

HUSSERL'S THEORY OF A PRIORI KNOWLEDGE: A RESPONSE TO THE
FAILURE OF CONTEMPORARY RATIONALISM

by

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Dedication

Dedicated to Barry Smith

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ABSTRACT

I argue that recent rationalists' accounts of a priori knowledge suffer from two substantial weaknesses: (1) an inadequate phenomenology of a priori insight (i.e. rational intuition), and (2) the error of psychologism. I show that Husserl's theory of a priori knowledge presents a defensible and viable alternative for the contemporary rationalist, an alternative that addresses both the ontology and phenomenology of rational intuition, as well as such contemporary concerns as the possibility and character of a priori error, the empirical defeasibility of a priori claims, the relation of mind to necessity, and the role of conception and imagination in a priori knowledge. Consequently, I conclude that Husserl's theory provides the needed response to the 20th century critique of rationalism, and its attendant a priorism, as mysterious and obscure.

Introduction

There is something of a revival of rationalism currently taking place. Room for a priori knowledge, propositions, and subject matters is being opened up in all quarters. Yet, recent rationalists' accounts of a priori knowledge are quite modest. Most authors are content merely to defend the existence of a priori knowledge in response to the naturalistic critique (e.g., Bealer 2000, Bonjour 1998, Sosa 1998, Katz 1998, Plantinga 1993, et.al.). Due to this modest aim there is a fundamental weakness running through these accounts: they lack an adequate ontology and phenomenology of the a priori. For example, it is common among rationalists to cite 'intuition' or 'a priori insight' as an essential element of a priori knowledge; however, there is little description of the nature of such insight and how it accomplishes its task.

Of course, the defense of a form of knowledge is important, but the bane of a priorism, in my view, has been the lack of specific details in the accounts of its advocates as to what such knowledge consists of and how it is achieved. Because of this lack of detail, charges of mysticism and obscurity have often been leveled against a priorists. Albert Casullo has recently gone so far as to suggest that the rationalists position hinges on its ability to respond to this charge, for failing to do so opens rationalism to the same generality argument traditionally used by rationalists against empiricism.¹

¹ See Casullo 1999.

I also think that Jerold Katz is on the right track when he points out that the demands on rationalism in meeting this challenge are two-fold, i.e. both epistemic and ontological. Katz has recently argued that rationalism not only requires an account of the epistemology of a priori insight, but that it requires an account of its objects of knowledge, and that means supporting some sort of realism. However, the real issue behind the demand for realism is not whether or how it supplements the defense of rationalism. The real issue that the rationalists (like all epistemologists) have to contend with is that link that holds between knowledge and the known, a link that is held to be suspicious in the case of a priori knowledge. What is needed to meet this demand is a clarification of the appearance of the object of knowledge: where that object is found, and how it is found to be what it is. In the case of rationalism, this means more than supporting some sort of realism, it means clarifying the specific way that the objects of a priori knowledge come into the purview of knowers. In other words, what is needed is a phenomenology of a priori insight.

Thus, I believe there is a serious need for more than a defense of the existence of a priori knowledge, but an account of its possibility, its character; moreover, if rationalism is to fully respond to its critics, an account is required that provides a viable comprehensive non-metaphorical alternative to the conceptual foundations of naturalism and empiricism.

My main contention is that Edmund Husserl's work provides an excellent basis for such an alternative. Husserl's development of phenomenology, to his own

mind, depended straightforwardly on the metaphysical reality of universals and the epistemological possibility of a priori knowledge. He spent at least as much time defending his new science of phenomenology as actually practicing it, and consequently, all of his works reference these two fundamental pre-conditions. When the relevant pieces are examined a substantial unified body of work on the nature and possibility of non-empirical (a priori) knowledge emerges.

In the following dissertation I will attempt to show that Husserl's theory presents a defensible and viable alternative to the contemporary rationalist, an alternative that addresses both the ontology and phenomenology of rational intuition, as well as such contemporary concerns as the possibility and character of a priori error, the empirical defeasibility of a priori claims, the relation of mind to necessity, and the role of conception and imagination in a priori knowledge. Consequently, I think Husserl's provides the needed response to the 20th century critique of rationalism (and its attendant a priorism) as mysterious and obscure.

The labor divides into two parts. Part I (chapters 1-3) characterizes the fundamental issue of a priori knowledge. From Leibniz to Ayer, that issue has been an attempt to account for our knowledge of universal necessities such as those found in both the formal disciplines of logic, mathematics, and mereology, and the non-formal disciplines of economics, law, color theory, ethics, and linguistics to name a few.² The two assumptions guiding this pursuit have been that we do indeed have knowledge of the necessary truth of certain classes of universal facts, and that

² See Smith 1996 for a survey of the non-formal a priori disciplines that have developed in the 20th century.

empirical experience and induction cannot account for this fact. The question then remains: how is such knowledge possible?³

As acknowledged by advocates and detractors alike, the possibility of a priori knowledge seems to hinge on a direct apprehension of universals and universal states of affairs, otherwise called “rational intuition” or “universal intuition” so as to distinguish it from empirical intuition. The remainder of Part I consists in a critical evaluation of recent theories of rational intuition. I suggest there are two substantial problems with contemporary rationalist’s positions on a priori knowledge: (1) an inadequate phenomenology of a priori insight (i.e. rational intuition), and (2) the problem of psychologism.

In chapter two I make the case for the first problem. I argue that there is an inadequate ontology and phenomenology of the knowing act among contemporary rationalists. This is manifest by a lack of specific answers to fundamental questions such as “What elements go into the make-up of a piece of immediate a priori knowledge?” and, “How are these elements appropriately connected to achieve that result?” As a consequence, one is left in the dark regarding some of the most central issues of a theory of a priori knowledge. There is little if any analysis of the object of knowledge and the acts of consciousness which bring the object to light. This makes statements about the nature of knowledge and the distinctions within it impossible. This first problem is discussed in relation to four prominent

³ The first assumption is not really necessary to get the project off the ground, for the mere possibility of modal knowledge demands an account of that possibility. That is, an account of how it is possible and what makes it possible.

contemporary rationalists (Laurence Bonjour, George Bealer, Jerold Katz, and Christopher Peacocke).

Throughout the 20th century the rationalist's appeal to intuitions has borne the crux of the charge of mysticism. The current revival of this notion, however, has been at the hands of naturalistic prejudices, (Quite possibly in an attempt to relieve the burden of this charge). There is a peculiar and mistaken emphasis on evidence construed naturalistically that makes such theories of intuition subject to the critique of psychologism. In chapter three I argue that any theory, naturalistic or not, which attempts to make intuition into a piece of psychologistic evidence destroys the possibility of knowledge and leads to skepticism. This second problem is discussed with reference to a number of contemporary rationalists including George Bealer, Panayot Butchvarov, Alvin Plantinga, and Ernest Sosa.

Part II (chapters four-eight) is a presentation and defense of Edmund Husserl's theory of a priori knowledge and his proposed methodology for discovering a priori necessities. His too is a theory of intuition. It has the immediate benefit of addressing the phenomenological demands and avoiding the problems of psychologism.

In chapter four I present the epistemological and ontological background into which Husserl's account of a priori insight is embedded and in which his later methodological remarks find their sense and justification. That background consists in a set of interrelated theses about the mental acts and act qualities constitutive of

knowledge, the objects of (a priori) knowledge, and the formal connections that bind those acts and their objects.

According to Husserl's theory of knowledge certain mental acts are capable of directly presenting their objects to various degrees and extents. Husserl calls this quality the degree of "intuitiveness" of an act. In the case of a priori knowledge those objects are modal relations. Modal relations are cashed out in terms of Husserl's metaphysical realism and mereological constituentism. Modality on this account consists in the form of unity binding objects and object parts together into greater complex wholes. These forms of unity (termed "dependence" and "compatibility" relations) derive directly from the reality and relations among the natures of objects.

Between the acts and their intuitiveness on one side and the objects on the other Husserl posits an inseparable link: To every existing object there corresponds the possibility of a set of acts and act qualities through which that object is fully presented and perfectly known, and "conversely, if this possibility is guaranteed, then eo ipso the object truly exists." (ID sect.142) In light of this linkage, Husserl's epistemological task is clarified. That task is to find and describe those acts and act qualities through which one becomes fully presented with the sorts of universal necessities traditionally deemed "a priori"; In Husserl's terms, that task is to describe the acts and act qualities that constitute the intuitive fullness of the dependence relations that define an object's modal unity. This task and its results are exactly the

supplement needed to make the case for the possibility of rationalism and modal knowledge.

In chapters five and six I lay out the results of Husserl's efforts to fulfill this task. Husserl deems the subject matter of modality to consist in the dependence and compatibility relations holding among objects in virtue of their natures or essences. Thus, his task is to clarify the character of the experiences which acquaint us with both the essence of an object and its modal unity.

In chapter five I lay out Husserl's theory of the apprehension of universals. Husserl, like most realists, assumes that for every similarity there is a respect under which the relevant objects are similar. To apprehend that respect is to apprehend a universal. In Husserlian terms, the sense of universal meaning is fulfilled when one finds that respect or category to be identically one and the same among a plurality of individuals.

Husserl distinguishes two sorts of universals: Empirical types and Pure Essences. Empirical Types are universals that are apprehended on the basis of actual individuals and they make up the subject matter of the empirical sciences (e.g., natural kinds). Husserl finds empirical types inadequate to the task of discerning modal relations, and hence, a priori knowledge. He argues that they have an essential attachment to actuality which makes their modal unity inscrutable. I discuss two of the more salient features of this attachment, and its relation to the question of a priori knowledge.

In contrast “pure essences” have no essential connection to actuality or any actually existing individuals. In pure essences, Husserl finds the ground of modal knowledge and the proper subject matter of the a priori disciplines. To overcome the inadequacy of the intuition of universals based upon actual individuals and to apprehend pure essences Husserl proposes the method of “Free Fantasy”. In chapter six I present this method. It consists of the systematic use of imagination to reveal not only pure essences but the essential relations that hold among them.

Chapter seven is a defense of Husserl’s theory and method in response to the canonical criticisms arising within the Husserlian and phenomenological tradition. In this tradition, mainly sympathetic critics have tried to mollify Husserl’s aims and thesis in order to make his account more amenable to their various naturalistic and post-modern sympathies. The assumptions guiding their critique are criticized and Husserl’s theory is defended against their charges.

The prevailing wisdom among Husserl scholars has it that Husserl’s method suffers from a pair of serious objections. First, that there is a vicious circularity operant at some level in the method, thus requiring one to presuppose what they set out to establish. Second, it is held that the method cannot provide us with any more than a tentative and inductive generalization with respect to modal relations, and thus no a priori and specifically, modal insight at all.

I argue that there are several errors common to these critics. (1) They assume the method stands alone and neglect the epistemological and ontological assumptions that legitimate it. Most commentators and critics of Husserl’s approach have looked

only to his proposed method. Methods, however do not justify themselves, nor do they do not explain why they should work. The justification of Husserl's method is shown to derive from his various theories of knowledge, imagination, and universal intuition already laid out in chapters four through six. (2) They assume an extensionalist and thereby inductivists approach to discerning modal relations. From this perspective they charge Husserl's account with the weaknesses of induction: uncertainty, probabilistic knowledge, and revisability. I argue that this assumption is neither correct nor held by Husserl. (3) They assume that the method *is* Husserl's account of universal intuition. I argue, by way of chapter five that Husserl's method can serve as the basis of universal intuition, but its primary aim is to unravel the modal unity that those natures prescribe.

In chapter eight I summarize the Husserlian response to the challenges facing an adequate rationalism and the failure of contemporary theories. I argue that while avoiding the problem of psychologism, Husserl's theory provides a comprehensive answer to the fundamental question: how is modal knowledge possible? It directly answers the questions posed in chapter one by describing the elements involved in acquiring modal insight and the structure of their combination to achieve that end. In the phenomenological spirit, Husserl's theory clarifies the "how" of this possibility, and consequently demonstrates the significance of a non-reductive descriptive approach to intentional phenomena. One consequence of that approach is that the theory sufficiently allays the charge of mystery and mysticism surrounding the a

priori by making descriptively plain the phenomenological and ontological character of rational intuition.

In the analytic tradition, the critique of rationalism comes mainly in the form of several challenges and counter examples. These objections (laid out in chapter one) concern (1) the possibility and character of a priori error, (2) the empirical defeasibility of a priori claims, (3) the relation of mind to necessity and (4) the role of conception and imagination in a priori knowledge. I conclude chapter eight with an account of how the Husserlian theory can accommodate these issues and the concerns they raise. The conclusion drawn is that Husserl's theory stands as a viable and comprehensive alternative for the rationalist that goes a long way towards meeting both the demands of rationalism and the challenges of naturalism.

Part I. Contemporary Epistemology and the Theory of A Priori Knowledge.

Chapter 1

The Theory of A Priori Knowledge.

1. *The Classic Problem of the A Priori.*

At least since Leibniz, '*a priori*' has been taken to mean independent of experience, as contrasted with '*a posteriori*' or dependent on experience. 'Experience' in this context standardly indicates empirical experience.⁴ Thus, *a priori* knowledge is knowledge had independent of empirical experience, while *a posteriori* knowledge is knowledge had based upon empirical experience.

It is the difficult to characterize just what is meant by 'empirical'.⁵ A primary problem is that empiricists themselves disagree over the extension of the term. Where 17th and 18th century empiricists took empirical knowledge to be knowledge derived from the senses and reflection, some contemporary empiricists retain sense-experience but reject reflection, while others include memory and testimony. In an effort to define empirical experience, and avoid the ad hoc character of an extensional, piecemeal demarcation,⁶ I believe we can learn from some rationalists. Leibniz, for one, thought that our experiences of individual

⁴ For example, Leibniz 1996, Kant 1993, Ayer 1952, Kripke 1970, Kitcher 1980, Burge 1998, et.al.

⁵ No less problematic is the meaning of 'experience'. Theses about the nature and role of experience in knowledge will be the subject of specific discussion further on. For the time being, I will use the term 'experience' in a loose and customary sense to indicate any of the conscious activities we live through in our daily life.

⁶ Albert Cassullo points this out as a central problem of the *a priori* in his Encyclopedia of Philosophy entry. See Cassullo 2000, 1.

objects and states of affairs could never account for, or justify, our knowledge of the strict universality and necessity of truths such as are found in logic and mathematics. Knowledge of the former he called *a posteriori* and empirical, knowledge of the latter, he called *a priori*. In the preface to his *New Essays on Human Understanding* he writes,

Although the senses are necessary for all our actual knowledge, they are not sufficient to provide it all, since they never give us anything but instances, that is particular or singular truths. But however many instances confirm a general truth, they do not suffice to establish its universal necessity. (Leibniz 1996, 49)

And later in chapter one he writes,

And however often one experienced instances of a universal truth, one could never know inductively that it would always hold unless one knew through reason that it was necessary. (80)

Kant maintained a similar position. For Kant, empirical experience, “teaches us that a thing is thus and so, but not that it cannot be otherwise.” (Kant 1993, 27) According to both men, we have on the one hand knowledge that propositions such as the laws of logic and mathematics are universally and necessarily true. On the other hand we have knowledge of the individuals that make up the natural world. Our experiences of the latter are insufficient to establish knowledge of the former. No amount of experience of individual objects or states of affairs can account for our apparent knowledge of the universal and necessary truth of the so-called ‘truths of reason’ or *a priori* truths.

I will follow suit by defining empirical experiences as those experiences that take individuals as their objects. *A posteriori* or empirical knowledge then, is

knowledge that arises from our experiences of individuals. Thus sense experience, reflection, memory, etc. are all empirical in so far as they inform one about individuals and individual states of affairs.

What is an individual? Following Jorge Gracia, I take individuals to be non-instantiable instances; particulars in the customary sense. To call something an instance is elliptical for saying it is an instance of some kind or type. A manufacturer may produce several instances of a new type of golf ball, or a publisher may run off several instances of a new book. The golf balls and the books have in common that they are examples which make up the extension of some kind or type. What distinguishes them from the type itself, to which they belong, is that they cannot themselves be types for the production of further examples. No individual is a type, kind, quality, category, or predicate. This is the sense in which a particular can have no instances. Qualities, categories, etc., have instances, which “fall under them”, as it is said. No individual can have an extension of examples of itself, which “fall under it” as its instances. Certainly, a particular golf ball, for example, that I am holding right now can be used as a proto-type for the sake of producing further golf balls, but only of the same type as the proto-type, not of the same particular golf ball itself.

Ordinary examples of individuals are persons, like Bill Clinton, places like the United States, objects like the tree in my back yard, dependent parts of objects like the surface of this table, events like the 2000 Olympics and my trip to Milwaukee this past August. Not so ordinary examples are property instances or

tropes, such as the brownness of the table, and states of affairs such as the being wrinkled of my shirt. All of these examples are instances of some kind or type, but cannot themselves have any instances. Thus, the United States is an instance of a country, but nothing is an instance of the United States. These items stand in opposition to non-individual objects such as the number 2, Beethoven's ninth symphony, the card game pinochle, and the color Red.

1.1 The Fundamental Issue.

The remarks of Leibniz and Kant serve another purpose: they indicate the central issue of a priori knowledge itself. It has been regularly presumed throughout the history of philosophy that empirical experiences present only individuals, instances, or 'matters of fact' in Hume's terminology, as opposed to Relations of Ideas, Universals, Abstract Objects, Possibilities, Truth of reason, etc. No amount of experience of matters of fact, it is supposed, is sufficient for the knowledge of a "Truth of Reason". The same characterization has survived into the 20th century.

In *Language, Truth, and Logic*, A.J. Ayer provides a concise and useful description of the very same issue. His comment concerns a special class of propositions.

We maintain that they are independent of experience in the sense that they do not owe their validity to empirical verification. We may come to discover them through an inductive process; but once we have apprehended them we see that they are necessarily true, that they hold good for every conceivable instance. And this serves to distinguish them from empirical generalizations. For we know that a proposition whose validity depends upon experience cannot be seen to be necessarily and universally true. (Ayer 1952, 75)

Ayer makes apparent the classic and central issue of the a priori. We seem to have knowledge that certain states of affairs are universally and necessarily the case. Yet, our empirical experience cannot account for this knowledge. I know that $2+2$ is 4, and in this knowledge, that it cannot be otherwise. I know that red is a color. I know that every promise gives rise to a mutually correlated claim and obligation, and that the fulfillment of that obligation extinguishes the corresponding claim. I also know that these facts are not contingent. There is no possibility of red at some point in time ceasing to be a color, or of promises generating claims without correlative obligations. At the same time our knowledge of the natural world relies on empirical experience and induction, neither of which give us reason to believe something is universally and necessarily so. While we might come to justifiably believe some law concerning the proportion of temperature and pressure of a quantity of gas empirically, and the law itself might be necessary, empirical experience alone cannot reveal that the law is necessary. Empirical facts, and generalizations derived from such facts, do not exhibit their necessity to us. In response to this situation, the traditional question of *a priori* knowledge has been: Given that we do have knowledge of the necessary truth of certain universal facts, and empirical experience and induction cannot account for this, how is such knowledge possible?

This is the issue I take on under the heading of a priori knowledge, and this is the question I will defend the Husserlian theory as an answer to. There are several points that need to be cleared up in order to make good sense of this question. They

concern the character of the question, its presuppositions, and the relation of the question to issues of evidence and justification.

