to our question, manifests a disposition to occurrently believe that the ship that is historically continuous with the original ship is the Ship of Theseus. Her belief is grounded in implicit knowledge of how to apply the concepts, such as the concept of a ship, identity, etc.—those that are involved in the content intuited.

Now an objector may point out that it is obviously implausible to say that the student already has this *particular nonoccurrent belief* about *this particular ship* that she has never thought of or heard of. If so, then the account based on the analogy with memory is incorrect.

The worry that this case raises is only apparent. Once we are clear on how thought experiments are supposed to work and what dispositions to believe attach to it disappears. The objection presupposes that the student's disposition to believe attaches only to a particular ship because the belief is about that ship. Naturally, one has a disposition to believe that P (where P is structured) iff one has a disposition to have beliefs about its constituent parts. How is it possible then to avoid the unwelcome consequence that the student already believes something about a particular that she is completely unfamiliar with?

The answer lies in the fact that while thought experiments and intuitions are seemingly about particular cases, their *intention* is implicitly general.⁷ That is, when we invite the student to consider the Ship of Theseus, we are not only asking her to imagine only a particular ship but also along with it any object of that kind and any object of that category. So, the student's disposition to believe that the sailing ship is the Ship of Theseus is of a different kind from disposition to believe that the Ship of Theseus is large, for example. In the former case her

⁷ Cf. Allan Sidelle (1989: 33).

disposition attaches to the whole, without attaching to the particular constituents of the content (rather the general ones), while in the latter the disposition attaches to the whole by attaching dispositions to believe the constituents. And it is possible that one's disposition attaching to the content as a whole, independently from believing *particular* individual components that compose it, is possible precisely because of this generality component that judgments elicited in response to thought experiments carry. The student's response manifests what she already believes because she has beliefs about the general category that is in question in the example about the ship. That is, she is competent with the concepts of a ship, a plank, identity, etc. as she has been applying them long before she considered the thought experiment. Similarly, long before we learn that disjunction introduction axiom, we have been reasoning in accordance with it and we are able to recognize its validity precisely because we already implicitly knew it by being competent with the English 'or'.

The objection from unencountered thought experiments is underwritten by the assumption that the structures of a particular perceptual and a particular intuitive judgment are the same. They both appear to be about features of a particular ship. This is misleading, however. In the light of the foregoing discussion we should deny this assumption. The crucial difference, thus, between the two examples lies in that the perceptual judgment is abductive, while intuitive judgment is deductive. I conclude that unencountered thought experiments present no serious problem for the dispositional account of intuition proposed.⁸ I turn to an objection concerning apparent mistakes and disagreements.

⁸ I should point out that I do not deny that dispositional terms can have episodic use, but in the case of intuition the episodic use is derivative in relation to dispositional rather than the other way around.

Apparent Mistakes and Disagreement

On the etiological conception of intuition, intuitions are infallible. How can this be squared with the actual practice of philosophizing? For when theorizing about various philosophically interesting phenomena, philosophers often disagree whether zombies are possible, whether determinism is compatible with freedom of the will, etc. Ultimately such disagreements seem to be traced back to disagreements in what each party takes to be intuitive. Often then when philosophers disagree, the ultimate disagreement is presented as disagreement in intuitions, and that is where the debate ends. But how is philosophical (rational) disagreement in intuitions possible if it is impossible to make a mistake when one has an intuition?

In order to answer this, we need to first get clear what we are assessing as possibly mistaken. When doing philosophy, we often make *claims to have intuitions and knowledge*. Making a claim to have an intuition, of course, an empirical matter and no doubt, it is possible to make a mistake in empirical matters if the connection between one's grounds and what one believes is inadequate. So, a mistake can occur when classifying one's belief as intuition, knowledge, etc. Such mistakes may have roots in dogmatism, attachment to the beliefs and theories one has, stubbornness, etc. It is no surprise that when relying on something other than competence in making a judgment, one can go wrong and make a mistake. It is only when a judgment draws on one's competence alone that it is impossible to make a mistake.

On the proposed view, disagreements in intuitions is impossible if two thinkers fully understand the case, are both interested in the truth of the matter, mean the same by the relevant terms, and make judgments grounded in competence. The possibility of a disagreement between two philosophers who meet *all* of these conditions is ruled out on conceptual grounds because it is incoherent to say that one is competent and yet a judgment based on competence gets things wrong. For the notion of competence is explicated by reference to the *correctness* of a judgment

produced solely on the basis of it. That is, correctness of the judgment it produces is built into the characterization of conceptual competence.

Thus, it is not that intuition can fail to be true (indeed how can this be so given that there is no room for truth-tracking and the appearance/reality distinction) but rather that our classification of beliefs can be mistaken and sometimes *apparent intuitions* are confused with *real intuitions*, just as often we misclassify beliefs as knowledge though they are merely apparent knowledge.

To illustrate the point, consider garden path sentences. Such sentences can easily mislead a thinker (who is competent) into thinking that there is no grammatical reading of them. Take for example the sentence, 'The old man the ship', which is often parsed as consisting of two definite descriptions and judged by competent speakers to be ungrammatical. This intuition, if the sentence is parsed as two definite descriptions, is true. Yet the judgment, which is false, namely, that there is no grammatical parsing of it, would not qualify as an intuition because it does not have the right etiology. That is, the judgment is not produced by competence alone. One judges correctly that on a certain parsing the sentence is ungrammatical but then *doesn't notice* the grammatical reading because the other reading is dominating one's thinking that there is no another parsing of it.

It might be further objected, however, that the conceptual guarantee that intuition must be reliable is cold comfort, if we cannot ever tell whose judgment is a real intuition as opposed to a merely apparent intuition.

Though the objection may appear to have some force, it ultimately rests on not taking the notion of competence seriously. To illuminate this, let us revisit the analogy with intuitions about grammaticality. The objection is analogous to objecting that since we cannot tell which subject is

speaking English when two subject disagree about what's grammatical, it is a cold comfort to say that grammar intuitions that draw solely on the language competence are necessarily right, for we cannot tell who is really speaking English. What the objection misses is that competence includes the capacity to *recognize* when it properly expresses itself. To be competent is to be able to get things right and recognize when one and others are getting it right. In the case of intuitions, the situation is even brighter, because we can actually test subjects by asking them (including ourselves) to consider further cases and somewhere in the series of further questions, the thinker will exhibit an inconsistency if the judgment was not based solely on the competence. That is the thinker would judge that P in the first case, and somewhere in n+1 case the thinker will judge ~P where he ought to judge P, if he got it right in the first case. This is because concepts are individuated not by a single rule but rather by a set of overlapping and interconnected rules that are manifested in one's performance when deploying such concepts individuated by such rules.

Knowledge-How is a Species of Knowledge-That

A way to understand competence is as a form of knowledge, we have argued. Such knowledge expresses a possession of a skill, knowledge how. Stanley and Williamson (2001) have argued against the distinction between knowledge how and knowledge that. Specifically, they have argued against the distinction as defended by Ryle (1949, 1971). If successful, such a challenge would be a problem for the non-evidential etiological account of intuitions proposed in the previous section. For what one knows one can rely on (in evidential sense) in coming to believe various things. And if knowledge how reduces to knowledge that then there is no non-evidential sense of 'rely on.'

Stanley and Williamson (2001) aim to show that Ryle's (1949, 1971) argument in support of the distinction between knowledge how and knowledge that cannot even get off the ground.

The reconstruction of Ryle's argument goes as follows, according to Stanley and Williamson.

Premise 1: If one Fs, one employs knowledge-how to F.

Premise 2: If one employs knowledge that p, one contemplates the proposition that p.

RA Premise: Knowledge how to F is a species of knowledge that $(\phi(F))$.

Furthermore, let "C(p)" denote the act of contemplating the proposition that p. Suppose that Hannah Fs. By Premise 1, Hannah employs the knowledge how to F. By RA, Hannah employs the knowledge that $\phi(F)$. So, by Premise 2, Hannah C($\phi(F)$)s. Since C($\phi(F)$) is an act, we can reapply Premise 1, to obtain the conclusion that Hannah knows how to C($\phi(F)$). By RA, it then follows that Hannah employs the knowledge that $\phi(C(\phi(F)))$. By Premise 2, it follows that Hannah C($\phi(C(\phi(F)))$)s. And so on. (Stanley & Williamson 2001: 3-4).

According to Ryle, as portrayed Stanley and Williamson, the thesis that knowledge how is a species of knowledge that has an absurd consequence that no action is possible because doing anything would require apprehension of an infinite number of propositions of increasing complexity. Yet, the argument is unsound, Stanley and Williamson argue.

They first observe that it is obvious that (1) has to be restricted in some way. They take it to be restricted to *intentional actions*. Now, if (1) is restricted to intentional actions, so must (2) be restricted for the premises must be about the same kind of action. Yet, premise (2) so restricted is vulnerable to counterexamples, it is argued. There are instances of knowledge that in which contemplating is not an intentional act such as, manifestation of knowledge that the light is turned on by flipping the switch and similar automatic actions. They propose a way to save (2) from such counterexamples, which requires that (2) is not restricted to intentional actions. But then (1) cannot be so restricted and then (1) has counterexamples (e.g. digesting food is an action but not an instance of knowledge how). The authors conclude that Ryle's argument cannot get

off the ground because there is no uniform reading of premises and thus Ryle hasn't refuted the thesis that knowledge how is a species of knowledge that.

Minimally, if Stanley and Williamson (2001) critique of Ryle's (1949, 1971) distinction is to have any force it must faithfully represent Ryle's argument. However, there is a doubt that their argument is successful. There is a worry that Stanley-Williamson (2001) critique fails on two related grounds. First, the elements of the reconstructions (the theses attributed to Ryle) are incorrect, and second, the reconstruction in general is not in the spirit of Ryle's argument.⁹

However, we need not to go into the details of what has exactly gone wrong with Stanley-Williamson argument. Suffice it to say that the formulation of our account of intuition is not wedded to the formulation in terms of knowledge how and to identification of the notion of knowledge how and the notion of competence. The etiological account of intuition can entirely be formulated in terms of *competence* alone.

These were objections that had to do with the etiological concept of intuition and its epistemological implications we developed over the course of Chapter 6. We can conclude that the proposed account does not do injustice to the problem of novelty regarding a priori knowledge, its dispositional nature does not have unpleasant consequence that one already has particular attitudes about propositions that one has not considered occurrently. Further, we have an explanation of disagreements in light of the infallibility claim regarding intuition. Lastly, the account is shown to be immune to the criticism to the effect that it collapses in the evidential camp after all.

Now, let's turn to the objections that concern the account of modality that underwrites the etiological account of intuition.

⁹ These charges against Stanley-Williamson (2001) can be found in Anđelković (2005).

CHAPTER 7 A PRIORITY, ANALYTICITY, AND NECESSITY

This chapter aims to defend the account proposed in the previous chapters from some further objections that are distinct in kind from the objections I have discussed so far. The objections I discuss in this chapter have (more or less) to do with the claim that necessary truths that are the contents of intuitions and which are knowable a priori are *analytic*. In particular the objections concern an account of modality, conventionalism, which underwrites my account of the nature, the epistemic role and the authority of intuition. According to conventionalism, necessity is best understood in terms of analyticity. That is, the source of necessity is in language rather than in the world. However, As Bealer writes, “of course, onus is on philosophers who accept this view to clarify what they mean by ‘analytic’ (1998: 211).

Spelling out the notion of analyticity is not the only problem on the horizon. The account of intuition that was defended is committed to the traditional view about the relation between what is analytic, what is necessary and what is a priori, which I shall explain in the next section. Roughly, the traditional view states that these three concepts are necessarily coextensive. Specifically, the problems for understanding necessity as conceptual and thus analytic in nature concerns putative counterexamples. Bealer writes,

...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...

...Clearly possibility intuitions cannot be identified with consistence 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. (1998: 211-212)

I start by clarifying traditional view about the relation between a priority, necessity, and analyticity and standard counterexamples to it (synthetic necessary a priori, contingent (analytic or synthetic) a priori, necessary synthetic a posteriori). The objections are answered by first getting clear on what the relevant notion of analyticity is. A discussion of the preferred conception of analyticity paves the way for explaining away the counter examples. The counter examples are diagnosed as a consequence of a confusion about what the role of a linguistic vehicle in our judgment of epistemic and /or modal status of the problematic statements is. Once we get clear on this, together with the preferred concept of analyticity, we get the line up between analyticity and necessity.

However, it will emerge that not all analytic statements are suitable for producing the traditional alignment between the analytic, the necessary and the a priori. But such statements are relatively easily identifiable and have no epistemological or methodological repercussions for the traditional view. They are typically individuated with respect to particulars, rather than purely qualitatively. What we should conclude in the light of such examples is that we only need to be clear about the scope of the method of conceptual analysis. And this is not a limitation, of course, it is rather that such statements are epistemologically uninteresting so that they do not disturb the methodology that rests on the traditional alignment.

Lastly, I give a summary of what we have learned about modal or philosophical knowledge and its possibility as grounded in intellectual intuition.

The Traditional View about A Priority, Necessity, and Analyticity

On the traditional picture of the relation between the a priori, analytic, and the necessary, if a truth is analytic, then understanding it suffices for putting one in a position to know that it is true. Such knowledge is a priori because it is solely determined by understanding what the

relevant terms mean and nothing else. Analyticity, on this picture, brings together necessity and a priority. To put it succinctly, the traditional view is the following:

It is necessary that P iff it is a priori that P iff it is analytic that P.

It is contingent that P iff it is a posteriori that P iff it is synthetic that P.

Though the traditional view has been challenged, first by Kant (1787), and then by Kripke (1972), and Putnam (1975), I think that it is fundamentally correct because there are ways of refining the connection between the a priori, the necessary and the analytic that preserves the traditional alignment. This means that there are modern versions of the traditional view, such as conventionalism, that preserve the core idea of the traditional view, namely that necessity resides in language and understanding and not in the world. And we have a reason for holding such a view because the traditional view of the relation between the three concepts is the best alternative from the epistemological and methodological point of view. However, the traditional view, and with it conventionalism, are beset by many of what are sometimes thought to be decisive counterexamples.