1.2 The Negative Character of the Question.

A priorism has continued to be primarily a negative thesis: There is knowledge which is not based upon empirical experience. The positing of a form of knowledge independent of experience has always accompanied the modern discussion of a priori knowledge, and the issue has been treated as if the default and paradigmatic cases of knowledge are empirical. It is enough for a priorists to argue that empirical knowledge does not exhaust all that is known, so there must be at least one form of non-empirical knowledge. A positive account of non-empirical bases of knowing becomes of secondary importance. However, the burden of insufficiency could just as well be attributed to a priori knowledge. Empiricists might argue that since a priori forms of knowing (Relations of ideas, Innate Ideas, etc.) leave out an account of our knowledge of individual facts, we must posit an empirical form of knowing. While these might be the way arguments for the existence of a form of knowing run, defenses of the existence of non-empirical or empirical forms of knowing do nothing to illuminate how such forms are constituted and work. Of course, the defense of a form of knowledge is important, but the bane of a priorism, in my view, has been the lack of specific details in the accounts of its advocates as to

how such knowledge is accomplished.⁷ Because of this lack of detail, charges of mysticism and obscurity have often been leveled against a priorists and a priorism.

Naturally, my hope is to remedy this lack of specifics, and thus make clearer the nature of 'a priori' knowledge, that is, the nature and possibility of knowledge of the necessity of certain universal propositions. I believe that without a coherent theory that explains the very possibility of a priori knowledge, no argument for the necessity of its existence will save it from the dismissive attitude of naturalism. It is precisely the character and possibility of a priori knowledge that the charge of mysticism and obscurity ultimately latch on to. Thus, an adequate response to this charge (and attitude) demands an account of the details of that character and possibility. It is the primary thesis of this dissertation that contemporary rationalism has failed to adequately respond to this challenge and that Husserl's epistemological program is not only well suited to provide the needed response, but the result of that program is a comprehensive and viable alternative.

1.3 The Presupposition of the Question.

The presupposition, that our experience of individuals is insufficient to provide knowledge of the necessary character of universal facts, has tradition in its favor. Yet, is it necessary to rule out one form of knowledge or knowledge basis in order to correctly describe another?

⁷ Of course, specific details as to how empirical experience works have in similar fashion been a problem for empiricists. A problem exploited continuously by staunch rationalists from Hegel to Heidegger.

I see no reason that an account of a priori knowledge be in the business of supplementing empiricism. An account of different forms of knowing is required where ever different objects of knowledge are distinguished. The conditions for the possibility of knowing that a certain figure skater has just delivered a performance worthy of a 9.3 is different from, and demands a different account than, the possibility of knowing that a certain pitch is a strike in the World Series. Additionally, the more general the category of objects the more acute the demand for a distinctive theory becomes. Universal necessities, no doubt, are both rather distinctive and general, and an account of the possibility of their being known is most acutely required.

Is empirical experience sufficient for knowledge of the necessary truth of a universal proposition? Strictly speaking, one cannot presuppose this without an investigation into the nature of such knowledge and its object. Such a presupposition would be an obvious prejudice, a prejudice similar to the one the anti-rationalists adopts. The most important issue for the prejudicial anti-rationalists becomes how to come up with a coherent account of our knowledge of universal necessary truth that relies only upon empirical experience. This is an unwise way to proceed. The project of coming up with a coherent characterization, given certain pre-judged limitations, leaves the acquisition of truth too greatly dependent upon chance. Naturally, the best way to proceed is by direct examination of the matters themselves, as free of presuppositions and prejudices as possible.

However, I do not want to deny the obvious. Simple empirical experiences of this or that individual fact certainly fail, by itself, to provide knowledge beyond those facts. And obviously, speculative generalizations fail to bring the necessary truth of a universal proposition any closer to being known. Yet, certain conscious activities, or groups of activities, directed on individual facts, may be capable of arriving at knowledge of universal necessity. That such activities require directedness beyond mere individuals seems almost certain. In fact, the insufficiency of empiricism is nearly built into the problem by definition, for an experience of the necessary truth of a universal state of affairs seems to be an experience of a non-individual.⁸

This last remark may seem unfair since I have stipulatively limited the meaning of 'empirical' to individuals. For those who favor this term and its tradition we can turn to Russell who makes the same point,

It is not necessary to maintain that we can arrive at knowledge in advance of experience, but rather that experience gives more information than pure empiricism supposes. (Russell 1936, 327)

⁸ Might the fact that one or five hundred instances of a universal necessity obtain provide us with knowledge that it is universally and necessarily so? Obviously, this is insufficient for two reasons. No small set of instances is sufficient to show that something holds (is true) universally and necessarily. But more importantly, a priori truths (e.g. If a is part of b and b part of c then a is part of c) unlike empirical generalizations about individuals, do not directly refer to or depend on the existence of any individuals. They presuppose nothing about existence, as Hume noticed they "are discoverable by the mere operation of thought, without dependence on what is anywhere existent in the universe." (Hume 1966, 98) Bertrand Russell and A.J. Ayer also both aptly pointed out that one may come to know some universal necessity by learning of its instances, but when the fact itself is known, it is possible to come to grasp the irrelevance of its instances to its truth.

Whether this more is termed 'empirical', matters not at all to the philosophical problem.⁹

1.4 Reformulation of the Question and Modal Knowledge.

Albert Casullo has recently brought some clarity to the issue of modal knowledge.¹⁰ Ayer tells us that empirical experience is insufficient to show us that a proposition is universally and necessarily true. However, as Casullo points out, knowing a proposition to be universally and necessarily true masks several important distinctions. There is a difference between the general modal status of a proposition, its truth value, and its specific modal status. The general modal status of a proposition is its necessity or contingency. One can know the general modal status of a proposition without knowing its truth value. That is, one can know a universal proposition to be either necessarily true or necessarily false without knowing which it is: true or false. An example would be the claim that "To be is to be the value of a bound variable". Most of us recognize that this claim is necessarily true or necessarily false while at the same time not knowing which. On the other hand one can know the truth value of a proposition without knowing its modal status. In Kant's words, we may know a thing is thus and so but not that it cannot be

⁹ By way of anticipation, the same can be said of the Husserlian solution to be offered in Part II. Husserl even calls himself the true positivist for the same reason Russell gives; that is, by being more faithful than empiricists to the rich character of experience and its objects when addressing the problems and possibility of knowledge. See ID Sect. 19.

¹⁰ See Casullo 1977 and 2000.

otherwise. I may know that every day the Sun rises but not know that every day the Sun must rise.

To know the specific modal status of a proposition is to know both its general modal status and its truth value. If I know that the proposition “ $2 + 3 = 5$ ” is necessarily true, and I know that the proposition “I have black hair” is contingently false, then I know the specific modal status of these propositions.

Given these distinctions between the truth value, general modal status, and specific modal status of propositions, how shall we best characterize the question for a theory of a priori knowledge? Knowledge that something is universally and necessarily the case is knowledge of the specific modal status of a universal proposition that is necessary. Thus I suggest the following: *How is knowledge of the specific modal status of universal necessities possible?*

I believe this is the subject that Leibniz, Kant, and Ayer, et al, attempt to provide an account of, and this is the proper question for a theory of a priori knowledge.¹¹ At the very least this will be my question whether it continues to don the title of ‘a priori’ or not.

¹¹ Casullo also worries that the way we come to know the general modal status of a proposition looks a priori. I expect that facts about modality and the general modal status of certain classes of propositions are themselves necessary and hence fall under my investigation. For to know that a proposition p is necessary and not contingent is to know the specific modal status of the proposition, “Propositions of class C are necessarily true or necessarily false”, a proposition which is itself either necessarily true or necessarily false.

1.5 Singular judgments of necessity; A posteriori judgments of necessity.

There are two classes of examples which may appear to challenge my formulation of the question of a priori knowledge. The first are singular judgments of necessity such as: "I am identical to myself", "My wedding vows produced an obligation in me", "Mt. Marcy has a shape", "Any three different notes of the Star Spangled Banner can be ordered linearly", "The inside of that wine bottle is no larger than the wine bottle itself." While these statements do not express universal propositions, each is necessary and true and seemingly known a priori to be necessarily true. The second are a posteriori judgments of necessity. Among the most popular are , "All cats are mammals", "Water is H₂O", "Gold has atomic number 79". These statements are assumed to be known to be necessarily true a posteriori.

Neither class is problematic to my claim, only complicating. The first class of propositions are merely substitution instances of general propositions. Knowledge of the specific modal status of such singular necessities arises in virtue of knowledge of the specific modal status of the universal propositions they are instances of. The examples in first class are but instances of "Everything is identical to itself", "Every promise produces an obligation in the promiser", "All material bodies have shapes", "Any three tones can be ordered linearly", "The inside of any container is no larger than the container", respectively. Items in the first class are among the propositions Kant called 'impure' and Russell called 'mixed'.¹² Knowledge of their specific

¹² See Kant 1993, Russell 1959.

modal status requires both a priori and empirical knowledge. That is, it requires knowledge of the specific modal status of some universal proposition that is necessary, and knowledge of some individual fact, namely, that something falling under the scope of the universal necessity exists.

The issue is similar for the second class of propositions, universal necessities apparently known a posteriori. Consider the case of water. We know a priori that everything has its nature essentially. Thus, if it is in the nature of composite material substances to have their respective elemental compositions, then this is also necessarily true. If empirically we come to learn that water is in fact a composite material substance, we can conclude that water has its respective elemental composition by its nature, and that this fact is necessarily true. Of course establishing that water is a composite material substance is no less a feat than establishing that the nature of composite material substances is to have their composing elements essentially. However, without the knowledge of the specific modal status of a universal proposition, we could no more know that planets must be identical to themselves or Mt. Marcy must have a shape, than that water cannot be a simple substance.¹³

Some would claim that this knowledge is “automatically empirical knowledge.”¹⁴ Is it? That depends on whether or not we adopt the convention of

¹³ I have stated the claim about composite substances conditionally since the verdict is as of yet out on the true nature of material beings. What stands as a necessary truth is that material substances have some nature and have it essentially. Thus, as Kripke contends, identity statements of essence are necessarily true or necessarily false.

¹⁴ For example, Kripke 1980, 159.

regarding 'a priori' as limited to cases of pure a priori knowledge. Since 'a priori' has come to mean merely the negative quality of independent of experience, and experience in this context is empirical experience, any knowledge which derives even partly from empirical considerations is called empirical or a posteriori. However, this convention does not diminish the fact that so-called a posteriori necessities depend on a priori knowledge in no less a fundamental way than the substitution instances mentioned above.

The assumption that guided the traditional issue of a priori knowledge, and which I am adopting in order to specify the question for a theory of a priori knowledge, is not contradicted by any of the examples presented so far. Empirical experience remains insufficient to account for our knowledge that certain universal facts are necessarily the case. Simply put, there are no 'pure' a posteriori universal necessities. Furthermore, since the possibility of knowledge of the specific modal status of so-called 'a posteriori necessities' depends on and derives from knowledge of the specific modal status of universal propositions known wholly non-empirically, it becomes evident that an account of purely non-empirical knowledge is a necessary prerequisite to an account of a posteriori necessities. The primary goal of a theory of a priori knowledge then is to account for such cases of non-empirical and foundational knowledge. Its secondary goal becomes the elaboration of the subsequent conditions required for the possibility of knowledge of the specific modal status of 'applied' universal necessities such as the substitution instances and *a*

posteriori necessities mentioned above. The remainder of the dissertation will limit itself to the possibility of the former.

1.6 *Evidence and Justification.*

My characterization of the problem of a priori knowledge is the project of explaining how knowledge of a certain species of fact is possible, yet I have not mentioned justification, evidence, warrant, etc. Surely, the distinction between a priori and a posteriori knowledge is a distinction between forms of justification, evidence, warrant, etc.

To many, 'warrant' has come to indicate that, what ever it is, which is required to make a true belief into knowledge. For internalists this indicates reasons which serve as justification or evidence for true beliefs. For externalists this element is a feature of the processes that produce true beliefs.

As long as 'warrant' has this merely functional significance, a theory of the a priori is clearly a theory of warrant. On this reading a theory of warrant becomes the central issue for a theory of knowledge itself; it distinguishes knowledge from mere opinions, beliefs, and other related cognitions. Its goal is to describe the nature of the connection between object and thought which defines the knowing experience.

Epistemic warrant, whether normative or descriptive, internalist or externalist, has only one requirement. For a belief to be warranted, it must bear the right relation to the truth.¹⁵ Reliabilists cash out this relation in terms of the belief

¹⁵ Coherentists are the exception to this rule.

forming processes and the likelihood of their producing true beliefs. Robert Nozick requires that the appropriate relation meets certain counterfactual conditionals, so that our belief forming processes track the truth. In a similar vein causal theorists require that the truth be appropriately causally connected to the knower and his belief. Alvin Plantinga requires that the relation to truth be the result of the proper function of our belief forming processes. Sosa holds the relation to truth be the result of an epistemic virtue. Whether it be truth tracking, reliability, or even infallibility, the basis of justification (for internalists) and warrant (for externalists) must be some item which bears an essential relationship to the truth. Accidentally coinciding with the truth is not sufficient.

However, all of these various accounts are incomplete for they neglect an important question: *What is it* about truth-conducive reliable processes, truth tracking processes, properly functioning epistemic abilities and processes, etc., on the occasions they work perfectly fine, that makes it the case that things are as they are thought of, or that what one thinks of, is as it is thought of? The same sort of questions can be asked of the internalist. For example, what is it about reasons, evidence, or justification that succeed in getting one's belief latched on to the truth in such a way so as to make one a knower?

To see my point, consider perception. Perception is a paradigm source of knowledge for both internalists and externalists alike. What then is it, we must ask, in the nature of perception that allows or accounts for one being able to think of what is as it is, on those occasions when perception is busy conducting, tracking, providing

reasons, or teleologically reaching truth? This is a question about the objectivity of knowledge and the necessary properties of any processes of cognition which constitute the appropriate relation between a knower and the object of knowledge. Until a specific account of this cognitive achievement is given, a theory of knowledge is incomplete. And, until a specific account is forthcoming for our knowledge of the necessary laws we find in logic, mathematics, and the other a priori disciplines, the a priori will remain mysterious.¹⁶

It is important to remember that the elements constitutive of a piece of knowledge must of their own character necessitate truth. The cognitions, objects, and relations which make up a piece of knowledge must necessitate the truth of what is believed or considered. While this is acknowledged by all epistemologists, the basis of this relation, its possibility, “how” it works, is often neglected.

In light of these remarks, talk of warrant, justification, evidence, etc., is either vacuous, when it indicates the name a philosophical problem (That is, what else besides belief and truth are need for knowledge?), or misguided when it indicates conditions that the connection between thinking and truth ought to coincide with or conform to. What is important, for the possibility of knowledge, and the traditional a priorists, is just how the connection to truth and necessity is forged in the first

¹⁶ This issue is partially addressed in Bonjour 1998, chapter 6, where an attempt is made to characterize what the apprehension of a necessary truth consists in. Most theorists do not realize what is missing. Thus, where ‘intuition’ traditionally functioned as the “reality hook” which made knowledge of necessities possible, the term now indicates merely a sort of qualia or internal condition whose epistemic value requires external support. (See Chapter three of this dissertation for specific criticism of this psychologizing tendency.)

place.¹⁷ Knowing that this forged relation is the result of the proper functioning of my epistemic abilities, occurs reliably over the last thirty years, or even that it tracks the truth infallibly, does not begin to explain, in the details, how this link comes about in but one case, if at all.

Of course there are answers to this question. Many cite intuitions as the process which hooks one onto universal necessities in the right way. But when the details are spelled out, the result is often misleading and susceptible to grave errors, and usually merely metaphorical and incomplete. I will evaluate several such attempts in chapter two.

1.7 Conclusion.

I have suggested that an account of a priori knowledge is an account of our knowledge that certain propositions are universally and necessarily true. The move to posit knowledge independent of experience results from a recognition of a body of knowledge for which empirical experience alone seems incapable of accounting. In spite of the so-called a posteriori necessities, the traditional issue is still the relevant one. How is the sort of knowledge exemplified in mathematics, logic, and a priori disciplines in general, possible? I will now address what this question means, and how it should be answered.

¹⁷ The problem with the accounts mentioned is that they are purely relational. They describe warrant as some sort of essential relation between thinking, and the object known, but they do not specify in virtue of what properties this relation obtains. Instead they merely characterize certain qualities instances of the relation must exhibit, or certain facts which must be entailed by these relations, whatever they are.

1.8 What is an account of a priori knowledge?

My question has taken the form: How is it possible to come to know that something is universally and necessarily the case? 'How is it possible' questions are ways of asking for the essential structure of a certain item and the structure of the items it depends on for its existence. In the case at hand, that would be an account a certain kind of knowledge. While it is always true that one can come to believe anything, and do so upon a reasonable basis (e.g. being told by a friend), the conditions for the possibility of knowledge require a different story. Testimony, reliable causal processes, logical deductions, and other mediate forms of coming to know all depend on more basic and immediate forms of knowing. The necessary precondition for any mediate form of coming to know is some immediate form. Thus, the primary issue to be dealt with by a theory of the possibility of knowledge is the possibility of immediate knowledge, and for my concerns, that means a characterization of the essential structure and pre-conditions of a piece of basic or immediate knowledge of the specific modal status of universal necessities. Naturally, knowledge can be extended by mediate means, and a complete theory of knowledge must, no doubt, include such studies. However, it is sufficient to limit discussion to the possibility of immediate or basic forms of a priori knowledge, for it is at this level that criticisms arise preventing a priorism from getting off the ground, and it is at this level that the very possibility of a priori knowledge hinges.

The project can be divided into two fundamental questions (1) What elements go into the make up of a piece of immediate a priori knowledge? In other words, what goes into the make up of one's knowledge that something is universally and necessarily the case? In essence, this is what a theory of rational intuition attempts to lay bare. However, citing 'intuition' and proceeding to place certain conditions on appropriate intuitions leaves out the central story, namely, (2) How are these elements appropriately and necessarily connected to achieve that result? How are truth, necessity, judgment, and the elements constitutive of intuitions connected so as to make knowledge of universal necessities possible? Questions (1) and (2) if sufficiently addressed will result in an adequate phenomenology and ontology of a priori knowledge. The phenomenological component is satisfied by characterizing just how necessities make their appearance to a rational agent capable of coming to know them. In short, it tells us what they look like, and where they are found. What we want to know from the phenomenological standpoint is the character of the experiences that reveal necessities. These will also be the experiences that make one's belief in necessity more than a blind opinion but a rational and motivated response in the face of the relevant phenomena. Thus, phenomenologically, we want to know about the character of our experiences and the manner in which they intentionally direct us to objects. The ontological component goes further by characterizing the properties and relations of those experiences and their objects that make it possible for them to relate in the way the phenomenological account describes, i.e. to relate under the heading of knowledge. This entails characterizing

the structure and ties among the forms of modality on the one hand and various sorts of experiences on the other.

While a priorism was originally constitutive of analytic philosophy as practiced by Russell and Frege, it lost sway among the second generation of analytic philosophers to the linguistic turn and the rise of positivism. Few philosophers today are of a mind with the linguistic turn, and fewer still sympathetic with positivism, yet the dismay with pre-analytic philosophy, and sympathy with Quinean styled naturalism has engendered suspicion towards the a priori. In particular it has motivated a sustained analytic critique of the legitimacy and value of so-called a priori knowledge. This critique has revolved around at least four key issues. Not in any particular order, they concern (a) the possibility of error, (b) the relation of the empirical to a priori disciplines (c) the role of conceivability in modal knowledge, and (d) the relation of mind to necessity and other abstract objects. The failure of previous theorists to adequately deal with one or more of these issues has opened the door to numerous objections to the whole category of the a priori/non-empirical knowledge. These objections, more than those of the linguistic and positivistic turn stand against rationalism in the 21st century, and therefore stand against Husserlian a priorism. Thus, to the extent that a theory can adequately address these issues, it provides more than a viable alternative to the rationalists, but also a viable alternative to the conceptual foundations of analytic naturalism. The following is a characterization of the role these issues play in supporting the rejection of a priorism.

In Part II of the dissertation, I will present the Husserlian alternative, and in chapter eight (Part II), I will elucidate the resolution offered by the Husserlian scheme.

A. How is Error Possible?

A theory of knowledge must provide for the possibility of error in judgment, and a theory of a priori knowledge is no exception. The failure to account for the possibility of error provides an obvious basis for criticism. Historically noteworthy errors by philosophers have been used to discredit both the alleged value of claims of a priori knowledge and the very possibility of a priori knowledge. The validity of these sorts of arguments depends on the capacity for a theory of a priori knowledge to accommodate them. We can divide the historically significant errors into three classes. First, claims thought to be known a priori have been shown not to be a priori. A famous example of falling victim to the first error is Kant's depiction of Newton's laws of motion as a priori. More recently, Hillary Putnam has argued that the purported a priori claim that cats are mammals is not a priori at all.¹⁸ Second, claims thought to be known a priori have been discredited by further a priori insights. This, I assume is how philosophers demonstrate the falsity of each others premises and the invalidity of each others arguments. Third, claims thought to be known a priori have been discredited by a posteriori evidence. The most notorious example of the third sort is the rejection of Euclidean geometry as the proper character of real space by Einsteinian physics. Along these same lines, Hillary Kornblith has argued

¹⁸ See Putnam 1962.

that the supposedly a priori transitivity of temporal precedence (If a precedes b, and b precedes c, then a precedes c) has been shown to be false by Einstein's relativity theory.¹⁹

Hence, an account of a priori knowledge must be accompanied by an error theory. This entails doing justice to the evident fallibility of claims to a priori knowledge, and the possibility of the three types of error just mentioned. In the last chapter (eight), I will show how the Husserlian theory can account for the possibility of these three forms of error. I argue that none put in jeopardy the necessity or legitimacy of Husserl's a priorism.

B. The Relation of Empirical to A Priori Disciplines.

Related to the charges leveled under the rubric of error is the divisive relation between the a priori and empirical disciplines. Rationalists, often argue for the authority and autonomy of philosophy over empirical science on the basis the role of rational intuition. Naturalists on the other hand, tend to argue for the continuity of philosophy and science based either on the dismissal of a priori knowledge, or its defeasibility by empirical science. Thus, the relation of empirical and a priori science can be used as a reason for rejecting a priori claims and disciplines.

Are empirical claims a priori defeasible? Are a priori claims empirically defeasible? Are so called empirical sciences purely empirical or do they include a priori elements? These questions have a perennial ring to them, and answering them

¹⁹ See Kornblith 2000. It is contentious whether examples of the third kind form a genuine class or are better explained as examples of the first two.

would require nothing short of a total theory of science and knowledge. Naturally, a substantial theory of the nature of our modal knowledge, coupled with an account of the possibility for error will shed light on these important issues. I doubt that an account of the possibility of modal knowledge provides the final word on the issue. I must however, provide an account usable by the philosopher of science in his endeavor to answer these questions. More importantly however, the criticism of the a priori grounded in the defeasibility of a priori claims loses its force should the empirical be defeasible under certain conditions by a priori insight. The Husserlian account to be presented divides the empirical and a priori in such a way that the defeasibility of the one by the other, though possible under certain conditions, does not speak to the overall priority of either. Nor does it entail the rejection of either.

C. The Relations among Conceivability, Imagination, Possibility, and Necessity.

Recently, there has been much discussion of the relation between conceivability and possibility especially surrounding issues in the philosophy of mind.²⁰ It is necessary that an account of a priori knowledge account for the legitimacy and sense of conceivability criteria in the determination of possibilities and impossibilities. An account of our knowledge of modal facts must not only explain how we come to find universal and necessary truths, but why conceivability or any other conditions have any role to play in the first place. That is, it must be explained what it is about the nature of conceivability, possibility, impossibility, etc.,

²⁰ See Yablo 2000 and 1993, and Chalmers 1996 and 2002.

that make it the case that a thought experiment can, on occasion, refute a claim to necessity.

This essential role for conceivability however has given rise to the objection that conceivability is an unreliable guide to possibility and impossibility, and therefore, not helpful in the procurement of modal knowledge.²¹ In the course of Husserl's theory, a criteria evolves that not only links certain kinds of conceivability to possibility but more importantly, accounts for the very possibility of that link.

D. The Connection of Mind to Necessity.

A frequent complaint against a priori knowledge is that it depends on a mysterious connection between mind and some unhappy metaphysical beasts such as modalities, possible worlds, universals, essences, etc. Since Paul Benacerraff's essay on mathematical knowledge it has also been acceptable to regard any such connection to be impossible on the grounds that it does not follow the causal scheme generally accepted of perception, or perceptive acquaintance.²²

An account of a priori knowledge must satisfy this suspicion by providing a plain, non-metaphorical, and non-mysterious account of the cognitive processes, objects, and relations of which a priori knowledge is constituted. Whether or not this account includes a causal-perceptive process solely depends on the nature of those cognitive, objectual, and relational elements, and cannot be settled prior to their elucidation. Jerold Katz, e.g., has argued that the problem is with the model of

²¹ For example, Yablo 2000 and Van Cleve 1986.

²² See Benacerraff 1973

acquaintance and attempts to work without it. The Husserlian model to be presented, I claim, succeeds first and foremost in dispelling the shroud of mystery surrounding the notion of rational intuition. Secondly, it provides the basis for a theoretical-causal supplement to the theory of modal knowledge, for it leaves room for a number of causal roles, including Formal, Teleological, and Efficient.

1.9 Conclusion.

The aim of the following presentation is to fulfill these demands in a somewhat broad outline. In the next two chapters I point out the weakness in recent rationalists attempts to come to grips with questions (1) and (2). Chapter two is a series of criticisms of a number of recent theories of rational intuition and modal knowledge. My aim is to make clear what I think is missing in these accounts, and thereby clarify what a proper answer to (1) and (2) should look like. Chapter three is a sustained argument against the psychologizing tendency among many of the theories of rational intuition recently proffered. The conclusion of both chapters, and thus Part I, is that contemporary rationalism stands in need of a viable alternative that adequately meets the phenomenological and ontological demands expressed in questions (1) and (2) and does so in a way that avoids the perils of psychologism. Part II will then take up the Husserlian response to these demands.

Chapter 2

Contemporary Rationalism and the Theory of Intuition

2.1. Introduction.

Recently, several notable rationalists have leveled defenses of a priori knowledge, and consequently have opened up debate on its role and value in philosophy. Laurence Bonjour, for example, has defended a priori insight as the only viable basis for a fully grounded epistemology. George Bealer has defended the autonomy and authority of philosophy on the basis of its a priori method and subject matter. Jerold Katz has argued for a realistic rationalism whereby a rationalist epistemology (encompassing rational intuition) and ontological realism mutually support each other.

As mentioned above, one's a priorism need not be generated out of concerns with internal inconsistencies with empiricism, or the basis of philosophical knowledge, but simply with a genuine and general concern with the nature of our knowledge: its basis, its correlates, its structure, etc. It is not my goal to defend the possibility of a priori knowledge from its critics or to discuss the inadequacies of the alternatives. While these are valuable endeavors, they are not mine.²³ My concern is with the positive characterization of a priori knowledge we find presented among contemporary rationalists.

²³ Of course, if my efforts to shore up the short comings of rationalism are successful, this will have a certain merit in the debate.

In the following chapter I critically examine the views of these and other leading analytic rationalists. I argue that their views, (when not outright untenable), suffer from an inadequate ontology and phenomenology of the knowing act. This is manifest by a lack of specific answers to the fundamental questions of an account of a priori knowledge described in the last chapter. They are, (1) what elements constitute a piece of immediate a priori knowledge? and (2) how are those elements appropriately and necessarily connected to achieve that result?

2.2 George Bealer's Theory of A Priori Knowledge.

In a number of recent essays, George Bealer has laid out his theory of a priori knowledge.²⁴ It is widely agreed, Bealer tell us, that knowledge necessitates evidence, at least "for the high grade of theoretical knowledge sought in science, mathematics, and philosophy." (Bealer 1999, 29) It is a theory of evidence that rests at the locus of his epistemological investigations, for George Bealer shares an assumption which dominates contemporary epistemology: a theory of evidence is all that is required of a theory of a priori knowledge. It is easy to see why, given the dominance of the True Justified Belief account of knowledge in contemporary epistemology. Simply, even if truth and belief divided into species, none of these divisions would capture the differences found among the standard examples of a posteriori and a priori knowledge. Like other contemporary rationalists, his theory aims at a defense and explanation of 'intuition' as a form of evidence, and

²⁴ See Bealer 2002, 2000, 1998 and 1987.

specifically the form of evidence constitutive of a priori knowledge. His explanation of intuition as a form of evidence emerges as an answer to two questions: What are intuitions and why are they evidence?

2.2.1 *What are intuitions?*

Intuitions, Bealer tells us, are not, "a magical power or inner voice or a mysterious "faculty" or anything of that sort."

For you to have an intuition that A is just for it to seem to you that A. Here 'seems' is understood, not as a cautionary or "hedging" term, but in its use as a term for a conscious episode. For example, when you first consider one of DeMorgan's laws, often it neither seems to be true nor seems to be false; after a moment's reflection, however, something new happens: suddenly it just seems true. Of course this kind of seeming is intellectual, not sensory or introspective (or imaginative). For this reason, intuitions are counted as "data of reason" not "data of experience". (Bealer 1999, 30)

In our context when we speak of intuition, we mean "rational intuition" or "a priori intuition." This is distinguished from what physicists call "physical intuition." We have a physical intuition that, when a house is undermined, it will fall. This does not count as a rational intuition, for it does not present itself as necessary: it does not seem that a house undermined must fall; plainly, it is possible for a house undermined to remain in its original position or, indeed to rise up. By contrast, when we have a rational intuition, say, that if P then not P, this presents itself as necessary: it seems that things could not be otherwise. (30)

My view is simply that, like sensory seeming, intellectual seeming(intuition) is just one more primitive propositional attitude. (31)

According to these remarks, intuitions are primitive and sui generis propositional attitudes. They are intellectual in character, not sensory, and take as objects propositions(?) which present themselves as necessary. Yet, they also take truth values, as when one considers and then reflects upon a law of logic and it thereby suddenly seems to be true. Bealer goes on to say that intuitions are

analogous to perceptual presentations in that they resist change in spite of changes in our beliefs. When something intellectually seems to be the case, it will continue to seem so even if we come to believe it is not so. For example,

In the Muller-Lyer illusion, it still seems to me that one of the arrows is longer than the other; this is so despite the fact that I do not believe that it is (because I have measured them). In each case, the seeming (intellectual or sensory) persists in spite of the countervailing belief. (31)

From the example above, of intuiting the truth of DeMorgan's laws, we get a glimpse of the workings of the essential elements involved in arriving at a priori knowledge. We are told that knowledge of one of DeMorgan's laws begins with a consideration of the law which presents itself as necessary. While in a state of consideration the law need not seem true or false. In this state, something called 'reflection' is possible (upon the law?). After reflection, what seems to be a passive occurrence suddenly arises whereby the law seems true. This passive seeming is the 'intuition'. This seeming will remain in spite of our beliefs contrary to it.

In this section I will not criticize the accuracy of this description. I will, however, indicate what I take to be the theory's inadequacy by way of posing a number of questions. First, what is it about considerations, presentations, and reflections that make it possible for objective knowledge to arise? Another way to put it is to ask how necessities, propositions, cognitive acts, etc., interact so as to play an essential role in accounting for the evidential and/or knowledge status of intuitions, where that would most likely mean providing the thinker with things as

they are? Further, Bealer states that intuitions concern certain propositional contents which present themselves to consciousness as necessary. How is such a presentation accomplished? In virtue of what sorts of thinking do necessities appear? Surely this is important, for without a story about how necessities make themselves present to consciousness, and how their modality makes itself present, we cannot even begin to account for a priori knowledge as traditionally conceived.

To summarize, various cognitive acts are invoked in the account that appear to form a basis for a priori knowledge, yet there is no description of how these acts interrelate so as to be essential to and productive of that evidence and knowledge. It is precisely such facts that an epistemological theory of a priori knowledge requires a description of. What is the basis of a priori knowledge? What sorts of elements are involved and how are they appropriately connected? These issues are recognizable as specifications of the fundamental requirements on an account of a priori knowledge given in the introduction. These came in the form of two questions: (1) what are the elements that go into a piece of a priori knowledge and (2) how are these elements appropriately connected to accomplish that end? While elements such as considerations, reflection, etc., are mentioned in Bealer's account, their distinctive values and roles in the process leading to a priori knowledge is not elucidated. Likewise, their essential characters and relations are left undisclosed. As it stands the account is too opaque to aid our investigation of a priori knowledge.²⁵

²⁵ Many other questions need resolution in order to render this theory manageable. How is objective connection to the world made, and at what level is: appearance, presentation, consideration, seeming? How far should we take the comparison with perceptual seeming? It is hard to say for he does not

The second part of Bealer's theory consists in an explanation of why intuitions are evidential. Surprisingly, to answer this question, Bealer neglects the role and structure of the acts invoked in his description of intuiting one of DeMorgan's Laws, and instead attempts to demonstrate that intuitions are evidence on radically different grounds. This suggests that the cognitive acts indicated in the description of a priori knowledge are not in fact essential at all.

2.2.2 Why are intuitions sources of evidence?

Bealer regards intuitions as basic sources of evidence. Something is a basic source of evidence if it has an appropriate strong modal tie to the truth.²⁶ Bealer is a reliabilist and calls his position 'modal-reliabilism' to indicate that the appropriate tie between a basic source of evidence and the truth cannot be accidental or contingent. Intuitions, it is claimed, have the appropriate tie, and therefore, are basic sources of evidence. The natural question which arises is how. How do intuitions achieve an

distinguish between something's appearing before me and its seeming to be the case. In perception when I see something, in every respect which it appears it also seems, so seeming seems to add nothing to the mere presentation or appearance of an item in perception. In contrast, seeming is claimed to be propositional in character, something an appearance need not be. In that case, what would it be to see the lines in the Muller-Lyer illusion and then for it to seem to be true that one is longer than the other? Surely, it would be no more than that I judge one of the lines to be longer than the other, not that I have an additional appearance or seeming. But Bealer distinguishes seeming from judgment on the grounds that judgments like beliefs are plastic but seemings are not. Clearly, more needs to be said.

²⁶ The conditions on the "appropriate strong modal tie" are the following: (1) it holds relative to some suitably good cognitive conditions, (2) it is holistic in character, (3) it holds not with absolute universality, but as Aristotle would say "for the most part." (Bealer 2000, 9) These specifications are unimportant to the discussion for they only indicate the circumstantial conditions which are likely to promote the instantiation of the 'appropriate strong modal tie', they do not explicate of the nature of this tie. The nature of the tie between truth and cognition is what is essential to a theory of knowledge, not a description of the contingent circumstances which promote the instantiation of this tie.

appropriate tie to the truth? Or better, in virtue of what parts, and properties are intuitions and truths related so as to be constitutive and productive of knowledge? What we want to know, in Bealer's words, is "Why there should be such a tie between intuitions and the truth." (30)

Surely, the answer lies in what seemings and truth are, and naturally one expects that an elucidation of the features of seemings, considerations, presentations, necessity, propositions, reflections, etc., to provide the answer. Yet, Bealer has little to say about the structure and relations of the various elements involved in producing an intuition, so how will he procure an answer? He answers by claiming that the required modal tie is a consequence of *understanding* the concepts involved in the content of our intuitions. This answer turns out to cause serious problems for his account.

2.2.3 Understanding Concepts / Concept possession.

The claim is essentially this: intuitions have the appropriate strong modal tie to the truth, and are therefore, evidential, as a consequence of what it is to possess the concepts involved in the intuition. To possess a concept is just to understand it to a certain degree. Only a certain kind of concept possession, namely, determinate concept possession entails the tie needed to make intuitions evidence. According to Bealer, a subject possesses a concept determinately if and only if

(i) the subject at least nominally possesses the concept where, "A subject possess a given concept at least nominally iff the subject has natural propositional attitudes (beliefs, desires, etc.) toward propositions which have that concept as a conceptual content." (37)

and

(ii) the subject does not do this with misunderstanding or incomplete understanding or just by virtue of satisfying our attribution practices or in any other such manner. (38)

A nominal level of possession, Bealer states, is compatible with misunderstanding the concepts involved as well as incompletely understanding the concepts involved. Misunderstandings are erroneous beliefs about the concept and incomplete understandings are just 'gaps' or ignorance of certain facts about the concept. An example of misunderstanding a concept is Tyler Burge's case of a woman who believes it is possible to have arthritis in one's thigh. An example of incomplete understanding of a concept is the case of an individual who does not know whether it is essential for contracts to be written or not. Thus, full understanding, that is, determinate concept possession is the possession of natural propositional attitudes towards propositions which have that concept as a conceptual content, accompanied by the absence of erroneous beliefs and any ignorance about that concept.

The degree to which one possesses a concept can vary and change so as to be more or less productive of intuitions and hence, knowledge.

When a subject's mode of concept possession shifts to determinateness there is a corresponding shift in the possible intuitions accessible to the subject (or the subject counterparts). In fact there is a shift in both quantity and quality. The quantity grows because incomplete understanding is replaced with complete understanding, eliminating "don't knows." The quality improves because incorrect understanding is replaced with correct understanding. (41)

Bealer provides an example to motivate his theory. Consider a woman who fully understands the concept of multigon. When the woman considers a question as to whether triangles are multigons,

Then, intuitively, when the woman considers the question, she would have an intuition that it is possible for a triangle or a rectangle to be a multigon if and only if the property of being a multigon = the property of being a closed straight-sided plane figure. Alternatively, she would have an intuition that it is not possible for a triangle or a rectangle to be a multigon if and only if the property of being a multigon = the property of being a closed straight figure plane figure with five or more sides. Intuitively, if these things did not hold, the right thing to say would be that either the woman does not really possess a determinate concept or her cognitive conditions are not really fully normal.²⁷ (39)

2.2.4 Criticism.

Despite the odd talk of understanding concepts and the failure to distinguish concepts from what they are of, there is a fatal objection to Bealer's theory. The theory depends on what it sets out to establish. It guarantees the appropriate strong modal tie to the truth required of a basic source of evidence by making intuition dependent on knowledge. Thus, concept possession, at least in the relevant a priori cases, which is meant to explain a priori knowledge, consists of and presupposes a priori knowledge. Intuitions depend on a priori knowledge, and therefore, cannot be constitutive of it.