Putative Counterexamples to the Traditional View

Putative examples of synthetic a priori:

1. $7+5=12$. (Necessary, synthetic a priori)
2. Nothing can be red and green all over at the same time. (Necessary, synthetic a priori)

Identity statements and statements involving essential properties:

3. Water = H₂O. (Necessary, synthetic a posteriori)
4. Hesperus = Phosphorus. (Necessary, analytic, a posteriori)
5. If Earth exists, Earth is a physical object. (Necessary, synthetic a posteriori)

Statements involving 'actual', and 'actually':

6. Actually, Kripke is a philosopher. (Necessary, synthetic a posteriori)
7. All actual philosophers are philosophers. (Contingent, analytic, a priori)
8. If someone is the president, then the actual president is the president of something. (Contingent, analytic, a priori)

Reference fixing statements:

9. S is one meter at t. (Contingent, a priori)

In the light of such challenges, it may seem as if the commitment to the thesis that intuitive a priori knowledge including knowledge of modal truths is exhausted by what is analytic does not have much plausibility.

In what follows, I shall suggest that none of these examples pose a serious worry for the traditional alignment of the a priori, analytic, and the necessary, once we get clear on the adequate conception of analyticity, the scope of the traditional view, and the proper refinement of the connection between the necessary and the analytic. We shall show that even within the Kantian tradition of thinking about analyticity the examples of alleged synthetic a priori turn out to be analytic necessities knowable a priori. And we shall show that even within Kripke-Putnam tradition about how proper names and natural kind terms work we can still defend the traditional alignment between the a priori, the analytic and the necessary (with some refinement). As far as the question whether there are a posteriori necessities goes, I would like to remain neutral with respect to it because it is not my concern in this project; the project is about a priori knowledge. However, since it is thought that our intuitions about how natural kind terms work are best explained by there being non-analytic real necessity (the one that lies in the world rather than in language and understanding), I shall have something to say about this kind of modality. My main concern, however remains to show that the kind of conventionalism¹ that this account of intuition has in its background easily accommodates the non-controversial part of the story about a posteriori necessities—the part that concerns our concepts and the facts about them.

¹ Conventionalism is the view that resides in language rather than in the world. For a defense of such a view see Sidelle (1989). For a more recent defense of conventionalism, specifically conventionalist modal semantics, see Jesse Butler's (2009) *Clearing A Path for Conventionalist Modal Semantics*.

Different Conceptions of Analyticity

Let us start with the objection recently raised by Laurence Bonjour (1998). The charge is that there is no clear single conception of analyticity that can be useful in modal epistemology and the one that seems to be the best candidate (some kind of reductive conception *a lá* Frege) is either vulnerable to counterexamples or to Quine's (1980) critique.

...There is in fact no conception of analyticity that is capable of providing an adequate and autonomous epistemological account of the generally acknowledged cases of *a priori* justification; indeed the ability of such conceptions to provide such an account of even a single piece of *a priori* knowledge will turn out to be very much in doubt. (1998: 31)

My hypothesis is that moderate empiricist have traded, whether knowingly or not, on the extreme ambiguity of the concept of analyticity, avoiding the objections to one conception by appeal to another and failing to appreciate the other is no conception, at least none developed so far, that is adequate for their needs once the ambiguity is resolved (1998: 58)

Let accept Bealer's (1998) and Bonjour's (1998) challenges to clarify what we mean by 'analytic'. For they correctly notice that the truth of the claim that all modal truths knowable a priori are analytic in part depends on how we understand the notion of analyticity. That the understanding of the concept of analyticity is the epicenter of the dispute about the relation between a priori, necessary and analytic is illustrated by the preceding quotes Bonjour (1998).

Reductive Conception of Analyticity

Bonjour writes,

One of the most widely accepted conceptions of analyticity, and also in some ways the clearest, is that proposed by Frege: a statement is analytic if and only if it is either (i) a substitution instance of a logically true statement or (ii) transformable into such a substitution instance by substitution synonyms for synonyms... Ultimately I will argue that although it is far from clear or obvious that there is any sharp line to be drawn between what is logic and what is not, this makes very little difference for epistemological purposes. (Bonjour 1998: 32)

Why is it, according to Bonjour, even the best conception of analyticity cannot do the job of accounting for the epistemic status of the reducing class of statements (logical truths) and it cannot fully account for the epistemic status of statements such as 'Nothing can be red and green

all over at the same time', etc? The sentence, 'Nothing can be red and green all over at the same time,' does not qualify as analytic on any reductive conception of analyticity because 'red is a color' and 'green is a color' cannot be reduced to logical truths by substituting synonyms for synonyms, where the relevant logical truth would be of the form 'P or ~P'. Denying any logical truth leads to a contradiction, which is typically the test of analyticity of a sentence. So, let us try to substitute synonyms for synonyms in the sentence 'Nothing can be red and green all over at the same time' and see whether we get a logical truth the denial of which would yield a contradiction. Let us substitute for 'red' 'nonblue' for example in the sentence in question. We get 'Nothing can be nonblue and green all over at the same time'. Now, let us deny the truth of this sentence. We get that 'Something can be nonblue and green all over at the same time', which is not a contradiction. Thus the sentence 'Nothing can be red and green all over at the same time,' it is argued, is not analytic on the proposed criterion of analyticity.

Another example comes from an observation that even a denial of the law of excluded middle—('not both P and not P')—is not identical to an explicit contradiction because it requires the application of the rule of double negation to obtain a contradiction. (BonJour 1998: 35)

Lastly, according to BonJour (1998), the reductive conception of analyticity cannot account for the a priori status of logical truths or principles of inference.

Reductive conception of analyticity, though perhaps useful for other purposes, are thus inherently incapable of providing by themselves an adequate basis of the moderate empiricist program: they are incapable in principle of accounting for all instances of a priori epistemic justification or indeed accounting fully for any. (BonJour 1998: 35)

Yet, BonJour (1998) thinks reductive conception of analyticity to be the clearest conception of it. In this he follows Quine (1980) who thought the alternative, Kantian conception, even on best interpretation of it, was obfuscating.

Kant conceived of an analytic statement as one that attributes to its subject no more than is already conceptually contained in the subject. This formulation has two shortcomings: it

limits itself to statements of subject-predicate form, and it appeals to a notion of containment which is left at a metaphorical level. But Kant's intent, evident more from the use he makes of the notion of analyticity than from his definition of it, can be restated thus: a statement is analytic when it is true by virtue of meanings and independently of fact. (Quine 1980: 20-21).

However, Bonjour (1998) may be too quick in following Quine here. For, Quine's (1980) conception of analyticity is subject to the same charge that he raises against the Kantian conception. That is, his conception is too restrictive. If so, it is unclear that Bonjour (1998) is right in favoring this conception of analyticity.²

The problem with the Quine's (1980) conception of analyticity is that it is too restrictive because it rests on a problematic (implausibly restrictive) conception of synonymy that is understood as substitutability *salva veritate*. On such a conception of analyticity, even intuitively paradigmatic case of synonyms such as 'is a bachelor' and 'is an unmarried male' turn out to be non-synonymous because they cannot always be substituted *salva veritate*. For example,

John is a happily unmarried male.
John is a *happily* bachelor.

The second statement is ill formed despite substituting 'bachelor' for its supposed synonym 'unmarried male'. Thus, if the criterion of substitutability *salva veritate* determines synonymy, then, since the former sentence is grammatical and the second is not upon substitution, we must conclude that the two terms in question are not synonymous and that 'Bachelors are unmarried males' is not analytic. Yet, intuitively the sentence is a paradigm of an analytic sentence. What is going on in this case is that 'bachelor' is structurally different from 'unmarried male'. The latter is a complex noun and it interacts differently with an adverb such as

² I should point out that both Quine (1980) and Bonjour (1998) agree that truth in virtue of meaning is an obfuscating conception of analyticity they do though for different reasons. Quine rejects it because he is a meaning skeptic, and Bonjour rejects it because it is committed to the coextension between analytic and the a priori. He complains it is unclear how such truths are known (or how one is justified in believing them).

‘happily’ than does ‘bachelor’, which is lexically simple. Thus substitutability *salva veritate* does not quite track synonymy but rather some lexical and syntactical facts.

Benson Mates (1950) notices this phenomenon when he writes,

I assume that we are dealing with a language in which the formation rules do not prevent the interchange of expressions of the same type. Thus, the fact that “humanity” and “human” are not interchangeable in English does not indicate a difference in meaning, for syntax alone prevents their interchange. (Mates 1950: f 120)

That we need a different notion of synonymy rather than to revise our judgment about what counts as analytic is a reasonable conclusion to draw from the example.

Non-substitutability *salva veritate* shows no more than that certain expressions cannot be substituted for each other because they belong to different parts of speech, so to speak. For example, ‘is bachelor’ is an unstructured predicate, while, ‘is unmarried male’ is structured and its behavior and interaction with other parts of speech will, in part, be determined by its structure. Similarly, while ‘is red’ is an unstructured predicate, ‘is nonred’ is complex.

Having said this, let us turn to the question whether there is a conception of analyticity that is clearer than reductive conception and that can do the job we need it to do

Analyticity as Truth in Virtue of Meaning

Perhaps the concept of analyticity that is the clearest and that can do the job we need it to do is the concept of truth in virtue of meaning.³ Of course, this is a rough characterization that needs some refining. A suitable context in which such a refinement is possible is the framework of Donald Davidson’s program of truth-theoretic semantics.⁴ That is we need to illuminate the meaning of the phrase ‘truth in virtue meaning’. To do so, we shall start first with a brief overview of the basics of the interpretative truth theory for a context insensitive language.

³ For a revival of Kantian conception of analyticity see Gillian Russell (2008).

⁴ I follow in this section Ludwig and Lepore (2005, 2007) and Ludwig (2002)

A crucial requirement that truth theoretic semantics is committed to, namely, the requirement that a theory of meaning for a natural languages must be compositional in the sense that it puts anybody who understand the theory in the position to understand any sentence of the language for which it is a theory. This is attainable by requiring that understanding of the meaning of potentially infinite number of semantically complex expressions is determined on the basis of understanding of the meaning of a finite number of semantic primitives⁵ and their mode of combination. The goal of a compositional meaning theory is to produce meaning theorems of the following sort

(M) s means in L that p ,

where ‘ s ’ is replaced by a structural description of a sentence of the language, L , and ‘ p ’ by a metalanguage sentence that translates it.

In order to be able to produce true meaning theorems, the compositional meaning theory makes use of the machinery of a Tarskian truth theory, which gives the form of the meaning theory. A Tarskian truth theory that gives the right result is the one that meets Tarski’s convention T, that is it has as consequences all sentences of the form (T), where ‘ s ’ is replaced by a structural description of an objectlanguage sentence and ‘ p ’ by a metalanguage sentence that translates it.

(T) s is true in L iff p

The connection between a theory meeting (T) and compositional meaning theory is the following: a truth theory meets (T) convention only if it entails every instance of (T) in which a structural description of a sentence of L replaces ‘ s ’, and a synonymous metalanguage sentence replaces ‘ p ’. Since the relation between the substitution pairs in (T) is the same as that between

⁵ A term is ‘semantically primitive’ in a language, L , iff one cannot understand sentences of L in which the term appears on the basis of understanding sentences in L in which it does not appear.

the substitution pairs in (M) every instance of the sentence (S) is true when what replaces 'p' translates the sentence denoted by what replaces 's'.

(S) If s is true in L iff p , then s in L means that p .

(S) enables us to specify the meaning of a given sentence, given its T sentence. This is how a Tarskian truth theory for L that meets (T) with axioms that interpret primitive expressions of L provides the machinery to meet the compositionality requirement. And any such theory is called *interpretative truth theory*.⁶

Since the axioms are interpretative they specify meanings of the primitive expressions in the object language that puts a subject in a position to understand each object language term. Given this, intuitively a proof of a T-form sentence for an object language sentence that draws only on the content of the axioms will be a T-sentence (i.e., such that 'p' translates s). Such proof, the proof of a T-sentence for a sentence, s that belongs to the object language, and which draws only upon the content of axioms is called a canonical proof. The contribution of subsentential parts to the interpretative truth condition of a sentence s is revealed by a canonical proof of the T-sentence. A canonical proof of a T-sentence for an object language sentence *shows* what its semantic structure is, for it *shows* how the semantic categories to which its constituent terms belong, determined by the type of axiom provided for each, contribute to determining its interpretative truth-conditions. Relative to a knowledge of a canonical proof procedure someone knowing the truth theory and knowing it is interpretative is in a position to derive a true (M) sentence for each sentence of the object language, and thus, to provide a specification of the meaning of the primitive expressions of the language.

⁶ I should point out two things that are important. First, Tarskian truth theory is extensional. The truth predicate is defined extensionally, by reference to the relation of satisfaction between sequences of objects or functions to the expressions in a language. And second, the requirement that the axioms be interpretative in effect requires that the object language term for which it is an axiom is of the right semantic category.

Now let us see how we can use this framework to analyze the concept of analyticity. The suggestion is,

A sentence *S* is analytic in *L* iff the truth of *S* is entailed by true meaning statements alone about its components. (Ludwig, 2007: 4)

So far so good, but how does the context of the framework for providing a truth-theoretic semantics help illuminate the phrase ‘truth in virtue of meaning or meaning statements’?

We know that (M) is true, so we know that *p* is a metalanguage sentence that translates ‘*S*’. Since ‘*S*’ is entailed by true meaning statements (of *L*) alone, it seems reasonable to assume that *p* is entailed by true meaning statements which are translations of those of *L*. And if *p* is entailed by true meaning statements of *L* it is true as a matter of meaning alone (in *L*) that *p*, which entails ‘*p*’ is true in *L*. And the relation in question is semantic entailment, that is, entailment in virtue of meaning. This is how the machinery of the interpretative truth theory can help us explicate the notion of truth in virtue of meaning.⁷

Now, to prepare grounds for answering objection from synthetic a priori and other objections, let us turn now to a separate question, namely, what might true meaning statements of a language (i.e., statements about the meanings of expressions in a meaning theory for the language) be? Here are some suggestions.

Let us start with the predicates ‘is red’ and ‘is colored’. It is a matter of meaning alone that (1) all things that are colored all over have no region in which they are not colored, (2) to be red/green is to have the determinate property (specific shade) of a determinable property (being colored), and (3) distinct determinate properties had in a certain aspect are mutually exclusive.

⁷ I am indebted here to Jesse Butler.

Let us turn now to the predicate ‘is a successor of’. It is true as a matter of meaning alone that (1) the successor of 0 is 1, (2) the successor of 1 is 2, and (3) the successor of (a+b) is the successor of (a) + b ($\text{suc}(a+b) = \text{suc}(a) + b$).

With the examples of the true meaning statements listed above, we are in a position to explain why the apparent cases of synthetic a priori are in fact not what they appear to be. It will be shown that the examples that were advertised as synthetic a priori turn out to be true in virtue of meaning alone and hence analytic. The argument, of course generalizes beyond those instances.