To see this, consider that the theory of concept possession sets out to establish that concept possession entails that one's intuitions will have a 'strong

²⁷ One wonders why we simply cannot say that the right thing to say is that the woman does not *know* what a multigon is.

modal tie' to the truth. How is such an entailment accomplished? It is accomplished because complete and correct understanding of a concept excludes, by definition, the possession of any false beliefs or ignorance with respect to the concept. Another way to say the same thing is that one understands all there is to know about a concept. Therefore, a person's intuitions are tied to the truth *as a consequence of that person being in possession of the knowledge which his intuition purports to help procure*. Hence, determinate concept possession presupposes a priori knowledge, it does not account for it.

My criticism rests on the assumption that if one has understanding they at least have knowledge. Thus, a good understanding of contracts, logic, math, etc., means a great deal of knowledge, and consequently true beliefs about contracts, logic, math, etc. If the value of intuitions as evidence regarding some subject is a consequence of the intuitor knowing a great deal about the subject, it should not be surprising that one is guaranteed a 'strong modal tie' to the truth. However, this guarantee comes at a high price, for one must already be in possession of the knowledge they wish to procure with their intuitions.

As a result, the account is circular because intuitions count as evidence, ultimately, because they result from the possession of knowledge, knowledge which is itself a priori in character. It is subsequently vacuous because the question as to how one comes to have any degree of understanding (i.e. a priori knowledge) of concepts takes the place of our original question of how a priori knowledge is possible.

2.2.5 Objections.

There are two likely responses to my criticism. On the one hand, one can claim that understanding a concept indicates merely possessing true beliefs without evidence, and is not a matter of knowledge. On this account, possessing a concept is not the same as having a body of a priori knowledge, but merely a body of true beliefs. As a consequence, intuitions would provide evidence for my belief that A in virtue of my possessing the true belief that A. For example, right now I believe that $2 + 2 = 4$. If I consider this proposition, it seems to me that it is true, in virtue of the fact that I believe it. The problem is that this is no account of evidence at all, and definitely no account of knowledge. On the other hand, one may claim that understanding a concept may simply be a condition which allows one to procure intuitions and thus, true beliefs. Of course, this is what Bealer wants, but why should this be the case? And of course how, how does understanding accomplish this end? The answers to these questions remain to be specified.

The primary question for a theory of a priori knowledge is: How is a priori knowledge possible? I suggested in the introduction that this amounts to two fundamental questions: (1) What are the essential constituents of a piece of a priori knowing and (2) How do they fit together to make a piece of knowledge? In more specific terms, what are the relevant kinds of objects, relations, and cognitive acts, and what are the properties of such objects and acts, through which a priori knowing is accomplished? Given Bealer's account, the question would take the form: How is

understanding of a philosophical or 'a priori' concept accomplished? That is, how are true beliefs acquired regarding propositions which present themselves as necessary? This is the question that must be answered if Bealer is to have a theory of a priori knowledge.²⁸

2.2.6 *What has Bealer Provided?*

What Bealer has provided with his reliabilism, and I think he would agree to a certain extent, is merely a schema of necessary conditions that any candidate source of a priori evidence and knowledge must meet. He makes some remarks along these lines.

Given that contingent reliabilism fails, we are left with modal reliabilism, according to which something counts as a basic source of evidence iff there is an appropriate kind of strong modal tie between its deliverances and the truth. This formula provides us with a general scheme for analyzing what it takes for candidate sources of evidence to be basic. It is not itself an analysis... Rather, this scheme provides us with an invitation to find the weakest natural (non-ad-hoc) modal tie that does the job- that is, the weakest tie which lets in the right sources and excludes the wrong ones. (35-36)

Bealer thinks that intuitions meet these conditions as a consequence of what it is to determinately possess a concept. I have argued that his account of why intuitions are evidence is ultimately circular. However, it does rightly insist that possessing

²⁸ There are two other problems worth mentioning. The theory of determinate concept possession still leaves unresolved why intuitions are evidence. That is, why are concepts that are determinately possessed so well linked to the truth, and why does drawing on them also appropriately link one to the truth? Secondly, the sui generis propositional attitude of intuition seems superfluous on Bealer's account of determinate concept possession. For, if I know all about contracts or have a large number of beliefs about them, then when someone asks me a question about their necessary relations, I need only recall or assert what I believe. There is no need for an intuition. What an account of a priori knowledge should provide is an explanation of how I come to know and understand in the first place, not given some true beliefs, how I bring them to mind.

concepts, having understanding, and being appropriately tied to the truth are essential to knowledge. Furthermore, intuition may still meet the conditions for a basic source of evidence for other non-circular reasons as of yet mentioned.

Further evidence that the account is merely schematic is found in his remarks in "The Limits of Scientific Essentialism". There he considers a direct perception theory of a priori knowledge.

According to the "direct perception" theory, intuitions are a kind of "direct perception" of abstract truths. When normal intelligent people consider the question of whether a concept applies to an elementary hypothetical case, in most instances they just "see directly" that it applies if and only if it truly does apply. (Of course, misfires can occur...Accordingly, on the Platonist, "direct perception" theory, intuitions have a strong modal tie to the truth. (Bealer 1987, 343)

These remarks leave open the possibility that any number of different cognitive episodes (seemings, direct perceptions, etc.) may meet the conditions of a priori evidence. There may be as many varied cognitive episodes tied to the truth as there are distinctive cognitive episodes. Yet, exactly how each one of these items is linked to the truth surely depends on the character of those items themselves. In light of these facts it becomes obvious how much work there is left to do in order to produce a theory of a priori knowledge. Consider that, for example, if one is to reject direct perceptions in favor of seemings, it can only be on the grounds that they fail, in virtue of their character, to hook up to truth and knowledge in the 'appropriate' way. A theory of a priori knowledge and evidence requires an explication of that character and its manner of 'hooking' up. In fact, *a theory of a*

priori knowledge just is an explication of how, in virtue of their character, certain cognitive acts, truths, concepts, etc., get hooked up appropriately, to make a certain piece of knowledge.

While reliability and ties to truth are excellent requirements of a source or process of knowing, specifying those ties, and the elements upon whose nature they are founded is really what an epistemic theory asks and answers. What the Platonic direct perception theory begins to answer, and Bealer's theory fails to successfully address, is the how question. How are certain important and reliable processes connected to truth in those instances when they are successful, when they are actually connected to the truth?

2.2.7 Conclusion.

In summary, according to Bealer, intuitions are evidential, and constitutive of a priori knowledge, in virtue of being connected to the truth in the appropriate way. They have this connection in virtue of what possessing a concept amounts to. Surely, no rationalists would deny this, but just how intuitions accomplish this feat remains for his theory of a priori knowledge to elucidate. Naturally, concepts and their possession will play an important role in this story, but just how they do that also remains to be specified. Bealer's effort demonstrates the need for a more complete and comprehensive theory of a priori knowledge; especially one which satisfies the fundamental questions (Q (1) and Q (2)) in such a way as to shed light on the issues of concern presented in the introduction.

2.3 Laurence Bonjour's Theory of *A priori Knowledge*.

Laurence Bonjour has recently argued for a moderate rationalism which is anchored in the idea of a priori knowledge. For Bonjour, a theory of a priori knowledge is also a theory of a priori evidence, specifically, an internalist theory of a priori justification.

Bonjour's treatment of a priori knowledge and justification is quite traditional. A priori knowledge is knowledge had independent of experience, where experience signifies, "any sort of process that is perceptual in the broad sense of,

(a) being a causally conditioned response to particular contingent features of the world and (b) yielding doxastic states that have as their content putative information concerning such particular, contingent features of the actual world as contrasted with other possible worlds...In contrast to "mathematical intuition", even though it undoubtedly counts as experience in the sense of consciously undergone mental process, would not count as experience in this more specific sense so long as it is concerned with eternal, abstract, and necessarily existent objects and offers no information about the actual world as opposed to other possible worlds, that is, so long as its deliverances consist solely of (putatively) necessary truths. (Bonjour 1998, 8)

Similar to Bealer's requirement that intuition pertain to states of affairs that present themselves as necessary and concern concepts, there is a restriction of a priori justification to acts of pure reason which have as objects necessities among abstracta and *possibilia*.

With this general characterization of a priori knowledge in hand, Bonjour provides a positive account of how pure reason operates so as to produce a priori

knowledge. His account is embedded in the following description of coming to justify and presumably know that nothing is red and green all over.

First, I understand the proposition in question. This means that I comprehend or grasp the property indicated by the word 'red' and also that indicated by the word 'green', that I have adequate conceptions of redness and greenness (which is not, of course, to say that I know everything about even their intrinsic natures, let alone their relational properties). Similarly, I understand the relation of incompatibility or exclusion that is conveyed by the rest of the words in the verbal formulation of the proposition, together with the way in which this relation is predicated of the two properties by the syntax of the sentence. Second, given this understanding of the ingredients of the proposition, I am able to see or grasp or apprehend in a seemingly direct and unmediated way that the claim in question cannot fail to be true. (101)

The occurrence of such an insight does obviously depend on a correct understanding of the claim in question, which requires in turn an adequate grasp or comprehension of the various properties and relations involved and how they are connected. (107)

As with Bealer's account, understanding a proposition provides the basis for gaining insight into a necessity or in Bonjour's words, "the necessary character of reality." (107) Understanding is cashed out loosely in terms of comprehending or grasping the properties and relations indicated by the linguistic expression of the proposition.

From this basis of understanding, 'insights' or 'intuitions' are possible. The term 'intuition' indicates two things: "that such an act is seemingly (a) direct or immediate, non-discursive, and yet also (b) intellectual or reasoned governed, anything but arbitrary or brute in character. (102)

To summarize, the procurement of a priori evidence and knowledge can be divided into two stages: The understanding of the elements constitutive of the proposition in question, and the apprehension of the proposition's necessary truth.

To understand the elements of a proposition is to grasp or apprehend the relevant properties and relations involved in the proposition. The apprehending of the propositions necessity is the a priori insight, or intuition, which results from such understanding. Apprehension of properties consists of bringing to mind, in a direct and immediate way the properties themselves.

A person apprehends or grasps, for example, the properties redness and greenness, and supposedly "sees" on the basis of this apprehension that they cannot be jointly instantiated. Such a picture clearly seems to presuppose that as a result of this apprehension or grasping, the properties of redness and greenness are themselves before the mind in a way that allows their natures and mutual incompatibility to be apparent. (162)

On Bonjour's account a priori knowledge requires thoughts about universals which bring the universals to mind for the sake of an investigative "seeing". Plainly the view is similar to George Bealer's theory that one understands concepts as a basis for intuiting the truth of a proposition presented as necessary. However, to his benefit, Bonjour develops the conditions constitutive of conceptual understanding more fully. Essential for knowledge of necessity is the apprehending of properties such that they come before the mind, accompanied by "seeing" the relations that hold among these properties.

This account is no doubt metaphorical and incomplete, as Bonjour readily admits.²⁹ Of course, it need not on that account be false, and I believe the aspects of Bonjour's theory presented thus far say little that is false. Clearly though, what is needed is a non-metaphorical account, which includes a description of the sorts of

²⁹ Bonjour 1998, 185.

cognitive acts which have properties as their objects, and which present those properties in appropriate ways so that knowledge can be attained about them. Bonjour neglects an account of the kinds of cognitive acts which bring about directly or indirectly universals for inspection, and which sorts of acts make plain the judgable contents of the various sorts of a priori necessities we have knowledge of.

Instead, he tries to answer a more basic and primordial question: “How can thoughts be about things?”

How then is it possible that a thought, simply by virtue of its intrinsic character, is about or has an element of its content a particular property or universal, whether simple or complex, concrete or abstract, descriptive or evaluative? (182)

Bonjour provides very little in answering this question. He suggests that direct seeing is a consequence of the properties themselves being involved in the thoughts which are about them, and mentions that the Thomist distinction between *esse intentionale* and *esse naturale* might be the right way to cash this involvement out.

Albert Casullo believes that Bonjour does not go far enough. He argues that the failure to provide a successful account of how one can be presented with universals leaves Bonjour with no theory at all. In a recent essay, Cassullo claims the rationalists position hinges on the thesis that thoughts can be about universals in a direct or appropriate fashion for knowledge. Therefore, without an account of how this happens, the position fails.³⁰ Certainly this is false. Without an account, the

³⁰ Casullo 2000, p.35.

position is merely incomplete. However, pace Bonjour, there are some problems, for the wrong question has been asked.

Bonjour's worries about intentionality are somewhat askew. There is a difference between a thought's intentional directedness to a property and that or any other property being an element of the content of that thought. How properties can be *parts* of the thoughts which are about them is most likely a non-starter. In so far as I think of anything, the object of thought transcends the act of thinking, for one will be hard-pressed to find the real or fictitious object they are thinking of *within* their own stream of consciousness. There is a trivial sense in which one can think of a part or property of their own thought, for example, right now I am reflecting on my imagination of Mt. Marcy and I can tell you it is *of* Mt. Marcy, but so in a rather vague and unclear way. However, this reflective activity is not the issue Bonjour wants to raise. The better question to ask, as far as intrinsic intentionality is your concern, is how thoughts can be about things that are *not* parts of the thought process. This question though, is not specifically related to a priori knowledge, or even to knowledge generally, but to any sort of cognitive activity.

There is also a difference between merely thinking of something and having that same thing present to you as thought of. Bonjour seems to think, and Casullo is worried, that thoughts can be direct presentations of, and acquaintances with, properties. While acquaintance is one species of thinking, it is not the only. For example, I can think of Red without even imagining it, much less directly presenting it to myself. I suspect most readers do this every time they pass over the word 'red'

in a philosophy text. Surely, this is not a direct apprehension of the property Red. The problem of intrinsic intentionality must be distinguished from the problem of the possibility of immediate or direct presentation of a property itself. Such acquaintance is but one way to think of (be intentionally directed to) a property.

So the question Bonjour should be raising is: How does thought directly apprehend properties and universal necessities? On one hand, there is the general problem of what intrinsic intentionality is, and how it works; That is, how is it possible that a thought is about something, whether universal or particular. On the other, there are specific questions about the constitutive processes whereby certain objects are made present directly or indirectly to a cognitive agent in such a way that a priori knowledge is achieved. The latter should be Bonjour's question. To provide an answer, I suggest, consists in providing a description of the various sorts of experiences and cognitions which, out of necessity, are invoked by an agent in the activity of judging and apprehending the necessary character of reality. The former question, the question about intrinsic intentionality, is different. It asks how is it possible for there to be natural representations or signs, i.e. how can something natural like a thought be intentional? Or, in virtue of what do these items have the presentational properties that they have? These, no doubt, are some of the most central questions in philosophy generally. However, the question of intrinsic intentionality is not limited to a discussion of a priori knowledge, or even to knowledge. It is a more fundamental issue which affects any theory that attempts to describe cognitive agents and their activities. It demands an answer, but a lack of an

answer does not forestall a study of a priori knowledge any more than it forestalls a study of empirical knowledge, or any other cognitive subject matter.

2.3.1 Conclusion.

Bonjour makes an appeal for the plausibility of intuitive knowledge I will consider in closing since it is useful for clarifying my concerns.

If the proposition in question is, sheerly in virtue of its content, necessarily true, true in all possible worlds, why should this fact not be at least sometimes apparent to an intelligence that understands that content? (107)

Indeed, why shouldn't it? But the better question is just how does it? How does the fact that some proposition in virtue of its content make itself apparent to an intelligence that understands that content? What sorts of objects come together into the whole which is rightly called the appearance of truth and necessity to an intelligence, and what sorts of cognitive acts are required to bring about that appearance? The answer may be a simple story or it may be complex, but it is a story that needs to be told to make the theory complete. These questions are just ways of fleshing out what was stated in the introduction. An account of a priori knowledge must provide a complete and comprehensive explication of the elements and structure that are constitutive of a piece of a priori knowing.

In conclusion, Bonjour's account, though deeper and more comprehensive, and not subject to any obvious circularity, still leaves out the explication of our knowledge of the being necessarily the case of certain facts. While I think Bonjour's

account says nothing false, and Cassullo's criticism too strong, the story we are left with is still too opaque to settle the issue on the nature of our knowledge of the universal necessities and their universal necessity.

2.4 Katz's Theory.

In recent work, Jerrold Katz has defended the mutual dependence of rationalism and realism. He argues that this combination is well suited to meet the ontological and epistemological challenges of 20th century naturalism. The challenges to rationalism he divides into epistemological and ontological. The epistemic challenges discussed are roughly the same as conditions (a-d) mentioned in chapter one: the possibility of error, connection of mind to necessity by way of abstract objects, the relation to empirical science, and the role of conceivability.

Katz's aim is to dispel the charge of mysticism and thereby "provide an 'improved' concept of knowledge; improved in the sense that it overcomes the principle fault of traditional realism's lack of a plausible epistemology," Katz offers what he calls an "epistemology for mathematical knowledge...based on our natural cognitive faculty of reason." (Katz 1998, 34) Accompanying his rationalism is a commitment to realism regarding mathematical, logical, and linguistic objects.

The foundation of rationalism lies in the rational faculty of reason. The operations of this faculty are manifest most vividly in the achievement of mathematical proofs. For, according to Katz, proofs do not just establish that P, they establish that P is necessary.

Proofs provide us with adequate knowledge of a proposition about abstract objects by showing us that it is impossible for the objects to be other than the proposition says they are. (Katz 1998, 40)

Proofs work this way because not only are each of their premises seen to have no counter examples, but their conclusions are seen to follow from the premises. The role of our faculty of reason consists in this “seeing” of the necessity of the premises and the “seeing” of the necessity of their logical relations. Thus, at bottom, rationalism revolves around some sort of seeing of abstract objects, i.e., some sort of rational intuition.

Katz’s does not have a great deal to say about this faculty. He tells us, that where the empiricist posits “basic observational knowledge of properties of medium sized objects, our rationalist epistemology correspondingly posits basic ratiocinative knowledge of evident properties of abstract objects, e.g., the knowledge that four is composite.” (42) And later,

The notion of intuition that is relevant to our rational epistemology is that of an immediate, i.e., noninferential, purely rational apprehension of the structure of an abstract object, that is, an apprehension that involves absolutely no connection to anything concrete. (44)

He adds to these conditions the claim that intuition can reveal the limits of possibility with respect to object that bear the abstract structures in question.

Intuitions are of structure, and the structure we apprehend shows that objects with that structure cannot be certain ways. (44)

In summary, a priori knowledge of necessity derives from our ability to see logical and other necessary connections. This seeing results from the operation of a faculty of reason and consists in a non-inferential apprehension of the structure of abstract objects. As for the relevance of abstract objects, Katz reasons that since abstracta and their structure are unchanging and eternal, any apprehension of those structures is an apprehension of something necessary.

There is not much from the rationalist perspective to take issue with in Katz's epistemological proposal. What's missing is simply the story about what intuition is and how it works. In essence, there is no phenomenology of rational intuition provided. Katz goes on to mention that conceivability plays a role as the basis for intuition, but refrains from spelling out how that might work.

Katz's effort is another example of the trend in rationalism to merely defend the possibility of a priori knowledge. Like many rationalists, Katz's work revolves around making room for the possibility of a priori knowledge, a faculty of reason, and some sort of intuition. Yet, he has little to say about the details of that activity. How does one see abstract objects? How do they appear? What is the role of conceivability? How are the two tied together? Etc.

His positive case for the existence of intuition and its object is made in the form of a comparison between empiricism and his proposed rationalism. He argues that rationalism has superior resources, and is able to resolve the epistemological and ontological challenges raised by 20th century naturalists. It is sufficient for this end that he is able to point out the benefits of one theory over another. However, it is not

sufficient to alleviate the charge of mysticism that surrounds “intuition” talk, and not sufficient to resolve Cassullo’s challenge above. What is needed for these ends is an explicit account of the details of intuition. I would even suggest that Katz’s arguments bolster the charge of mysticism, for Katz’s portrays the dialectic between rationalism and empiricistic naturalism as two competing theories, one which cannot explain certain phenomena and the other that can by positing new faculties of knowledge. The weakness can be seen in Katz’s attempts to support this posit with the following analogy.

The rationale for claiming that it is intuition that is the source of basic mathematical and other formal knowledge is something like the precept that Holmes recommends to Watson in *The Sign of Four*. Holmes says, “How often have I said to you that when you have eliminated the impossible, whatever remains, *however improbable*, is the truth?” There are cases in which we can eliminate everything but intuition as a possible explanation of how it is known that a premise or a step in a proof has no counterexample. In cases like the compositeness of four, the pigeon-hole principle, the indiscernibility of identicals, and the ambiguity of “I saw the uncle of John and Mary” or the well-formedness of “The cat is on the mat,” there is no explanation other than intuition for the fact that ordinary, unsophisticated people, without expert help, immediately grasp the truth. (45)

The analogy poses a sort of transcendental argument for the existence of intuition.³¹ The weakness is that Katz’s intuitions coupled with realism must look like a lot of epicycles to the empiricist. This sort of arguments feeds into the naturalist’s contention that philosophical thesis and posits are continuous with the natural sciences and thus should be judged according to their explanatory power,

³¹ The analogy equally supports the abandonment of both empiricism and rationalism. For if there is an alternative explanation that posits less “exotic” powers or faculties, it will be preferable to Katz’s rationalism.

simplicity, aesthetics, etc. From some such naturalist perspective, Katz's posit looks no better off than aether or phlogiston.

The best way to make room for the possibility of intuition, and defend rationalism, I suggest, is to show what intuitions are, not only what they must be in order that this or that bit of knowledge is secured. Thus, still required to supplement Katz's account are the details. What does an immediate apprehension of necessity consist in? How do abstract structures appear? How do we make conscious contact with their eternal and unchanging relations? What is the role of conceivability? Answering these questions ought to put the *prima facie* plausibility back in the court of rationalism and dispel the aura of mysticism that surrounds it.

2.5. Christopher Peacocke's Moderate Rationalism.

Christopher Peacocke has proposed a form of moderate rationalism that dispenses with what he calls the "exotic" notion of intuition. Guiding his proposal is the belief that there is something right about the idea that merely understanding some propositions is sufficient for knowledge of their truth.

Similarly, it also seems that no more than grasp of the relevant color concepts is required for one to be in a position to appreciate the incompatibility of a surface being wholly definitely red and wholly definitely green. (Peacocke 2000, 256)

According to Peacocke, what is missing from current accounts, e.g., Bonjour 1998, is an answer to the "how" question.

How does understanding or concept-possession, have this epistemological power? What is it about understanding which makes certain ways of coming to accept a given proposition yield knowledge, even though the way is justification independent of experience? (256)

Peacocke, however, does not propose to answer this question directly.

Instead he proposes to take up the project of explaining why a given way (W) of coming to accept a proposition is in fact a priori, and thereby “unlock the explanation of the a priori status of the given content.” (264)

The “explanatory task”, of finding why it is that some way of coming to accept a proposition is an a priori way of coming to know is formulated as the attempt to discover the key relation that must hold between,

- (1) the respective possession conditions for the contained concepts of a given proposition P;
- (2) the semantic values of those concepts;
- (3) the way (W) of coming to accept or believe the proposition P.³²

Peacocke holds that the individuation conditions of concepts are given by their possession conditions. Thus, between (1)-(3), he is looking for a relation grounded in the nature (i.e. individuation conditions) of the concepts involved. That relation ought to tell one, “why, when a thinker comes to believe the content in way W, he can know it to be true in the actual world, justificationaly independent of perceptual experience.” (264)

³² Peacocke 2000, 264.

There are two classes of propositions that Peacocke proposes an explanation for. The first class - what he considers easier cases- consists of those a priori principles which either are, or follow from the “principles mentioned in the relevant possession conditions.” (266) In these cases it “is entailed by the nature of the concepts in P that the thinker must be willing to accept the principle P by way of W(or when reached by way (W))” (265) For example, in the case of the proposition “From A & B it can be inferred that A”, the nature of the concepts involved, i.e., Conjunction, Inference, etc., entail that “the thinker must be willing to accept the principle” by “accepting inferences one finds non-inferentially compelling. (265)

Furthermore, Peacocke adds that the semantic value of conjunction contributes to the truth conditions of the principle in question. He then reasons that since the correctness of the inference is “immediately founded in the nature of the contributions made by conjunction to the truth-values of thoughts in which it features,” (265) that “this method of reaching B, by inferring it from A & B, is immediately settled as correct in the actual world, however the actual world may be.” (265) Consequently, one’s justification for inferring B from A & B, “goes far beyond brute reliability.” (265)

This class of “easier” cases is clearly a class of the positivist’s “Analytic Truths”: a class of propositions that are true in virtue of their meanings. The positivist too felt these cases to be unproblematic and assumed that grasping their meaning was sufficient for knowledge of their truth. In Peacocke’s terms, this grasping of meanings consist in possessing certain concepts. The possession

conditions for those concepts, in turn, prescribe that one will be willing to accept the truth of those propositions when reached in some relevant way (W). In the example above that means that one who possesses the concept of conjunction will be willing to accept the principle "From A & B it can be inferred that A" when he reaches it by "accepting an inference one finds non-inferentially compelling." Furthermore, this belief is guaranteed to be true due to the fact that the concepts of conjunction, inference, etc., make it true. (264) Thus, according to Peacocke, this belief will be sufficiently justified because it results from a process that is more than reliable.

2.5.1 Critique.

I will not take issue with Peacocke's ontology of concepts, propositions and truth. I will grant him this account, because I want to focus instead on his claim to be providing a moderate rationalism that avoids the need for "rational intuition". Clearly, this would dispense with the troubles that accrue to the rationalist positions I have discussed so far. I do not think, however, that he has succeeded in this endeavor.

My criticism is directed to something the old positivists never articulated, but which Peacocke has rightly included; i.e., the "way" (W) of coming to accept, believe, or know a proposition. Peacocke claims that his account "explains the a priori status of the transition from A & B to B without postulating primitive, unexplained relations between understanding and the a priori, and without postulating problematic faculties." (265) In short, Peacocke believes he has provided

an alternative to rational intuition as a basis for our insight into universal necessities. What, however, are we to make of the “ways of coming to accept” that are integral to his theory? Do they avoid the need for rational intuition as the traditional rationalists has it, or do they smuggle rational intuition back in? I believe it is the latter.

Peacocke gives us two examples of “ways of coming to accept” to work with.

- (1) Accepting an inference one finds non-inferentially compelling, and
- (2) Inferring.

The suggestion in (1), that a way of coming to believe a proposition P consist in accepting it non-inferentially, seems to entail that P is accepted on some sort of immediate basis. When we examine canonical examples of immediate, non-inferential bases for belief we usually consider sense perception as the paradigm. If Peacocke is suggesting that some sort of perception, or similarly immediate presentation, is at the bottom of our acceptance of a priori principles, then how has he dispensed with “rational intuition” in the traditional sense? Rational intuition, as defined above by Katz, is precisely the “exotic” faculty that provides one with an immediate non-inferential basis for belief. Indeed, on Katz’s account, it is precisely in cases of recognizing logical relations among propositions that this faculty is most evidently manifest.

Maybe Peacocke is not suggesting this. What then does he have in mind? He might reply that we accept the inference from A & B to B because we simply find it “compelling”. This however, results in a puzzle. If this discovery of

compellingness is rationally grounded, then it must be due to an awareness of some relevant fact or feature. For example, one may find it compelling because it appears to be true, or it appears to be likely, etc. The quality that makes the inference above most compelling is clearly the validity of the inference itself, for one who is aware that B follows from A & B, will find belief in the validity of that transition quite compelling. Assuming he wants his beliefs to be true he will also find the proposition B compelling (assuming he believes the premise "A & B". Of course, if Peacocke accepts this explanation then he has introduced the problem of rational intuition all over again, for finding logical propositions to be necessarily true is exactly the sort of phenomenon that rational intuition is posited to explain.

Peacocke might opt for a different response and deny there need be any rational and motivating basis for the compellingness of certain propositions.³³ He might suggest that in certain situations, once one has grasped the relevant concepts involved in some proposition P, they just brutally and non-rationally are compelled to believe P. Such a compulsion to believe, we might suppose, may be as non-rational and brute as an addict's response to cigarettes.

This maneuver, however, is problematic. The problem is that even if an appearance of compellingness or compulsion to believe resulted, necessarily, from the mere understanding of all and only true propositions, it would do the cognizer suffering that appearance or compulsion no good. There are primarily two reasons. First, without an insight into the truth of the propositions themselves, one's feelings

³³ He seems to explicitly reject this, referring instead to the rational responses and rational acceptances of persons possessing certain concepts.

and compulsions are of no epistemic value. Second, discovering particular facts about oneself and one's psychological states cannot illuminate the truth or necessity of a logical law. When insight into universal necessities is replaced by feelings or appearances concurrent with the understanding of a proposition, one commits the principle error of psychologism. That error is the attempt to arrive at knowledge of logical and other a priori necessities, on the basis of particular psychological phenomena. (This error will be further elaborated in the next chapter, where it will be argued that it destroys the possibility of modal knowledge.)

What we want to know, as Katz illustrates above, is how can one find A to follow from A & B, and find it to be necessarily so. While we can agree with Peacocke that it is rational to accept the validity of this inference, that rationality is not merely based upon the relation between the concepts involved and the logical relations of the propositions, it is based upon some conscious experience of those relations. There must be some conscious presentation of the logical relations themselves, otherwise, there is no basis for accepting or rejecting the proposition to begin with. In short, if a belief is rational, there must be a reason one is willing to accept it. Ultimately that reason must be due to (a) something the believer is conscious of, and (b) The way (W) that he is conscious of it.

Peacocke might not be happy with this characterization and criticism of (1) and refer us to (2). Inference, it might be suggested, is clearly a way of coming to accept and know certain propositions, and there is nothing exotic about that.

The truth of this last statement, naturally, depends on what inference is. According to Katz, Penrose, and other rationalists, inference is itself an example of rational intuition at work. To make an inference is to draw a conclusion from a set of premises. To draw a conclusion rationally, (and where the perseverance of truth is one's aim), is to find that some proposition follows logically from some set of other propositions. But what does this conscious discovery consist in? I suggest that it consists in seeing the logical relations that hold among the propositions. But, logical relations are the paradigm of universal necessities that rational intuition is posited to account for. It is precisely the character of such a finding of necessity, precisely the "way" one comes to accept, that a phenomenology of a priori knowledge demands. Thus, when one rationally and knowingly draws a conclusion from a set of premises, it is the character of what they think about and the qualities of their thoughts that an account of rational intuition must provide. Consequently, this is precisely the sort of account that is needed for an adequate rationalism of Peacocke's sort.

2.5.2

I have argued that in these "easy" cases, the demand for a phenomenological account of rational intuition cannot be avoided. The same is true of the harder cases that Peacocke deals with. The second class of "harder" cases consists of a priori principles "which neither are, nor follow from those principles mentioned in the relevant possession conditions." (266) Peacocke offers some case studies of propositions in this class, and suggests some solutions to the key relation involved.

In all of these cases his explicit aim is to avoid the “exotic” notion of rational intuition and ground our knowledge in the possession of the relevant concepts. I will examine two of these cases, and conclude that they too either smuggle in rational intuition or fail to account for knowledge.

Case 1: Color Incompatibilities.

Consider the case of color incompatibilities. According to Peacocke, if a thinker possesses the concept red they must be willing to judge of some perceptually presented red shade R, “that is red”. This judgment, according to Peacocke is not informative to someone who fully possess the concept red. Likewise the person will be willing to judge of the presented shade that it is not green assuming they have the concept green. These conditions are part of the possession conditions for the concepts of red and green. (267)

“The conditions for possessing the concepts *red* and *green* require the thinker to be willing to make this judgment; and it will be true.” (267)

Supposedly, the judgment will be true because of the tie between the concepts of red and green and the nature of the colors red and green. Red, for example, “is individuated by which shades fall within it, which fall outside it, and arguably by its pattern of borderline cases in respect of shades.” (267) Since the thinker is having an experience that represents something as red, as long as he has the right concepts, he will be willing to judge that it is red, he will be right, and his

“entitlement to this belief does not rely on the content of her perceptual experiences beyond that content needed for having the relevant concepts in the first place.” (267)

Hence he will have knowledge a priori. Peacocke goes on to suggest that,

A thinker can reflect upon what she can correctly judge when presented with a given shade. She can appreciate that if it is correct to judge, on the basis of perception necessary for the demonstrative concept, something of the form “that shade is a shade of red”, it will also be correct on the same basis, to make the corresponding judgment “that shade is not a shade of green”. (268)

He goes on to suppose that it is plausible that it could be known that every shade of red is not a shade of green on the basis of perception, or otherwise. He then draws the needed conclusion.

If a thinker could know all this, she can come to know that no perceptible shade is both a shade of red and a shade of green. Since the basis of this reflection is the relation of shades of colors which are in fact constitutive of the colors thought about, the generalization holds which ever world is the actual world....No particular course of perceptual experience is required to attain this knowledge: it is a priori. (268)

The problem with this account is that all of the work takes place under the assumption that that one can come to know something about every shade of red or every shade of green. Coming to recognize that something is necessary for every possible shade of red is exactly what needs to be accounted for by a theory of rationalism. It is also exactly the sort of phenomena that rational intuition is introduced to accommodate. Peacocke gives away the fact that he has smuggled intuition in under the table.

The relations to shades which contribute to the individuation of the color are precisely those to which one who grasps the color concept must be sensitive when making perceptually based judgments involving the concept. (258)

Since, on Peacocke's account, the individuation condition for color just is the nature of color, his assertion amounts to the claim that possessing the concept of color makes one "sensitive" and "rationally responsive" to the nature of color. (268) Clearly, he cannot mean sensitive in the sensuous manner. However, the term 'sensitive' gives away the need for some sort of conscious acquaintance with the nature of color. Since, the nature of color is given by a set of individuation conditions, Peacocke needs to explain how one becomes sensitive, in a rational way, to the truth of those conditions. How, that is, does one become rationally aware that certain shades are colors, shades of red, not shades of green, and ultimately that no shade is both red and green? Providing this account is to provide the details about what coming to accept color incompatibilities themselves amounts to. While we can accept Peacocke's claim that the qualities of our thought must be essentially tied to the natures of the objects that we acquire knowledge about, we still must provide an account of just how that knowledge is acquired. Making that knowledge either a part, or a consequence, of the conditions for possessing the concept is, by itself, inadequate. We can also agree that possessing concepts puts one in a position to rationally procure beliefs that can be instances of knowledge. But this leaves open how those beliefs can be rationally acquired. Consequently, rational intuition has not been avoided, and clearly not in a way that avoids the charge of psychologism.

Case 2: Principles that outrun possession conditions.

Peacocke also brings up the case of principles that outrun our possession conditions and thus go “beyond the principles we find immediately, and non-inferentially, compelling in order to possess those notions.” (275) He suggests the following example. While the possession conditions for natural number might well include (1) 0 is a natural number and (2) the successor of a natural number is a natural number, they may not include the principle (P) that every natural number has only finite many predecessors.

To account for both the articulation of principles (1) and (2) well as (P), Peacocke suggests that these principles are implicit conceptions. The content of an implicit conception, Peacocke writes, “specifies the condition for something falling under the concept, or for the expression to be true of an object. To possess the concept, or to understand the expression, is to have the right implicit conception for it.” (277)

One can articulate the content of their implicit conceptions, as when one articulates (1) and (2) with respect to numbers, they can also go beyond those articulations.

Already in the humble case of the concept *natural number*, we mentioned a new a priori principle. Acceptance of the principle that any natural number has only finite many predecessors is not something primitively written into possession of the concept of a natural number, along the lines minimal theories would have to propose. The principle is rather something whose correctness can be worked out by an ordinary user of the concept, on the basis of an understanding which is characterized without reference to that principle. (277)

Peacocke then concludes that “This explanation in terms of implicit conceptions does not require any appeal to a quasi-perceptual faculty of rational intuition to account for the phenomena.” (277-78) That remains to be seen, and I think it is false for some of the same reasons given above. Having a thought, or willingness to believe, or any other such “conception” does not explain how one comes to establish the truth or falsity of their implicit conceptions, nor does it explain why it would be rational to accept their implicit conceptions. What we want to know is how it is possible to come to know (1), (2), and know they are necessarily true. Suggesting that as a consequence of possessing the concept of natural number, I have a pair of implicit conceptions, and that I can work out other principles from them, leaves open how I come to know the truth of those implicit conceptions and how I work out anything from them.

If implicit conceptions are cases of knowledge, then what we need is an account of their rational acquisition. If they are not knowledge, then on top of their acquisition we need an account of how they become knowledgably accepted.

In conclusion it is not obvious that Peacocke has dispensed with intuition, for he has not dispensed with ways of coming to accept, believe, and know. We expect Peacocke to provide us with an account of these ways of coming to know, how they are possible, what their character is, and how they can produce knowledge, but we do not get this. Instead we get a set of conditions on possessing concepts that entails that a person in that condition will (provided some way of coming to accept and know) get true beliefs in a reliable and even necessary way. The account shares a

great deal in common with Bealer's in this respect. However, where Bealer acknowledges that possessing certain concepts puts one in a position to procure true and reliable intuitions, Peacocke rejects the need for intuitions, thereby leaving the category 'ways of coming to accept' as exotic as the intuitions they replace.

Though this account cannot be charged with an inadequate ontology, it can be charged with neglecting the component of the knowing experience that is probably the most important: the way we come to believe and accept universal necessities. Traditionally the rationalist has it that we come to accept them on the basis of rational intuition. A rejection of this requires an account that avoids the charge of irrationalism and its consequent psychologism. What is needed is not only an explanation of the ties between concepts and the truth of modal facts, but an account of how that tie is made manifest in our experiential life. In short, what is needed is a phenomenology of modal knowledge.

2.6 The Need for a Better Theory.

I hope to have established the shortcomings of rationalists theories of a priori knowledge, and the need for a more complete and comprehensive account. I have attempted to specify the precise character of what I take to be the faults of the aforementioned theories. These have primarily been two. Contemporary epistemology needs a phenomenology of knowledge. A complete epistemological account requires an analysis of the cognizance of objects and the role of thought in knowledge, and that means an analysis of intentionality in all its relevant forms and

manifestations. The least partisan way to put the matter is this: Knowledge depends on thinking about things, but not all thinking is the same, and not all thinking makes for knowing. What are the kinds of thinking, and correlatively, what kinds of objects of thought are essential to and constitutive of knowing, and how do those elements fit together to make knowing possible?

It is out of a demand for clearer and deeper description that I criticize these accounts of a priori knowledge. I make the demand because I believe a better account is not only possible, but already available. In Part II, Husserl's theory of a priori knowledge will be presented as an attempt to shore up these shortcomings and answer the fundamental questions an account of a priori knowledge poses. Before I get to Husserl's theory, there is another noteworthy shortcoming to the recent rationalists "renaissance".³⁴ It is proceeding upon a psychologistic prejudice and thus unwarily commits the error of psychologism. The next chapter takes up this issue.