Application to the Putative Cases of Synthetic A Priori

On recommended conception of analyticity, namely treating ‘is analytic’ as ‘true in virtue of meaning’, it turns out that standard examples of synthetic a priori statements are in fact analytic statements because they are entailed by true meaning statements.

A derivation, in the metalanguage, of ‘Nothing can be red and green all over at the same time’ might go like this:⁸

1. Let x be red all over (premise).
2. x is colored all over (by 2, see previous section).
3. x has no region in which it is not colored, in fact no region in which it is not red (by 1, 2 see previous section).
4. x has a distinct determinate property in a certain aspect – specifically x has a distinct determinate property (red) such that there is no part of x that is not red (from step 3).
5. x cannot be such that any part of x is green, because x is such that it is red all over. (by 3, see previous section).
6. x cannot be such that it is green all over. (Step 5).

⁸ For a neat presentation I am indebted to Jesse Butler.

Similar strategy will apply to the sentence ‘ $7+5=12$ ’. On the favored conception of analyticity, it is a matter of meaning alone that $7+5=12$ because the truth of the statement is entailed by what we mean by ‘7’, ‘5’, and ‘+’. The derivation goes as follows:

1. For any number, a , a successor of a is $a+1$.
2. For any number, a , b , $a+0=a$ and $a+S(b)=S(a+b)$.
3. $7+5=(S^7(0)+S^5(0))=S(S^6(0))+S^5(0)$ (instantiation of step 2).⁹
4. $7+5=S(S^6(0))+S^5(0)=S^{11}(0)=S(11)=12$ (instantiation of step 1).

This is how the story goes for synthetic a priori. It turns out that there are no synthetic a priori truths on the preferred conception of analyticity.

In what follows I explain the cases of contingent a priori (analytic, or synthetic) and necessary a priori (analytic or synthetic) statements and show why they are not a problem for the traditional view once we pay attention to what is said to be necessary/ contingent or a priori/ a posteriori, namely, whether it is a sentence or a proposition. That is, we need to recognize the role that the linguistic vehicle plays in what we know and what is said to be a priori or a posteriori. With such knowledge and a refinement within the class of analytic statements, we can detect the ones that are suitable for generating the traditional alignment, namely the ones that are analytic in traditional sense—that is individuated purely qualitatively—and which are the proper subject of conceptual analysis.

Putative Cases of Necessary A posteriori: Identity Statements and Statements Involving Kind Properties.

Identity Statements between Natural Kind Terms. Let us start with identity statement between natural kind terms, such as ‘water’ and ‘ H_2O ’. Bealer nicely summarizes the worry.

Finally, since scientific essentialist impossibilities (e.g. that water contains no hydrogen, that gold is a compound, etc.) are consistent¹⁰ (on the prominent construals of consistency)

⁹ ‘ S^n ’ denotes n iterations of the successor operator.

¹⁰ ‘Consistent’ means ‘not analytically false’ or ‘conceivable without a contradiction’.

they would erroneously counted as possible according to the proposal. Clearly possibility intuitions cannot be identified with consistence 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. (1998: 213).

Are scientific essentialist impossibilities an obstacle for our account? Before we turn to answering this question, let us first briefly revisit the familiar case of a posteriori necessities and explain the trouble they seem to make for the traditional alignment.

The talk about a posteriori necessities enters the stage through the story about how the *natural kind terms* work. Such terms are, according to Kripke (1972) and Putnam (1975), rigid designators. What such terms pick out is indexed to what they pick out in the actual world. They have, according to the view, a hidden indexical component. Now, this is a useful feature of natural kind terms because they are suited for tracking identity of things (kinds) across possible worlds, by tracking *essential properties* of things. Such essential properties are taken to explain the superficial properties of a thing referred by a natural kind term. For example, the term 'water' works in such a way that it picks out the liquid stuff *around here*. Water's being composed of H₂O explains why water appears and behaves the way it does, why it has the property of being a liquid, etc. But, of course, that water is composed of H₂O was an important empirical discovery. Though it was an empirical discovery and thus knowable only a posteriori, the statement that water is H₂O is necessary. And this has been the received view of contemporary philosophy since Kripke's (1972) and Putnam's (1975) arguments. The case is supported with famous thought experiments that produce the intuition that water is necessarily H₂O. Let us revisit the Twin Earth thought experiment.

We are invited to imagine a planet, Twin Earth, that is just like our Earth in every respect, except that what fills rivers and lakes, runs through facets, and quenches thirst has a different

chemical structure from water on Earth. It is not H₂O but rather a chemical with a complex structure captured by the abbreviation 'XYZ'. Now suppose you take a spaceship to Twin Earth and you see this clear liquid and fill up the glass thinking that water might feel good. This situation is supposed to be perfectly analogous to the one before 1750s, that is, before we know what the chemical structure of water was. Now, when our Twin Earth traveler finds out that the liquid he is about to drink is XYZ, rather than H₂O, he quits drinking because it is not water. This leads to the conclusion that our concept of water is wedded to the concept of H₂O, that is, water is necessarily H₂O. However, since for all we know water could have been something else, that is, we can imagine that though actually water is H₂O it could have turned out that something else, H₃O, for example is the stuff that fills the lakes. Obviously, it cannot be that it is necessary that water is H₂O and that it is not necessary that water is H₂O. This is what leads the scientific essentialist to distinguish between two kinds of necessity, a conceptual (epistemic) and a metaphysical necessity. The first one is in understanding (language) and the latter in the world. Apparent anti-scientific essentialist intuitions get explained away as merely epistemic and metaphysical necessity underwrites the claim that water is necessarily or essentially H₂O. That is, according to Putnam's (1975) account, our judgments about the Twin Earth cases express not only semantic facts about the concept of water but also a clue about the *nature of water* (or the *nature of the liquid* stuff picked out by the term 'water'). Such conclusion, however, is knowable only posteriori, it is argued, because it has an empirical premise that the liquid stuff around here that we call 'water' has such and such composition.

It is uncontroversial that the intuitions about Twin Earth show something about how the linguistic community on Earth uses the term 'water' and consequently about the concept of

water. Of course the members of the community may use 'water' in such a way that they are competent with the term, but they are not masters. The rule that determines the extension of 'water' mentions that the stuff must be H₂O to be water, but to be competent one need not know this rule. One needs only the broad category associated with the term (clear stuff, liquid). To be a master, however, one must know that 'water' and 'H₂O' are co-referential, that is that water is H₂O. So far so good. Necessity, in so far as we have knowledge of it, is grounded in what is true in virtue of the concepts alone (analytic), that is how the concept of water and other natural kind concepts work. The necessity of water is H₂O can be explained by virtue of how we use terms such as 'water', and 'H₂O' (which indeed one may need some experience to discover).

Now there is a further question, is the analytic necessity the only kind of necessity? Scientific essentialists think that it is not because there must be another kind of necessity that accounts for why water belongs to a natural kind it does in the light of the apparent anti-essentialist intuitions that we also have. For example, it seems it could have turned out that some samples of water contained no H₂O. Kripke (1972) argues that the intuition can be explained away by distinguishing two kinds of necessity, epistemic and metaphysical, that are confused when reporting the apparent intuition that it could have been the case that water had no hydrogen molecules. Instead, the intuition should have been stated in metalinguistic terms: 'It is possible the community of speakers who are in the epistemically indistinguishable from us and who intend to use the relevant terms literally, would make a true statement by asserting "some samples of water contain no H₂O"'. That is it is possible that the linguistic community used 'water' differently so that it would apply to different stuff than it actually applies to.