³⁴ Coined in Bealer 2002, 1.

Chapter 3

The Problem of Psychologizing Rational Intuition.

In the psychologistic literature of the last decades we have seen inner evidence spoken of as a causal feeling which attends on certain judgments, and is absent from others, which at best has a universally human linkage with certain judgments and not with others, a linkage in every normal human being in normal circumstances of judgment. There are special normal circumstances in which every normal person feels self-evidence in connection with the proposition $2 + 1 = 1 + 2$. Just as he feels pain when he gets burnt.

E. Husserl (*Logical Investigations Prolegomena, Sect. 51*) 1900-1901

The psychologistic “feeling” theory of evidence mentioned above by Husserl was one component of a thoroughgoing naturalism in epistemology and logic at the turn of the twentieth century. In addition to psychologizing the subject matter of logic and mathematics, the manner of discovering logical truths was appropriately deemed empirical. In true naturalist style, insight into logical truth was replaced with “feelings” or other psychological episodes concurrent with thoughts about logical or mathematical law. Several contemporary rationalists seem to have fallen victim to this same psychologizing tendency. My intention in this chapter is to criticize this approach, pointing out a number of undesirable consequences of the view, and thereby dissuade contemporary rationalists from this theoretical path. I conclude by pointing out that the reasons for rejecting the psychologistic approach are also reasons for accepting a direct perception account of rational intuition.

3.1. Introduction.

On most accounts, to have a rational intuition is to have an insight into a necessity, or in Laurence Bonjour's words, to see the "necessary character of reality."³⁵ Traditionally conceived, it is through rational intuition that we gain insight into logical, mathematical, ontological, ethical, and other a priori propositions. It is an intuition by which we see that $2 + 2 = 4$, that modus ponens is truth preserving, that parthood is transitive, that consciousness is intentional, that every promise gives rise to a claim and corresponding obligation, and that fulfilling this obligation extinguishes its corresponding claim. What does this 'seeing' consist in? Recent opinion varies. The following briefly presents several recently proposed answers to this question.

3.1.1 Plantinga's Virtue Theory.

Alvin Plantinga suggest that seeing that something is necessarily true amounts to finding yourself utterly convinced of it as a result of the proper functioning of your cognitive faculties.³⁶ This means that seeing that two and two must be four is to find out something about yourself. Specifically, it is to find yourself to be in a state of conviction with respect to a mathematical fact. This is an obvious replacement of insight into mathematical relations with insight into psychological relations, and a simple modification can be recommended that

³⁵ See Bonjour 1998, 107.

³⁶ See Plantinga 1993, 105-106. Recent work by Sosa incorporates the requirement that knowledge be the result of an epistemic virtue, a requirement already inherent in Plantinga's account.

preserves the essence of Plantinga's claim. Instead of *finding* oneself utterly convinced as the result of the proper functioning of your faculties, we might suggest that one need merely *be* utterly convinced. Either way one takes Plantinga's thesis, it is an example of the psychologizing tendency I find troubling among many rationalists.

Before I move to another example, I would like to remark on some of Plantinga's qualifications and motivations surrounding his thesis. Following his statement of the thesis he adds that he is unsure of the importance of this condition given that one "might be convinced that a proposition is necessarily true without *seeing* that it is true." (Plantinga 1993, 105) I agree and think that this concern alone should convince us that we are on the wrong path. However, I believe that Plantinga is unwarily motivated by the psychologizing prejudice to find something in the stream of experience that answers to the psychologistic demand, that is, the demand to find some mental phenomena that one "feels" or that "pops up" when they see the necessity of two and two being four, "just as they feel pain when they get burnt."³⁷ That motivation expresses itself in the following pair of remarks.

So what is it, then, to *see* that a proposition *p* is true? All I can say is this: it is (1) to form the belief that *p* is true and indeed necessarily true (when it is necessarily true, of course), (2) to form this belief immediately, rather than as a conclusion from other beliefs, (3) to form it not merely on the basis of memory or testimony (although what someone tells you can certainly get you to see the truth of the belief in question), and (4) to form this belief with that peculiar sort of phenomenology with which we are well acquainted, but which *I can't describe in any way other than as the phenomenology that goes with seeing that such a proposition is true.* [my italics] (Plantinga 1993, 105-106)

³⁷ Husserl *LI Prolegomena*, Sect. 51.

Plantinga goes on to apologize for the lack in condition four, but mere incompleteness is not the real problem here. Why are his conditions (1)-(3) not components of the phenomenology of intuition? Traditionally, phenomenology as initiated by Edmund Husserl, and sustained throughout the last century as the descriptive investigation of the essence of the various forms of cognition, including cognitions which constitute the intuition of logical, mathematical, and other *a priori* subject matters, would certainly include (1)-(3) among its descriptive results. It is likely that Plantinga has something else in mind by “phenomenology”, as some of his further comments suggest. For example, in response to the suggestion that certain creatures could be created in such a way that they come to know certain contingent truths independent of experience, and hence *a priori*, Plantinga writes,

But would this be *a priori* knowledge of contingent truths? That depends. It could be knowledge with the right sort of independence of experience; and it could also exhibit two of the three kinds of phenomenology that go with knowing something *a priori* - That is, it could display that faint and scrappy sensuous phenomenology, together with that sense of rightness or correctness. Perhaps it could also display the phenomenology that Descartes and Locke (incorrectly, as I said previously) describe in terms of luminosity, brightness, and luster.
(107)

These remarks seem to indicate that “phenomenology” or “phenomenological description” pertains to some sort of qualia or phenomenal features attendant upon the knowing experience. Whether or not those attendant experiential phenomena are essential is difficult to discern. However, it is clear that with the search for the right “phenomenology”, or attendant mental phenomena which arise with the insight and intuitive presentation of necessities, a clearly psychologistic approach dominates

one's theory of rational intuition. Here the quest for qualia and the terminology with which to describe them begin, and here too begins the psychologizing of rational intuition. The search for intellectual and sensuous feelings, moods, tinctures, etc., which make an appearance during the apprehension of necessities suddenly seems important and takes the place of genuine phenomenological researches. If my suspicion is right, then what Plantinga apologizes for is his failure to find that attendant causal "feeling" which the psychologizing prejudice deems important to an analysis of rational intuition.

Whether or not I am right about Plantinga's motives, his initial thesis stands as an example of the psychologistic tendency among contemporary rationalists with which I am concerned. That thesis and others like it will be the target of my criticism, not the motives speculated on above.

3.1.2 Conceivability.

Another class of views that teeter on the brink of psychologism are those which invoke conceivability criteria. Philosophers from Rene Descartes to Stephen Yablo have taken insight into necessity to consist in certain criteria of conceivability, imaginability, or thinkability. The basic idea is that finding something inconceivable is an indication of its impossibility. However, their positions are stubbornly ambiguous between finding *yourself* unable to conceive and finding something inconceivable itself. For example, Panayot Butchvarov claims that a priori insight consists in finding a mistake in belief unthinkable. Determining

whether this discovery of unthinkability is personal or applies universally to all possible thinkers is unaided by such ambiguous statements as, “we determine that they are necessary by finding ourselves unable to think of them as being otherwise.” (Butchvarov 1970, 181) Stephen Yablo claims that conceivability and inconceivability can count as guides to the possible and impossible. Yet, he also encourages this confusion when he writes, “Thus p is conceivable for me if (CON) I can imagine a world that I take to verify p .” Inconceivability is explained in like fashion. Something is inconceivable for me if, “I cannot imagine any world that I don’t take to falsify p .” (Yablo 1993, 29) Again, these are criteria of conceivability relative to an individual thinker, not conceivability in itself. What it is for something to be conceivable for me and what it is for something to be conceivable for some possible thinker are two different (though related) notions. Finding out facts about yourself and your abilities is a different affair than finding out facts about a logical, mathematical, or other necessary relations. I will adopt the former sense, the subjective sense, for the sake of my discussion, for it is this psychologistic tendency present in all of these accounts that is the target of my criticism.

3.1.3 Bealer and Sosa.

There is another sort of view, most fully developed in George Bealer’s work, that regards intuition as a contentful cognitive episode that one passively and spontaneously suffers when considering or reflecting upon certain (a priori) propositions. According to Bealer, an intuition is an intellectual *seeming*, a primitive

propositional attitude which arises suddenly and passively when certain necessary propositions are considered and reflected upon.³⁸ Bealer writes,

For you to have an intuition that A is just for it to seem to you that A. Here 'seems' is understood, not as a cautionary or "hedging" term, but in its use as a term for a conscious episode. For example, when you first consider one of DeMorgan's laws, often it neither seems to be true nor seems to be false; after a moment's reflection, however, something new happens: suddenly it just seems true. Of course this kind of seeming is intellectual, not sensory or introspective (or imaginative). For this reason, intuitions are counted as "data of reason" not "data of experience". (Bealer 1999, 30)

He adds that these intellectual "seemings" are distinct from other sorts of intuitions for they only arise in reflection upon propositions that present themselves as necessary. (30-31)

Bealer's theory is a theory of intuitions as evidence and is supplemented by an Aristotelian inspired form of modal reliabilism. Intuitions, (i.e., "seemings") are sources of evidence for our modal and other a priori beliefs. They help procure knowledge by being reliably correlated to the truth in a natural and non-accidental way.³⁹

In a similar reliabilist vein, Ernest Sosa has proposed that an intuition is an inclination to believe that arises on an appropriate basis of understanding.

Before one is shown the relevant reductio, one *would* naturally believe the naïve comprehension axiom, just in virtue of understanding what the axiom itself says: that each meaningful predicate or property determines a corresponding set, even if its cardinality is zero. This axiom seems extremely plausible intuitively, absent perception, introspection, or relevant reasoning. Such immediate plausibility attaches to some abstract propositions, and need involve no belief. (Sosa 1998, 259)

³⁸ See Bealer 2000, 3.

³⁹ See Bealer 1999, 9-10.

Nevertheless, such seemings or appearances, whether sensory or intellectual, may still be *inclinations* to believe based on direct experience (sensory) or understanding (intellectual), and regardless of collateral reasoning. Here accordingly is our modified definition. (259)

His also is a theory of evidence complemented by reliabilism. These two views present intuition as a passive psychological occurrence which one suffers when certain propositions are understood and reflected upon. Suddenly and spontaneously, certain inclinations, urges, convictions, arise in a thinker as a result of this understanding and reflection, or, in Bealer's case, we might say that suddenly something just seems right, or appears true.⁴⁰

We can organize the accounts presented into four distinct theses. Rational intuition consists in,

- (1) Being or finding yourself utterly convinced;
- (2) Being or finding yourself unable to imagine, think, or conceive otherwise.
- (3) Having an intellectual seeming arise in you;
- (4) Having an inclination to believe.

⁴⁰ Similar to the views of Bealer and Sosa are the accounts of Alvin Goldman, Joel Pust, and Nenad Miscevic. Goldman and Pust consider intuition a "Spontaneous mental judgment" whose evidential status is in need of support. (Goldman, 1998) Miscevic incorporates many of these views stating that intuition is "a belief-producing response that is phenomenologically immediate, and accompanied by a feeling of obviousness and certainty." (Miscevic, 1999) I leave the views of these authors to the side because of their explicit naturalism. My intention is to argue against naturalistic and psychologistic tendencies solely among rationalists. Naturally, my arguments will apply equally well against Goldman, Pust, and Miscevic as well as other naturalists, though they will be much less likely to persuade.

(1) – (4) share something in common. ‘Rational Intuition’ is the name of an intellectual condition, an intellectual feeling if you will, or better, a condition in the sense that confusion, excitement, and satisfaction, are intellectual conditions. Just as you feel pain when you get burnt, or feel confused and frightened when accosted unwarily, so you have an intuition when you consider certain propositions. For Bealer and Sosa this feeling comes in the form of an intellectual seeming, and an inclination to believe respectively, while for Plantinga, et al., it is more akin to a cognitive condition such as a state of conviction, or a condition of cognitive incapacity.

3.2 The Issue.

It is the primary purpose of an account of rational intuition to explain how necessities come to be objects of knowledge. I contend that these and like alternatives are fundamentally inadequate. The problem is that (1)-(4) replace insight into necessities with either insight into, or merely the occurrence of, particular psychological facts (none of which are themselves insights into necessities). This is an unacceptable limitation for various phenomenologically evident reasons,⁴¹ but of central importance to my argument is the fact that intuitive conscious experiences limited to individual psychological episodes never extend to the sphere of pure and formal universality where logical and other a priori laws are to

⁴¹ For example, experiences of universals themselves are possible as when one recognizes some number of similar objects as similar with respect to the same (i.e., identical) aspect.

be found.⁴² The problem is realized when we ask how we are supposed to get from these particular psychological phenomena and episodes on the one hand, to logical and other a priori necessities on the other. My contention, and the traditional rationalists' position, is that we cannot. Simply put, finding out something about oneself, one's current state of mind, the limits of one's cognitive abilities, or any other psychological fact, gets one no closer to the discovery of a law of logic or any other a priori necessity than to the knowledge of a football score or tomorrow's weather. How one gets from a fact about a mind on a certain occasion to an insight into a logical law turns out to be a paralyzing problem for these accounts, as I will attempt to establish with the following arguments. For the sake of simplicity I will argue that (1) - (4) fail to account for the possibility of knowledge of simple logical laws. Any account of rational intuition ought to provide for much more than this, but it will be sufficient for me to argue that they cannot provide for even simple logical maxims such as the Law of Non-Contradiction or simple entailments such as Modus Ponens.

I begin with the two most familiar barriers to any attempt to psychologize rational intuition. The fact that (A) *Logical and other a priori necessities are not particular psychological facts, hence knowledge of logical necessity is not the knowledge of any particular psychological fact; and (B) Logical and other a priori necessities cannot be deduced from particular psychological facts.*

⁴² Of course all of the premises used in my arguments are rejected by naturalists. There is no point in discussing their differences here, for my target is the theory of rational intuition as defended by contemporary analytic rationalists.

3.3.1 *Elaboration of Arguments.*

(a) Logical and other a priori necessities are not particular psychological facts, hence knowledge of logical necessity is not the knowledge of any particular psychological fact.

This is a rather trivial point nowadays, but I will elaborate for the sake of further arguments. Knowledge of one's current psychological condition is not knowledge of any logical, mathematical, or any other universally necessary proposition. There are two reasons. (1) No logical law is itself a psychological condition, (2) No logical law refers to or is concerned with any psychological conditions. With respect to (1), one's psychological condition is an individual contingent occurrence and knowledge of it concerns an individual contingent fact. Universal and necessary truths, such as logical laws are plainly not individual, not contingent, and not occurrences, and the same goes for the facts they correspond to. With respect to (2), one's current psychic state is, well, psychic. No law of logic concerns anything psychological. Simply put, the truth that nothing can at once be P and not-P fails to refer to any thinkers or thinking of any sort. The content of this law instead concerns the formal character of objects as such, i.e. objects in general and their properties. More specifically the law concerns the formal relation that specifically excludes co-instantiation between contradictory properties. Of course

thinkers and their thoughts are subject like all beings to formal law, but this no more makes the law psychological than it makes it political for presiding over political objects as well. Thus, discovering that I am convinced of something, that I am inclined to believe something, that I cannot conceive of something, or that something seems to be a certain way to me, appears quite remote from discovering any law of logic.

(b) Logical and other a priori necessities cannot be deduced from particular psychological facts.

There are at least two reasons for this. (1) Facts about one's psychological condition are merely individual facts corresponding to individual psychological phenomena. As such, no logical law can be deduced from them or from any set of individual psychological facts no matter how large that set. The reason is that no number of particular facts logically entails a universal necessity. Hence, no number of particular facts about my current psychological condition can by themselves serve to logically ground conclusions of a universal and necessary character. Indeed, no law of logic can be deduced from any set of individual facts no matter what the content of those facts, psychological or otherwise. This is just the limitation of induction coupled with the evident universality and necessity found among logical and other a priori necessities.

(2) No number of individual psychological facts entails a non-psychological fact, and certainly not a formal-logical law. Psychological truths, plainly, do not make reference to the character of objects as such or the relations of entailment that hold among propositions in virtue of their form. In fact no single notion essential to logic, (truth, material implication, proposition, etc.,) are mentioned in any psychological statement. The only conclusions that could be drawn from a large set of propositions about psychological phenomena are conclusions, and possibly laws, pertaining to psychological phenomena. Additionally, there is a manifest difference in the generality of a psychological law as compared to any logical law. On the one hand, psychological laws are restricted in the sense that they govern only phenomena of certain domains, in this case psychological phenomena. On the other hand, logical laws are formal and entirely general; they govern phenomena across every domain, psychological as well as non-psychological. From facts about this or that restricted content, laws of a greater generality can never be deduced. From all S are P one cannot deduce that all Q are R where S is a subset/species of the genus Q. But more obviously, from laws about this or that contentful subject matter, i.e. this or that species of object, entirely general laws that apply to every category can never be deduced.

(a) and (b) are well known and continue to stand as a bulwark against simplistic psychologism and its naturalizing tendency. In light of this, proposals (1)-(4) appear quite remote from the apprehension of a logical or other a priori necessity.

The problem, and hence the challenge for the above accounts, is to see how one can get from psychological facts on a given occasion to logical or other necessities.

3.3.2 *Non-Deductive Inference: Reliable Indication.*

One response to the challenge is that some sort of non-deductive method of inference can be used to breach the gap. A Reliabilist theory of evidence seems especially suited to offer such a response, and is adopted by Bealer and Sosa.⁴³ The reliabilist may agree that no psychological fact is a logical law and also agree that no logical law can be deduced from any set of psychological facts. However, the reliabilist might reply that the existence of certain psychological phenomena *may in fact* serve to indicate the truth of a law of logic. They may argue that the psychological phenomena one experiences when entertaining or reflecting upon a logical law may be reliably correlated with the truth (and necessity) of that law. Consequently, such psychological episodes (or their contents if they have any) can serve as valuable evidence for the truth of a given logical law.

In response, even if we concede that certain psychological episodes are reliably or even infallibly linked to the truth of logical laws, the reliabilist response is unsuccessful for a number of reasons.

First, to establish any knowledge of this reliable correlation, or even to suspect it, depends on knowledge, and hence insight, into the truth of those very same logical laws. Establishing correlations requires establishing the existence of

⁴³ See Bealer 2000, especially pp. 1-2, 7-10, and Sosa 1999, 4.

the relata to be correlated. For example, to use smoke as an indication or evidence of fire requires more than just knowledge of the presence of smoke, but of its reliably attendant cause (fire) in at least some instances. In the case of logical laws this means that to use a psychological condition as an indication of the truth of a logical law requires more than just knowledge of the existence of that psychic occurrence. It also requires knowledge of the obtaining of that law in at least some instances. The indicative power of such correlations is therefore of no use in discovering such laws. We must presuppose the truth of the law in order to establish, or even inquire into, its relation to the existence of certain psychological phenomena. Clearly then, it becomes impossible to establish a correlation, whether that correlation is reliable, unreliable, or otherwise.

The problem re-emerges for the reliabilist that (1) - (4) limit the scope of intuitive experiences to psychological phenomena. A reliable connection is of no evidential value to a person who cannot grasp this connection, or even the possibility of such a connection. If we are limited to intuitive judgments about psychic occurrences alone, the necessities themselves, the laws of logic, will remain entirely unknown, as will their potential correlations with psychic events.