Following Alan Sidelle (1989) we can show that a posteriori necessities are consistent with conventionalism about modality that underwrites our account of intuitive a priori

knowledge of modal truths. It can be shown that statements of the sort ‘water is H₂O’ are best explained by the fact that they are entailed by what he calls “analytic general principles of individuation” rather than metaphysical necessity. Such principles, according to Sidelle (1989), have something to do with our intentions regarding how we want to talk about natural kinds, for example, and are gotten by abstraction from the particular subjects and particular predicates as in ‘Water is H₂O’.

(x) (If x belongs to kind K , then if p is x 's P -property, then it is necessary that x is p),

where x ranges over any sort of subject ... and a P -property is a kind property, of which p is an instance... (Sidelle 1989: 34).

(x) (If x is a *chemical compound* [natural kind], then if p is x 's *chemical structure* [deep explanatory feature], then it is necessary that x is p , or colloquially again, chemical compounds (natural kinds) have their chemical microstructures (deep explanatory features) necessarily. (Sidelle 1989: f34, emphasis added)

Sidelle is right in pointing out that the claim that typically philosophers aim at arguing is not that water is H₂O, which is in itself a philosophically very uninteresting claim. What is aimed at in thought experiments is getting to a more general principle as spelled out in the quote. The question remains whether the general principle is analytic or synthetic. He shows that if we suppose that it is analytic we get the necessity of ‘water is H₂O’, which will be a posteriori because the argument to such a conclusion would have empirical premises to the effect that water is a chemical kind and that its microstructure is actually H₂O. That water is H₂O would be grounded in empirical facts about the world, its necessity would be grounded in what we mean by ‘water’ and ‘H₂O’—that is, in conventions. But why not suppose that the principles of individuation are grounded in some metaphysical facts? I shall give such a reason in the section ‘Methodological Case Against Metaphysical Necessity’. For now, let’s turn to the question about how we explain water’s necessarily being H₂O, on the present proposal. Following Sidelle’s (1989) suggestion, we should not say that we cannot imagine water not being H₂O, which we

clearly can imagine, but rather that given the rule that determines the application of 'water', we cannot hold onto that rule and imagine that water is not H₂O. In another words, the convention that governs the application of 'water' explains why it is necessary that water is H₂O.

In the light of the foregoing argument we conclude that scientific essentialism, according to which essences are metaphysically real entities, the natures of things that have an explanatory role, is not a problem for our view.

Identity statements involving proper names. Consider the following two statements:

- (i) Hesperus = Hesperus.
- (ii) Hesperus = Phosphorus.

No doubt (i) is paradigmatically a priori, analytic and necessary, while, (ii) is a matter of astronomical discovery and hence a posteriori, though necessary. But, notice, on the direct reference view of proper names, according to which all that there is to a meaning of a name is its denotation, (i) and (ii) express the same proposition. However it is puzzling if they express the same proposition, how is it that one can be knowable a priori, while the other only a posteriori. The puzzle dissolves once we pay attention to what a priori/ a posteriori attach to and what we know when we know the meaning of a proper name (on direct reference theory). Let us start first with competence with proper names.

No doubt we can use proper names without knowledge that such names refer. Being able to use a term, however is different from competence with the term (knowledge of the meaning). And it is plausible to think that what one knows about what a sentence that contains proper names says is metalinguistic, though the name is used rather than mentioned in the sentence.¹¹

Our intuition that (i) is a priori has nothing to do with the proposition expressed by the sentence, but rather with something about the form of the sentence. What we know is that the

¹¹ Cf. Ludwig (2007).

sentence is a logical truth¹² and no matter what flanks the identity sign, the sentence is true. So, strictly speaking our a priori knowledge is of the sentence rather than of the proposition.¹³ Since knowledge of (i) is metalinguistic, we have an a priori route from (i) to (ii). Let us explain. If what we know in (i) is that $\text{Ref}(\text{'Hesperus'}) = \text{Hesperus}$, and $\text{Ref}(\text{'Phosphorus'}) = \text{Phosphorus}$, and since these reference clauses are meaning giving in the sense of providing a referent and since they give each name the same referent, the referent of 'Hesperus' can also be given with the following clause:

$\text{Ref}(\text{'Hesperus'}) = \text{Phosphorus}$,

The preceding three clauses entail that the sentence 'Hesperus = Phosphorus' is true. The sentence is true as a matter of meaning alone because it is entailed by true meaning statements.

So far we have shown that true identity statements involving proper names are analytic after all since they are analytically entailed by the true meaning statements alone and hence knowable a priori. However, there is still a problem. Each reference axiom entails that the referent of the name exists. This, with the help of the principle that if a proposition p is necessary and p entails q , then q is necessary, gives us an unpleasant consequence that not only that it is analytic (and necessary) that Hesperus is Phosphorus but also that it is necessary that Hesperus exists. A natural solution in the light of the hypothesis that what we know in the case of identity statements involving proper names is metalinguistic is the following:

Necessarily, 'Hesperus is Phosphorus' is true in English.¹⁴

¹² I should point out that the sentence is a logical truth relative to an existence assumption, namely, that the relevant terms have referents. Consequently, what we have here is not strict but relative a priori. For example, on the assumption that 'it' refers, we know it=it without further empirical investigation.

¹³ I should point out that traditionally, propositions are said to be knowable a priori and sentences are knowable a priori only in a derivative sense.

¹⁴ The proposal is adopted from Ludwig (2007). I should point out that according to the proposal, 'English' is treated as a rigid designator of a language, which fixes its semantics and syntax.

Overcoming the problem of existential entailment, however, requires refining the notion of analyticity and making a distinction between a sentence that is analytic in traditional sense and sentences that are ‘quasi-analytic’. The reason is that sentences that are analytic (true in virtue of meaning) but express a posteriori propositions are not analytic in the traditional sense. For traditionally a sentence is analytic iff the proposition it expresses is purely *qualitative* and not individuated by particulars. The propositions individuated with respect to individuals, which are expressed by analytic sentences, I suggest to call *quasi-analytic* to distinguish them from propositions that are purely qualitative and which are expressed by the sentences that are analytic in the traditional sense. Quasi-analytic sentences do not generate the traditional alignment, but are not a counterexample to the traditional view. The idea is that only a special kind of analytic sentence gives the traditional alignment between the analytic, the a priori, and the necessary so that we need to restrict necessity (in the sense relevant for conceptual analysis) to a proper subclass of analytic statements, namely the ones that are purely qualitative. This solution nicely dovetails with our purpose in this study. We are interested in modal knowledge as obtained from conceptual analysis and as originating in intellectual intuition. Singular or quasi-analytic statements are never analysanda in conceptual analysis and hence they do not disturb the traditional view in the epistemological or methodological sense.

Statements involving kind properties¹⁵. Recall, our puzzling case (9),

9. If Earth exists, Earth is a physical object.

This is supposed to be an instance of a necessary, synthetic and a posteriori truth. The reason that (9) is necessary is that we suppose that for any x , if x is a physical object it is necessary that x is a physical object, plus the claim that as a matter of fact Earth is a physical object. The statement is

¹⁵ I should point out that kind properties should not be confused with natural kind properties.

a posteriori because we cannot know a priori that Earth exists and consequently we cannot know a priori that it is a physical object since knowing the latter presupposes knowledge of the former. The statement is synthetic because there is nothing about the concept of Earth that requires that it exists and thus it is not analytic that the Earth exists.