Second, given the reliabilist or any similar empirical-inductive account, it would follow that our knowledge of logical laws rested on (K1) the knowledge that certain psychological states obtain, along with (K2) knowledge that these states are reliably attendant when the logical propositions taken under consideration are

genuinely true. This however, greatly distorts the evident qualities of our knowledge of simple logical maxims.

For starters if (K1) and (K2) were true, logical knowledge would arise based on the continued historical assurance that beliefs in these laws are accompanied by the appropriate psychological conditions. Consequently our resultant knowledge would bear the mark of probability. One would reason: Since most, or even all, (of my?) considerations of the law of non-contradiction have resulted in certain attendant psychological phenomena thus far (e.g., it seems to be the case, or I have an urge to believe it is the case), there is a high probability that the law obtains. Since one never sees a logical fact itself to be the case, one is limited to a probable hypothesis of its truth based on induction, or indication, from a single particular or group of particulars, namely, the set of psychological episodes or "intuitions". By analogy, our knowledge of logical laws would be like the knowledge that our neighbors are home because we see that their porch light is on, and they are usually home whenever their porch light is on. Clearly, our knowledge in this case amounts to a probable conjecture, based upon a reliable indicator. When we see the porch light on we could conclude, "There is a good chance that the neighbors are home." The problem is that this characterization distorts the quality of our knowledge of logical and other simple necessities. Simply, one does not judge that "There is a good chance that nothing is P and not-P," when one intuitively judges that nothing can be both P and not-P. Such conjectures are rare in the case of obvious and trivial truths.

Secondly, simple laws of logic can be ascertained in a single intuition, by a single individual. One does not compile or rely on a body of historical data (as the inductionists would have it) to be further expanded and modified in future experiences, especially in the case of the more simple laws.

Thirdly, any doubt regarding the truth of say, the law of non-contradiction, can be put to rest by re-verifying its truth again and again with ever new intuitions, much like doubts about the residence of our neighbors can be put to rest by going over to their house and checking. This option is ruled out by (K1) and (K2) in so far as self-evidence (encountering the fact itself) is ruled out.

Fourthly, our knowledge of simple logical and other a priori maxims does not admit of any mediate steps of inference (be it inductively or deductively). There is no mediate step from the existence of psychological particulars to logical truth. Hence, there is no need to establish the existence of any psychological particulars or their relationships to logical laws. In fact, knowledge of simple logical laws does not rest on the establishment of the existence of any individuals, much less certain psychological particulars.

Fifthly, an examination of the qualities of our intuitive knowledge of logic does not bear out evidence of any dependence on introspection or the establishment of the existence of any psychological phenomena. The insight that nothing can be F and not-F is wholly consumed with the logical content expressed and with the relations of properties and things themselves. No real particulars are referred to, only the species "object", "thing", "qualified", "property", etc., by way of reference to

the class of possible particulars is intended. Additionally, no introspection of one's psychological conditions is found in the concerned regard towards establishing the truth of a logical law. Just as when I see a car pass quickly by my window, I register its passing with my perception, not by way of registering any properties of the perception itself. It is in virtue of its properties that perception allows passing cars to appear to a judging and knowing subject like me, but no reflection is needed to effect that perception and perceptual judgment. While it surely is possible to reflect on my perceptual knowledge I need not enact such a reflection. The analogy holds for rational intuition. It is not by registering the existence or properties of a given intuition that I come to know a law of logic, but by *concern with the content of the law itself and the appropriate registering of the being of the fact it lays claim to*.

Third, conditions (K1) and (K2) lead to yet another troubling consequence: skepticism. To see how, consider what reason we have to believe that psychological conditions, processes, or phenomena are the same from species to species, person to person, and time to time, with respect to the truth of a given logical law. All that matters on the reliabilist account is that the psychological phenomena in question are well correlated to the truth.⁴⁴ Thus, such phenomena may be replaced by other phenomena without loss of epistemic value, whether those differences arise between species, persons, or even within the same persons at different times. This presents a problem. If reliable, or for that matter even necessary, correlations differed among individual persons or the same person at different times, skeptical consequences

⁴⁴ If there were an essential tie, then the criterion of reliability would be irrelevant. For, every time the favored psychic occurrence obtained, the truth would be appropriated of necessity.

would follow. I might have an inclination to believe when I consider some law of logic and you may experience disappointment, ambivalence, or an inclination to disbelieve. Today I may find myself unable to conceive, tomorrow I may be able. How would we resolve these conflicting intuitions? Appeals to more intuitions will not help. For, if we became constituted differently, and the various correlations we relied upon altered, we would not be able to discover this, nor adjust ourselves accordingly.

The genuine problem, though, is not that things might change, the genuine problem is that we do not know *now* whether the correlations between logical laws and certain psychological episodes are lined up in the right way. To discover whether this is the case requires stepping outside of our psychological domain and seeing the logical and other a priori necessities themselves, as well as seeing how they relate to the various psychological phenomena named in (1)-(4). Intuition qua direct perception has been the traditional solution in the face of these concerns. It allows one to compare the deliverances of “seemings” to the *facts themselves* and see whether they are linked in the “appropriate” way. Without the possibility of such comparison, not even an ideal thinker (e.g., God) can verify the deliverances of his intuitions and a universal Humean skepticism appears unavoidable with respect to not just logic, but all a priori disciplines and the scientific knowledge they support. The accounts under discussion do not acknowledge, or seem to even allow for this step and the threat of skepticism appears unavoidable.

Of course, if one can step outside of their psychological domain and see logical and other a priori necessities themselves, then there is no need for the reliably attendant psychic phenomena mentioned in (1) - (4). That “seeing” itself would account for the possibility of knowledge of logical law, and an account of such “seeing” would be an account of rational intuition.

Let me clarify these last statements. If what I have said is correct, then the value of reliably attendant psychological phenomena rest upon the establishment of correlations between the truth, logical law, and whatever phenomenon takes on the role of reliable indicator. This establishment, in turn, depends upon the apprehension and knowledge of the truth of the logical laws under scrutiny. However, if it is possible, and even required, to see a necessity itself as what it is, it becomes irrelevant whether this seeing occurs normally, regularly, reliably, or unreliably. More importantly, it becomes irrelevant whether this seeing is attended psychically by the phenomena mentioned in (1) – (4). Upon such “seeing” or “intuiting” a correct and rationally grounded judgment as to the truth is possible, and in such a way that knowledge is easily achieved. I would suggest that being confronted with a law of logic itself and consciously registering its truth is a paradigm of genuine knowing.

3.3.3 The Externalist Response: Process Reliabilism.

My criticisms of the reliable indication response target the theory that intuitions are psychological conditions that serve as indicative evidence for logical

and other a priori necessities. Many of these remarks, as well as those throughout the paper, fly in the face of contemporary externalism, especially in its naturalistic form. I will briefly consider the externalist response now.

The likely response of the externalist is that the reliable correlations that make intuitions epistemically valuable need not be known or even thought about, and that the problems I have raised simply do not arise. All that need occur, for one to know, is that the appropriate reliable connections obtain between the processes which produce their beliefs and the truth of those beliefs. Thus, the externalist may reply that the existence of an 'intuition' is no premise or indicator at all. In short, they may advocate some sort of process reliabilism.

If one takes this line, then we must ask what (1)-(4) are doing in their account of rational intuition and a priori knowledge. If these psychological phenomena and discoveries need not be the objects of consciousness, need not be thought of, need not play any evidential role, then what value have they to the discovery of a law of logic or any other universal necessity? Are (1)-(4) supposed to be processes that produce beliefs? If so, then at least two crucial questions arise: How do (1)-(4) produce beliefs, and what do they produce beliefs in? How does having an urge, a seeming, or being convinced of something produce a belief, and what does it produce a belief in?

Instead of developing the potential answers that might be offered to these questions, I wish to describe a fundamental problem with the attempt to account for rational intuition with any form of process reliabilism, whether in the case of (1)-(4)

or elsewhere. The problem is that the only sorts of processes that can produce doxastic attitudes are processes that result in a consciousness awareness of something, and they must do so in the appropriate way. The first point can be put simply: beliefs are possible only in the face of certain phenomena. If one is denied consciousness of those phenomena, there is simply nothing left to motivate their beliefs, doubts, or any other doxastic attitude. For the rationalist to remove (1)-(4) from the field of consciousness awareness is to remove the ground upon which to base any beliefs in the first place. Once the conditions essential for the possibility of belief are removed, insofar as knowledge depends on belief, the possibility of knowledge is removed.

Consider the example of a belief forming process like tasting. Plenty of beliefs can be formed upon the basis of tasting food, beliefs concerning the flavor, texture, and other qualities of the food. However, were tasting to present no conscious awareness of any flavor or food, what culinary beliefs could possibly be formed as a result of sipping a bowl of soup? If tasting failed to present such qualities as temperature, saltiness, etc., not only would forming beliefs about these qualities as a result of sipping be irrational, it would be impossible. Tasting food is a belief forming process only because it results in the conscious presentation of certain qualities of food items. To take away that presentation is to take away the basis for forming a belief about food, flavor, etc., at all.

Consider another example. Seeing a grove of apple trees is obviously a sufficient basis for forming beliefs about apple trees, however, it is not by itself a

sufficient or appropriate basis for forming beliefs about pear trees, and it is even less appropriate if the aim of one's beliefs is to get at the truth. Seeing apples trees may play a role in a chain of inferences that lead to beliefs about pear trees, but such a chain of inferences is built on a structure of relations and objects that only matter to the extent that one is conscious of *them* too. That means that one must have some sort of conscious presentation of the premises and logical relations that make up that chain of inference.

Seeing apples trees may also move one's memory or imagination to an associated idea of pear trees, but a memorial or imaginative presentation of pear trees is obviously not itself a belief or doubt. Of course, once such a chain of associations for whatever reason, leads to a presentation of pear trees, a belief can be formed about its content.

It is not just the fact of being presented with some object or state of affairs that is essential to the formation of beliefs. The qualitative type of the presentations themselves also matter; for not all presentations are conducive to forming beliefs. Having a desire, for example, though it consists in a conscious presentation of something, does not by itself support the formation of a belief. I may want to go to sleep within the next hour, but this desire for sleep alone does not allow me to form a belief or doubt about my wanted sleep.⁴⁵ Another example is fear. Fearing that my neighbor's dog may be loose is not by itself a basis for forming a belief about the dog being loose. In fact the dependence works the other way around; some such fear

⁴⁵ Naturally, if I am aware of my desire, i.e., if I perceive it, I can form beliefs about it, but perceiving one's desire is not to desire one's desire.

is rationally grounded only in a belief with the same content. Thus, not all manners of thinking allow for the formation of beliefs. It is the specific character of those conscious presentations that wholly determines which doxastic attitudes are possible and appropriate. For example, when I sensuously perceive soup by tasting it, and I am presented with its saltiness, I can, and it is rational to do so, form the belief that it is salty. However, were I to merely imagine tasting my soup, and imagine it to taste salty I would not form the belief that my soup is salty. Likewise, imagining that it was so hot as to burn my lips would not be a sufficient or rational basis for believing my lip burnt and in need of salve. Imagination, while a conscious presentation, does not provide a basis for the belief in the existence of any of the objects or qualities imagined. It is just not that kind of thing. Imagination is a process that results in the conscious presentation of things, but not in a way that motivates belief in the reality of the things imagined.

Visual perception, on the other hand is exactly the sort of “process” that presents objects and presents them in such a way that belief is a rational response. One of the key differences between perception and imagination is that perception, by its very nature, purports to present objects themselves, as they are. That is, it presents “the thing it-self” and presents it as existent. It is not of the character of perception to present things in guise or as signs of something else, or to present things as unreal. We can call this the self-presentive function of perception. Any act with this quality purports to be acquainting us with things as they really are, and as if

they are real. Such acts are none other than the “direct perceptions” that have traditionally been deemed “intuitive”.

Conversely, any activity or experience that does not of its essence get us to reality can only be used to do so if it can be correlated with reality, and thus correlated with the results of an experience (like perception) that does get us to reality. This fact is basis for the bulk of my rejection of the inductionist response above. Since, (1)-(4) do not intrinsically purport to present things as they are, they are not direct perceptions of modal facts. The only option is to use them as a mediary, an indicative sign. The conclusion of that section was that any such indicative use depends on a direct perception of the truth to correlate with the sign.⁴⁶

What is the conclusion to be drawn from these phenomenological observations? I believe that the conclusion to be drawn is that an account of our knowledge of a priori and other necessities must be a direct perception theory that explains our acquaintance with modal facts. A phenomenology of rational intuition must be an account that describes the experience that leads to an intrinsic revelation of modal facts. No doubt such an experience will be complex, but any attempt to do without it will inevitably lead to the problems described above.

If knowledge is a rational achievement, and beliefs rationally motivated and produced, they must be based on a consciousness of something, and ideally based upon the consciousness of the fact believed. I have argued that if our knowledge and

⁴⁶ One could always include these phenomena in their account and claim merely that are the effects of a perception of the relevant modal facts. It seems reasonable to suppose that seeing S to be necessarily P will produce in one the inclination to believe that S is P, S's seeming to be P, an inability to conceive S not being P, and the conviction that S is P.

conscious acquaintance is limited to such occurrences as are found in (1)-(4), knowledge of logic and other a priori necessities would be impossible.⁴⁷ Those beliefs constitutive of knowledge must arise not merely as the result of this or that causal process, but as a result of the conscious appearance of the relevant objects in the appropriate manner. It is the character of that appearance, of that “way” it is a consciousness of something, that makes the basis of a bit of knowledge rational and ultimately warranted.⁴⁸

Some sort of externalism may hold the key to an account of intuition, but it must first remove the problems of psychologism raised above, and explain the possibility and character of a presentation of the logical and other a priori necessities themselves. Merely stating that true beliefs can be generated by reliable processes fails to describe the how and the what of that production. It also treats knowers as irrational insofar as it neglects the presentational foundations of doxastic attitudes. It is not sufficient to find yourself having a belief that bears the mark of truth or results from the right sort of process; we must be presented with the facts themselves in the right way. A description of this presentation is the phenomenology of intuition that

⁴⁷ If what I have said is correct, then the value of reliably attendant psychological phenomena rests upon the establishment of correlations between a logical law and whatever phenomenon takes on the role of reliable indicator. This establishment, in turn, depends upon the apprehension of the truth of the logical laws under scrutiny. However, if it is possible, and even required, to see a necessity itself as what it is, it becomes irrelevant whether this seeing occurs normally, regularly, reliably, or unreliably. Upon such “seeing” or “intuiting” a correct and rationally grounded judgment as to the truth is possible, and in such a way that knowledge is easily achieved. I would suggest that being confronted with a law of logic itself and consciously registering its truth is a paradigm of genuine knowing.

⁴⁸ If one insists on calling this basis a cause, then we can say that it is the character of the cause that is missing in the previous accounts. To describe this character is to do more than simply state that a cause is necessary, or to offer some condition (e.g., reliability) the cause must extrinsically bear to truth, but to specify the how and manner of that cause.

is missing in the accounts above. This description *is* the account of rational intuition and the account of the possibility of logical, mathematical, and other a priori knowledge.

3.4 Conclusion.

The critique of some contemporary versions of psychologism points to the need for an adequate phenomenological account of the mental acts and act complexes that make possible an immediate insight into the modal character of reality. In conjunction with the critique in chapter two, the conditions on theory of the possibility of modal knowledge have been specified in repeated and broad outline. Adequately answering questions (1) and (2) (what elements make up a piece of immediate a priori knowledge and how they appropriately and necessarily connected to achieve that end?) requires telling a story about the nature of a certain class of experiences and a certain class of objects. Those objects will be the modal relations themselves, and the relevant experiences will be the mental acts that constitute the appropriate and necessary presentation of those objects. The weakness of psychologistic theories lies in their failure to incorporate the experiences that matter the most, the experiences that by their very nature purport to reveal modal realities to us, and under appropriate conditions succeed. With contemporary rationalism criticized and the demands on a theory of modal knowledge clarified, this ends Part I of this essay. In Part II, I present Husserl's theory as a viable alternative that meets the phenomenological demands and avoids the problem of psychologism.

Part II. The Husserlian Response

Introduction.

Husserl's consistent aim (at least from the *Logical Investigations* on) was to develop a transcendental philosophy. His "breakthrough" of phenomenology was the ever evolving science that once and for all solves this problem, (i.e, the possibility of veridical cognition.) In the process of establishing this possibility, Husserl makes endless references to the unconditioned universality and necessity of phenomenological propositions; propositions of a wholly "a priori" character. Given the centrality of the a priori (or as Husserl later calls it "eidetics") to phenomenological science, we might expect a number of treatises on the subject from an author as prolific as Husserl. However, the peculiar thing one immediately notices about Husserl's theory of a priori knowledge is that there is no one paper, book, or essay where Husserl treats exclusively of the a priori or rational intuition. In his published works, Husserl never exclusively takes up this and other related issues despite their vital importance to his phenomenological project. Instead, while pursuing his transcendental end, he intermittently sojourns into various ontological, moral, and epistemic issues when they become pertinent to a point he wants to make- and those points are usually contrasts between his own and another view.

The sporadic character of his treatment of the a priori, however, says nothing about the quality of that treatment. When we look at the relevant bits and pieces we

find them fitting together into a consistent whole that over time only broadens and deepens. In fact, what we find is the most comprehensive account of rational intuition to appear in the 20th century. If the charges I have leveled in Part I are correct, that account is uniquely suited to the needs of contemporary rationalism.

The following is an exposition and defense of that whole. My interpretive approach to Husserl's piecemeal development, specifically his account of rational intuition and the nature of modal knowledge, is to present his account as a single unified theory. The reason is simply that it appears to be a single unified theory. Many notions introduced in his earlier works receive deeper treatment in his later writings, while others get their sense and justification from Husserl's ontology, worked out most fully in earlier works like the *Logical Investigations* and *Ideas*.

Thus, I have freely invoked the relevant items from his works wherever they were to be found. As a matter of interpretation I draw on his earlier work to provide the ontological background for his later claims, and draw on his later work to provide the details of some of his earlier claims; a tidy and in this case, I think, justified hermeneutic principle.

I believe the following presentation of Husserl's theory demonstrates the sort of ontological and epistemological story that is needed in order to come to terms with the question of the possibility of modal knowledge. It also demonstrates the existence of a comprehensive and defensible alternative to contemporary rationalism and by extension to contemporary naturalism. I expect that in the course of this exposition, it will become evident that Husserl's theory meets the phenomenological

and ontological challenges head on, and provides the resources for addressing the issues of concern I raised in chapter one.

It is worth commenting that Husserl's work has endured a sort of disrepute and invisibility among anglo-analytic philosophers⁴⁹, but this is not due to his failure to publish a series of topical books. The disrepute owes itself to the believed refutation of traditional philosophy and metaphysics that the linguistic turn ushered in at the end of the first third of the 20th century. In the hands of Schlick, and Ryle et al, Husserl's well known anti-psychologism and a priorism became fodder for their revisionary metaphysics of positivism and linguisticism.⁵⁰ By the time of Quine's naturalized epistemology, philosophy of the Husserlian sort was little more than a straw man alternatively called Platonism and Aristotelianism. The invisibility of Husserl, however owes itself to different forces. Just as Quine's rejection of the positivist's distinction between analytic and synthetic truths failed to drive philosophy back to pre-positivist's days, the recent refutation of Quinean naturalism is failing to drive philosophers back to pre-Quinean days.