Here as well as in the previous section we need to be clear what is said to be a priori/posteriori (a sentence or a proposition) and what necessity / analyticity attach to. Further we need to keep in mind that the competence with proper names involves metalinguistic knowledge. I should point out here that 'Earth' is a special kind of name, a category name. Category names are a special group of directly referring terms such that there are some restriction on what can be their referent. Though particular individual picked out by a name in a counterfactual situation can be different, the kind the individual belongs to cannot vary in any situation. The reference axiom for a category name such as 'Earth' can be given as follows:

For any x , if $x = \text{Earth}$ and x is a physical object, then $\text{Ref}(\text{'Earth'}) = x$.¹⁶

Given the reference axiom above, then it is true in virtue of meaning alone that Earth is a physical object and anybody competent with the term 'Earth' knows that it is a physical object. For competence with a category name requires that a thinker knows that the name refers and that it falls in the appropriate category.

So instead of (9) we have 9_a :

9_a . Necessarily, 'Earth is a physical object' is true in English.¹⁷

However, what one knows is not the proposition that the sentence expresses; rather one has metalinguistic knowledge. So we have analytic a priori statement. But (9) is not analytic in

¹⁶ Adopted from Ludwig (2007).

¹⁷ I should point out that 'English' is treated as a rigid designator of a language, which fixes its semantics and syntax.

traditional sense because the proposition it expresses is individuated with respect to particulars. So the proposition expressed by the sentence is not necessary, but neither is it a priori. And to have a counterexample to the traditional view we would need a proposition that is both a posteriori and necessary. Though the sentence can be shown to be analytic and a priori on the assumption that 'Earth' is a category name, it is only quasi-analytic and not of the right sort to generate the traditional alignment.

A Methodological Case against Metaphysical (Synthetic) Necessity

Now, I would like to motivate the claim that necessity resides in language and understanding, rather than in things (or in the world)—that is, I would like to give a methodological and epistemological reason for thinking that conventionalism about modality is true. Roughly, the reason for thinking that semantic, rather than metaphysical facts ground principles of individuation of things lies in the fact that conventionalism is the only view that is consistent with the nature of modal inquiry and the possibility of establishing truths in the domain of necessity. As long as the method by which we aim to establish modal truths is the method of intuitions (thought experiments) it is necessary to think that the modality resides in language and is exhausted by analyticity. The reason is in that since as Putnam asserts, "Human intuition has no direct access to metaphysical necessity"(1975: 118), knowledge of metaphysical necessity is possible only by inference to the best explanation from an evidential base. Bealer explains the essentiality of treating intuitions as evidence in the context of getting to essences.

The arguments supporting SE [scientific essentialism] rely on intuitions, fore example, concerning Aristotle and the teacher of Alexander, twin earth, and so forth. Without the evidential support of intuitions SE would be unjustified. (To be sure, certain contemporary advocates of SE might wish to abandon the intuitional defense of SE altogether.) (Bealer: 2004: 24, the first parenthetical remark added):

In Chapter 5, we have argued that intuitions cannot be evidence that philosophical theories are true (and, which if true, are necessarily true). Falling short of being evidence, intuitions can

have epistemic authority in the modal inquiry only if they are better than evidence, that is, if they are knowledge of some sort. But to be better than evidence, direct access to the truth of intuitive content must be secured. But, according to the proponent of metaphysical necessity, intuition has only indirect access to metaphysical necessity (see Putnam's claim) and provided that the metaphysical realist has the burden of proof, he cannot make a good argument that there is metaphysical necessity. The reason is that he does not know it directly and he cannot use intuitions as evidence. What he knows is what I argued we know and which is a priori and necessary, namely that which is true in virtue of the concepts alone, and what Sidelle (1989) calls general principles of individuation.

Contingent A Priori Statements Involving 'Actual' and 'Actually'

Statements involving adverbs 'actual' and 'actually' are also often invoked as counterexamples to the traditional view. They create cases of the contingent analytic a priori, which if genuine would present a problem for the traditional view. Recall the examples:

10. All actual philosophers are philosophers. (Contingent, analytic, a priori)
11. If someone is the president, then the actual president is the president of something. (Contingent, analytic, a priori).

To explain what the problem is with (10 & 11), consider the following statements:

12. Necessarily, all actual philosophers are philosophers.
13. Necessarily, if someone is the president, then the actual president is the president of something.

Many philosophers have an intuition that though (10) is analytic, and so true, (12) is false.

There is an exactly analogous intuition regarding (11) and (13).¹⁸ Let us spell out what leads to the intuitions that (12) and (13) are false.

¹⁸ The intuition is generated if we assume that 'actually' makes a semantic contribution to the proposition expressed by a sentence containing it, rather than contributing emphasis, as some philosophers think (Cf. Michael Jubien

Let, w be the variable ranging over possible worlds, and let x be a variable ranging over individuals in the domain and let '@' be a name for the actual world. We have the following:

- (i) (x) (If x is a philosopher in @, then x is a philosopher).
- (ii) $(\exists w)(\exists x)$ (x is a philosopher in @ and it is not the case that x is a philosopher in w)

In particular:

- (iii) $(\exists w)$ (Kripke is a philosopher in @ and it is not the case that Kripke is a philosopher in w).
- (iv) Therefore, (i) is not necessary.

Similarly in the case of (13) we have the following reasoning. Consider the sentence 'Necessarily, if someone is the president, then the actual president is the president of something'. If true, the sentence must be true in all possible worlds. But it is easy to imagine a world in which somebody other than the actual president is the president and hence the president of something and in such a world the actual president went into business and never ran for the president. In such a world someone is the president, but the actual president is not a president and hence not the president of something. The reason that statements (12 & 13) are thought to be instances of contingent a priori lies in a view about how 'actual', and 'actually' perform semantic work.

It is often thought that 'actual' and 'actually' do the work of the kind that Kaplan's (1978) Dthat operator does. Specifically, the semantics for Dthat is such that when combined with a

(2009: 124). Nevertheless, I accept the challenge because many philosophers are pulled by such examples and our view can explain away such intuitions. However, I think that Jubien has given a correct diagnosis of this pull. He argues that this intuition would be had only by "the speakers who have internalized a standard 'possible worlds' conception of modality". (2009: 124) Needless to say, such speakers are not ordinary and clearly, intuitions of the speakers that are tainted by a theory are of little authority regarding the question whether the theory is true. They, at best, show that the theory is internally coherent. However, we should point out that, Jubien argues that the semantic treatment of 'actually' ends up with 'unintended and counterintuitive modal results' (2009: 124). First, essentialists would find it intuitive that Daffy is essentially a statue. Suppose that 'actually' works as a rigidifier and that the description that it rigidifies picks out the very object that bears the name 'Daffy'. However, it is also intuitive that that very object need not have been a statue, but rather a blob of clay, in some other world, for example. If 'actually' works as a rigidifier, then it picks out this object in that possible world. "The unwanted and counterintuitive consequence is that since the rigidified description is supposed give the meaning of 'Daffy', the sentence 'Daffy might have been an amorphous blob' (etc.) turns out to be *true*. Thus we contradict our original intuition about the essential statuehood of Daffy" (2009: 126).

description the F, as in Dthat [the F] it forms a directly referring singular term that refers rigidly to the F. This means that its semantic work consists in rigidifying the description ‘the F’. By rigidifying the description, ‘the F’, the operator makes it the case that the contribution of the description to the proposition expressed by a sentence is only its denotation.

Similarly, the semantic function of ‘actually’, when embedded in a modal context is to make the modal operator sensitive only to the extension of a term in its scope.¹⁹ If this is how ‘actual’, and ‘actually’ work, then we can think of their contribution to individuation of the propositions on the model of proper names. And if so, then we should not expect the traditional alignment between the analytic, the a priori, and the necessary because the propositions individuated with respect to particulars are contingent. So what is contingent is not the qualitative proposition expressed by ‘All actual philosophers are philosophers’ or ‘If somebody is the president, then the actual president is the president of something’, but singular propositions about actual philosophers or actual president. But sentences expressing such propositions are not knowable a priori, so we do not have a counterexample to the traditional view that qualitative propositions knowable a priori are necessary (see the case for proper names).

Reference Fixing Statements (Contingent A Priori)

Another seeming obstacle for the thesis that all a priori knowable modal truths are analytic, which presupposes the traditional line up between the necessary, a priori and analytic are cases of the contingent a priori that rest on reflections on how terms are introduced. Consider Kripke’s argument.

Someone who thinks that everything one knows *a priori* is necessary might think: ‘This is the *definition* of a meter. By definition, stick *S* is one meter long at t_0 . That’s a necessary truth.’ But there seems to me to be no reason so to conclude, even for a man who uses the stated definition of ‘one meter.’ (1972: 55)

¹⁹ For a semantic proposal for ‘actually’ see Ludwig (2007).

Kripke asserts that there is no reason to so conclude because “though *this* stick S is one meter long, it is not necessary that *stick* S be one meter long” (1972: 55). The definition, according to Kripke does not give the meaning of ‘meter’ but only fixes the reference. And “if heat had been applied to this stick S at t_0 , then at t_0 stick S would not have been one meter long” (1972: 55).

There has been an extensive literature on these sorts of examples of the contingent a priori with the complaint that the putative examples are in fact not a priori because of the existential presupposition of the statement that the length of the stick S at t_0 is one meter. Specifically, the statement presupposes that the stick S exists at t_0 , which is incompatible with the statement’s a priori status because of its existential import. The existential presupposition originates in a view about what the semantic contribution of a proper name in the statement is. According to the direct reference theory all that there is to the meaning of a proper name is its referent. Naturally, on this view, in order for the term to have meaning, the referent of it must exist, because it is all that there is to the meaning of the term in question. Thus, if it is true that this stick is one meter long and the direct reference thesis is true, namely, that the referent of the name is all that there is to the meaning of the name, then these two claims entail that the stick exists. But if so, then the statement ‘this stick S is one meter long’ cannot be a priori because no statement that entails an existential statement about a contingent particular can have a priori status.²⁰

A standard move in response to this charge is to conditionlize the relevant statement.

If stick, S, exists, then S is one meter long at t .

²⁰ Cf. David Bostock (1988: 373-375).

However, this move does not help because the conditional is not knowable a priori, because on the assumption that proper names are directly referential, it still entails that the referent of 'S' exists.

In conclusion, we have shown that the putative counterexamples to the traditional view can be handled by a conventionalism that underwrites my account of modal knowledge as the best theory of modality. The putative counterexamples dissolve once we become sensitive to the role of the linguistic vehicle in judgments about the epistemic status of the counterexamples. We also needed to refine a connection between the notions of analyticity and necessity by arguing that only certain kinds of analytic sentences, and thus only certain kinds of propositions, namely, the ones that are purely qualitative, are suitable for generating the traditional alignment. The group of quasi-analytic sentences that do not produce the traditional line up is relatively small and philosophically uninteresting from the epistemological and methodological point of view. This is because, they express singular propositions, individuate with respect to particulars and they are never analysanda in conceptual analysis and hence not a proper object of philosophical (a priori) knowledge.

Having said this, I turn to the summary of the master argument of this study and what we have learned about the possibility of modal knowledge and about the role of a priori intuition regarding such knowledge.

CHAPTER 8 CONCLUSION

In this study, we defend the view that modal knowledge is possible and that a priori intuition is its source. We arrived to this conclusion by first examining different conceptions of ‘intuition’, phenomenological and etiological and concluded that only on the etiological view of the nature, and the epistemic role of intuition, does it have epistemic authority vis-à-vis modal knowledge. This is because unlike the phenomenological view, the etiological view is not committed to the evidential theory of a priori intuition and/or a priori justification. That is intuitions’ epistemic authority does not come from intuitions being evidence in support of philosophical theories (analyses) or by being a priori justifiers for such theories (analyses).

We have explained in detail how the phenomenological individuation of intuition, based on the analogy with empirical sources of knowledge (perception or introspection) motivates the view that intuition is fallible and how the best theory of error entails that intuition is evidence. However, the evidential theory of intuition, it has been argued, is false. The reason is that upon analysis of the evidence relation, and what its relata can and cannot be, we showed that either there is no (reliable) connection between possible relata of the evidence relation or the relation is not of the right sort to render intuition (a priori) evidence. This argument is extended to the claim that intuitions are nonevidential a priori justification or reasons in the sense in which it is objectively likely that what they are reason for believing is true. Since the phenomenological conception of intuition entails the evidential (justification) theory and the latter is false, the conclusion that the phenomenological conception of intuition must be false follows.

This conclusion lead to an alternative, etiological, conception of intuition, according to which intuition manifests one’s conceptual competence or knowledge of what is true in virtue of meaning alone. The etiological account, in contrast to the phenomenological, is not committed to

the evidential (a priori justification) theory of a priori intuition and it not only illuminates the nature of intuition, but it also entails its reliability and rationality. That is, on the etiological account, intuitions are reliable by their very nature since, on this account, intuitions manifest competence (which is a kind of knowledge). And the reason that it is rational to rely on intuition, though it is not evidence, is that it is certainly rational to rely on what one knows.

Lastly, we have addressed standard challenges to the account of modality that underwrites our theory of intuition, namely conventionalism, according to which the source of necessity is in language and understanding. Another, related commitment, is to the three categories, the necessary, the analytic, and the a priori, being coextensive. The challenges addressed concern spelling out a clear notion of analyticity and handling proposed counterexamples to the traditional alignment between the necessary, the analytic and the a priori. The most notable putative counterexamples involve the synthetic a priori, cases of the contingent (analytic or synthetic) a priori, as well as the necessary (analytic or synthetic) a posteriori. We explain away some counterexamples (the synthetic a priori) by getting clear on the correct conception of analyticity. The rest of the counterexamples are explained away by drawing on the distinction about what knowledge attaches to, a sentence or a proposition. The putative counterexamples dissolve once we become sensitive to the role of the linguistic vehicle in judgments about the epistemic status of the counterexamples. We also needed to refine a connection between the notions of analyticity and necessity by arguing that only certain kinds of analytic sentences, and thus only certain kinds of propositions, namely, the ones that are purely qualitative, are suitable for generating the traditional alignment. The group of quasi-analytic sentences that do not produce the traditional line up is relatively small and philosophically uninteresting from the epistemological and methodological point of view. This is because, they

express singular propositions individuated with respect to particulars and being such they are never analysanda in conceptual analysis and hence not a proper object of philosophical (a priori) knowledge.

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BIOGRAPHICAL SKETCH

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