The following presentation is thus also an attempt to drive backwards and remove that invisibility. I cannot help but add that it is also an attempt to satisfy that desire held by almost all Anglophone writers on Husserl: to bridge the divide between the analytic and continental (or at least phenomenological) traditions.

⁴⁹ The work of Kurt Godel and Charles Parsons are exceptions to this rule.

⁵⁰ For the positivist critique of Husserl's a priorism see Schlick 1949, For Ryle's criticisms see Ryle 1971a and 1971b.

Part II begins with the presentation of the epistemic and ontological background into which Husserl's a prioriism is embedded. The following chapter (four) sets out Husserl's theory of knowledge and the fundamental epistemic task it engenders. That task is the phenomenological clarification of the mental acts and act complexes that bring modal facts to light. The possibility of that accomplishment lies in the character of intuitive acts on the one side, the objects of modal knowledge on the other, and the tie that holds them together. The characterization of these three elements results in a precise specification of the form of modal insight (rational intuition). With this form in hand, chapters five and six will take up the specific phenomenological description of that achievement.

Chapter 4

Husserl's Theory of Knowledge.⁵¹

4.1. Knowledge.

Naturally, an account of a priori knowledge, knowledge of modal relations, finds its place in a theory of knowledge. For Husserl, knowing is a species of conscious intentional experience. In the most general terms, knowledge is the conscious possession of truth on an appropriate immediate or mediate basis. Immediately based knowledge is the possession of truth in virtue of an encounter with the facts themselves. Mediate knowledge is the possession of truth as derived from facts other than the purportedly known fact, e.g., via deduction or induction. To possess the truth is in part to judge correctly.

In knowledge, however, we possess truth. In actual knowledge, to which we see ourselves ultimately referred back, we possess truth as the object of a correct judgment. But this alone is not enough, since not every correct judgment, every affirmation or rejection of a state of affairs that accords with truth represents *knowledge* of the being or non-being of this state of affairs... (LI, 60)

To possess knowledge is to have grounded that judgment in its appropriate evidential manner.

⁵¹ In what follows I will follow the terminology of the *Logical Investigations*. There, Husserl refers to the phenomena of knowing, perceiving, judging, and all intentionally directed conscious phenomena as 'acts'. Husserl's later work (especially *Ideas I*) modifies this terminology without abandoning the essentials of the theory to be presented. Since I find the terminology of the *Logical Investigations* more congenial to contemporary analytic work on mind and knowledge, I will stick to it throughout.

... We therefore conceive 'knowledge' in a wider, but not wholly loose sense: we separate it off from baseless opinion, by pointing to some 'mark' of the presumed state of affairs or for the correctness of the judgment passed by us. The most perfect 'mark' of correctness is inward evidence, it counts as an immediate intimation of truth itself. In the vast majority of cases we lack such absolute knowledge of truth... (60-61)

This "intimation of the truth itself" is achieved in a complete act involving an intuition, an immediate encounter with the facts themselves, and defines the primary and paradigmatic cases of knowing. All other (mediate) forms of knowing depend on this encounter, and are related back to its possibility. The nature of this dependence is of vital importance to any total theory of knowledge, but it will not be discussed directly here. Of greater contemporary relevance, and importance for this project is not the structure of mediate knowledge, but the very possibility of the immediate knowledge upon which it depends. Accordingly, an account of intuition, as the basis for immediate knowledge, must begin with what is prior to, and foundation for, the various structures of mediate knowledge.⁵²

4.1.1 Comparison to the Analytic notion of Knowledge.

Analytic work on knowledge since Gettier's 1963 paper has revolved around the refinement of a True Warranted/Justified Belief account of knowledge. In contrast, Husserl's definition is distinctively pre-analytic, and has more in common with the notion of *scientia* brought from Aristotle through the Scholastics into pre-

⁵² Incidentally, the structure of this dependence forms one of the central problem for Husserl's early work in *Philosophie der Arithmetik* and *The Logical Investigations*. It is likely that the problem of inauthentic mathematical knowledge is not only the impetus for Husserl's *Logical Investigations*, but the species of problem to which a phenomenology of reason is the ultimate answer. See Willard 1984.

modern and modern thought. If one were to make Husserl's notion of knowledge more amenable to analytic discussions, it would be fair to say Husserl also regards knowledge as True Warranted Belief, where 'warrant' indicates the possession of either immediate or mediate evidence and 'belief' is widened enough to include every sort of assertive positing consciousness, as in judgments, assertions, recognitions, expectations, and beliefs. All forms of mediate evidence are ultimately legitimated by their relation to appropriate forms of immediate evidence or "self-evidence". Self-evidence for Husserl is the evidence for something provided by a certain kind of presentation, namely one that presents that thing itself. Self-evidence is not a proposition or a belief that one is justified in believing or having without evidence or merely because one believes it, as some accounts of foundationalism would have it. Self-evidence is the evidence of an object or fact itself. A fact is not self-evident because it is presented to one's "self", or because it is interior to the "self", whatever that means, but because the fact *itself* is presented to the knower, as opposed to some sign, indication, symbol, etc., that mediates the knower's presentation. That is, the apprehension of a fact, on the basis of the direct presentation of the fact itself to consciousness, is self-evidence. To give a polite example, when I look outside to see if my car is parked on the right side of the street, seeing and perceptually judging that it is correctly parked provides self-evidence for the belief that my car is on the right side of the street. It may also be helpful to point out that self-evidence, for Husserl, does not entail certainty, yet it is un-mediated, and as direct as direct can be.

4.1.2 *Intuition & Fulfillment.*

The fundamental distinction driving Husserl's analysis of knowing is the distinction between thinking of something in its presence, and thinking of it in its absence or *merely* thinking of it. This is the difference between looking and seeing your shoes under the table, and merely thinking about your shoes being under the table. To think of something in its presence is to have an intuition, or in other words to have an intuitive experience of that thing. Intuition indicates an "acquaintance", to use Russell's term, where an object comes before us as itself "bodily" present in *propria persona*. (LI, 542) Intuitions of individuals and individual states of affairs, as in the case of finding my shoes to be under the table, are called "empirical intuitions" Loosely speaking, empirical intuitions form the basis for empirical knowledge and its derivative forms. In contrast, intuitions of universals and universal states of affairs are called "eidetic" or "essence" intuitions. Finding it to be the case that nothing can be red and green all over, and that every part of a part of some whole is also a part of that whole, is to have a universal intuition. Essence intuitions form the basis for non-empirical (a priori) knowledge and its derivative forms.⁵³

According to Husserl, the continuous interplay between intuitive and non-intuitive thinking, or presence and absence, permeates every experience to some

⁵³ This is not strictly true since intuitions of universals are also essential to empirical science, and empirical intuitions are ultimately essential to a priori disciplines, though each in different ways. These relations, I hope, will become clearer in the course of the work.

degree. For example, when I perceive my shoes under the table, only some parts and aspects of the shoes are intuitively present, while most (the interior, the underside, the backside, etc.) remain merely intended, merely thought. This interplay of intuitive and non-intuitive thought serves to ground the knowing relation itself. More precisely stated, knowledge, for Husserl, is the recognition of an identity between an object or state of affairs intuited and that same object or state of affairs as *merely* thought. The conscious registering of this identification Husserl calls 'fulfillment'. In fulfillment a mere thought, what Husserl calls an "empty intention" of an object or state of affairs is filled to some degree by an intuitive experience of that object or state of affairs, and, in the case of a perfect and complete fit between of what is thought and what is intuitively present, the object or state of affairs itself does the filling.⁵⁴

The distinction between filling and empty thought contents is a distinction correlative to intuitive and non-intuitive thoughts. When I think of my shoes under the table, but have yet to see them there, my thought is empty. Again, this is to think of them in their absence. When I look under the table and see my shoes, my empty, non-intuitive thought intention about my shoes becomes filled by the intuitively presented (seen) shoes. When the thing thought of is given to consciousness intuitively, we can get a fulfillment of the empty thought by the intuited object. In fulfillment, we come to be thinking of what is, as it is, upon the appropriate basis to consider ourselves knowers. In other words, fulfillment is knowledge, and the

⁵⁴ See LI VI, Sect. 21 & Sect. 36.

experience of fulfillment is the experience of immediate knowledge. Husserl also calls the experience of knowledge (fulfillment) “inner” or “inward” evidence, (see previous quotation) and characterizes it as the experience of truth.

The experience of the agreement between meaning, and what is itself present, meant, between the actual sense of an assertion, and the self-given state of affairs, is inward evidence: The Idea [Essence] of this agreement is truth, whose ideality is also its objectivity. (LI, 195)

The inwardly evident judgment is, however, an experience of primal givenness: the non-self-evident judgment stands to it much as the arbitrary positing of an object in imagination stands to its adequate perception. (194-195)

I began this section by saying that for Husserl, knowledge is the possession of truth. We can now see that to possess truth on an appropriate immediate basis is to become conscious of an identity between a fact as merely thought and the same fact as intuitively presented. That is, to become conscious of fulfillment.

In fulfillment, Husserl writes, we have it “*constituted that a thing is really and truly so*” but this does not preclude “the possibility that such ‘really being so’ is merely putative, and especially, in most cases that it is inadequately presented.” (LI, 708) Intuitiveness comes in degrees, and therefore, so too does fulfillment. When I see my shoes under the table and fulfill my intention, I do not literally “see” every part and property of my shoes, their location, and the table they are under. There is an evident difference between the way I am conscious of the facing-topside of the shoe and the way I am conscious of its bottom side and interior. The former is present to me in a way the latter are not. The latter are there, and I am conscious of them in a certain respect, but they lie beyond what is illustrated in my present

perceptual field; they lie at what Husserl calls "the horizon" of my perception. My visual perception, though intuitive to some degree, is quite limited, and upon further investigation may prove mistaken. For example, I may reach down to grab my shoes and discover they are in fact not mine, but merely similar to mine, or I may discover that they were not shoes at all but a dark cloth wrapped with shoe laces. Visual perception provides for a merely putative possession of the truth, it does not guarantee the truth. It does, however, point the way to a final adequate possession of truth. An adequate possession of the truth depends upon a complete intuitive presentation of something exactly as it is merely (emptily) thought to be.

Adequation, on Husserl's account, is an ideal limit of fulfillment that is not usually achieved. Indeed, with respect to physical objects and the states of affairs among them, adequate fulfillment necessarily cannot be achieved through any single or finite combination of intuitive presentations. The degree of intuitiveness of any perception of a physical object is always partial and incomplete. My perception of my shoes beneath the table can always be improved and more parts and properties of the shoes revealed. This means that there is always another intuitive presentation of the same object possible whereby more of the object is "filled" out. Yet every partial revelation of a material object in perception, Husserl held, contains in its sense a rule for the continuous and completed fulfillment of that object. Each intuitive perception of a material object makes plain the manner in which its empty components can be filled out. In the case of my shoes that manner would include the series of visual perceptions involved in closely surveying the shoes, looking inside

them, and underneath them, etc. It most likely also includes numerous other sense perceptions, none of which can in one blow, so to speak, take in every part and property of the object.

Husserl did believe that some adequate intuitions, and hence some adequate fulfillments, were possible and were often achieved with respect to two distinct categories: Conscious experience itself, as in the judgment “I am now having a perception of brown shoes”, and simple universal necessities such as laws of logic, arithmetic, etc.⁵⁵

A fulfillment is adequate if every part and property merely intended in an empty act finds intuitive fulfillment in a correlated intuitive act. In adequate fulfillment an empty thought is completely “filled” by a corresponding intuition.

A signitive [Non-intuitive] intention merely points to its object. An intuitive intention gives it ‘presence’, in the pregnant sense of the word, it imports something of the fullness of the object itself ... The ideal of complete fullness is, accordingly, the fullness of the object itself, as the sum total of its constitutive properties. (LI, 728-29)

A thought that is adequately filled by a corresponding intuition no longer merely means or intends its object, but has hold of its object and possess it completely. When adequate fulfillment obtains a genuine relation between thought and object obtains, and a whole is formed of which the object is a part. Here, the intentional object truly exists, and is no longer merely meant. Conscious mindedness

⁵⁵ ID Sect.137 & Sect. 138. Husserl’s conviction in the actual achievement of adequation waned throughout his life. See Follesdal 1991 for an expression of this and an alternative interpretation of Husserl’s theory of adequation and evidence.

(Zumuteseins) towards something becomes a conscious relation with something.

Here is found Husserl's "reality hook".⁵⁶

4.2. *Object Categories and Intuition.*

According to Husserl each category of object has its own peculiar mode of being made known, being made an object of consciousness, and finding fulfillment. In virtue of this, scientific disciplines naturally divide according to their subject matter and method of investigation. At the base of each discipline lies its subject matter, and corresponding to it the possibility of intuitive acts of consciousness that apprehend those objects.

To each science there corresponds an object-province as the domain of its investigations; and to all its cognitions, i.e., here to all its correct statements, there correspond, as primal sources of the grounding which validates their legitimacy, certain intuitions in which objects belonging to the province becomes themselves-given as existing and, at least some of them, given originally. (ID, Sect. 1)

Consequently, Husserl divides species of intuition according to the kinds of objects they present to consciousness. Sensible intuition is of sense perceptible natural objects and properties, empathic intuition is of other persons⁵⁷, categorial intuition is of formal objects such as totalities, states of affairs, and relations⁵⁸, and "eidetic", or "essence", intuition is of universals. (The last of these is of primary importance to the discussion here. It is the immediate encounter with universals

⁵⁶ See Willard 1995 and 1984 on Husserl's solution to the possibility of objective knowledge and its relation to other views.

⁵⁷ See Smith, D.W. 1989.

⁵⁸ See Sokolowski 1981.

upon whose basis a priori knowledge, the knowledge of strictly universal necessities, is grounded. Chapters five and six will explicitly develop Husserl's theory of these phenomena.)

In a very broad sense it is fair as to regard each of these species of intuitive acts as species of perception, however, perception is not the only intuitive act. Within the category of empirical intuitions both memories and imaginations also have characteristically intuitive aspects. Perception is distinguished from these other intuitive acts by the manner and extent to which it represents its object. Very briefly, perception is an act that regards its object as real, existent, and self-appearing, and is capable of representing individuating features and components of its object (i.e., time and place), imagination is not. This brief comment is intended only to indicate that there are distinctions among species of intuitive acts. Perception, especially sense perception, will be the guiding model of an intuitive act in the discussions of knowledge that follow. The reason is that for an explication of Husserl's conception of knowledge, it is those features that intuitive acts have in common that matter. Their specific differences will come to play a prominent role only later in the foundation of essence intuition in chapter six.

Given his acceptance of the correlation between object categories and knowledge categories stated above, Husserl's fundamental task can be clarified. The epistemological task he sets up for himself is to uncover and elucidate the various species of conscious activities which provide us with insight into the objects of the various categories. This effort can be seen as a thoroughgoing empiricism that takes

seriously the importance of the origin of our concepts as the basis of our knowledge in experience. The origin of our concepts for the traditional empiricist lies in an encounter with the object itself. A description of that primal encounter displays the genuine sense of our concepts and knowledge of that object. Empiricistic efforts of this sort were quite common in the work of psychologists and philosophers in the later 19th century, and Husserl was no different from his contemporaries or his teacher Carl Stumpf in this regard.⁵⁹ Reflecting in his 1925 summer lecture Husserl described his own this way.

On the one hand, the task was new, the attempt to go back radically and consistently from the respective categories of objectivities and ask about the modes of consciousness determinately belonging to them, about the subjective acts, act-structures, foundations of lived experience, in which objectivities of such a character become objects of consciousness, and above all become evidently self-given. (PP, 20)

And later in the same work,

The task necessarily arises of descriptively pursuing systematically coherent multiplicities of consciousness which pertain essentially to the cognitive becoming aware, or being able to become aware, of objectivities of every category. Every category of possible objectivities designates an index for a methodic regularity of possible psychic life; every possible real world, a regularity of possible intersubjective psychic life. (PP, 34)

When this task is aimed at the categories and objects of mathematics, logic, and universals generally, the result is an explication of immediate (intuitive) knowledge of universals and their correlative universal and necessary states of affairs. The result is a phenomenology of a priori knowledge. Obviously this is a

⁵⁹ See Willard 1984 Chapter 1, Sect.2 on the role of conceptual origins in late 19th C. philosophy.

task well suited to the contemporary demand for (and lack of) an analysis of rational intuition spoken of throughout chapters one-three. The results of Husserl's efforts to fulfill this task will be discussed in the next two chapters (five & six). There I will lay out Husserl's theory of universal intuition more carefully, as well as the intuitions of modal relations they ground. My concern in the remainder of this chapter is to continue to present the Husserlian framework within which those descriptions find their possibility, and their sense.

4.3 The Knowability Thesis.

The relation between categories of object and categories of intuitive conscious acts proves to be vital not just for the clarification of the phenomenological task just mentioned, but for the explanation of the possibility of modal knowledge.

Husserl held not just that knowledge is possible, but that the world and all the objects within it are intrinsically knowable. His position is tantamount to a rejection of the Kantian unknowable thing-in-itself, and his theory of cognition can be seen as a development of the consequences of this rejection. His robust epistemic realism comes specifically in the form of the assertion that to every category of object there corresponds the possibility of certain conscious acts whereby objects of that category come to be known. In Husserl's words,

To every object that *truly is* there corresponds in principle (in the a priori unconditional generality of essence) the idea of a possible consciousness in which the object is graspable ultimately (originar), and thus with perfect adequacy. Conversely, if this possibility is guaranteed, then *eo ipso* the object truly is. (ID, Sect. 142, Willard translation)

I will call this thesis the intrinsic intelligibility thesis. It states that for any object *p*, *p* exists if and only if *p* is in-principle knowable.⁶⁰ These statements require some clarification and qualification.

First, to clarify, the term 'object' in the quote above is meant in the widest sense possible so as to indicate any and every sort of thing. The term embraces, among other things, individuals, universals, concreta, abstracta, states of affairs, propositions, numbers, thoughts, and even possibilities themselves. Every actual and possible existing object, in this widened sense, is correlated with a species or set of species of conscious experiences, such that through those experiences that object is apprehended, just as it is, with perfect adequacy.

Second, Husserl's thesis is not a claim about any actual knowers, but about the essential relations between knowing, thinking, and being, themselves. The relationship between objects and knowledge described is an ideal one and does not entail that every object is, could be, or will be known in actuality. It signifies instead that corresponding to each existing thing there is, in-principle, the possibility of a consciousness which comes to know that thing. Such ideal relations obtain

⁶⁰ The title seems appropriate given Husserl's transcendental efforts. For on Husserl's account, it falls within the nature of each existing thing to have, in virtue of its category and thus in virtue of its properties, its characteristic mode of being made an object of knowledge. Knowability is no accident, but a fundamental constituent of being itself, and hence a genuinely transcendental feature in at least two senses of that term. In the medieval sense, it is a feature like unity and identity that applies to every category without restriction. And in the Kantian sense it is a precondition for the possibility of knowledge.

independently of whether anyone or anything instantiates them. Just as it is true that colored objects are extended independent of whether any colored objects factually exist and just as it is true that corresponding to every kind of tool there is a function that that tool serves, independent of whether there are any factually existing tools strewn about. I should add that the claim is not limited to human or any other known thinking things. The human inability to know this or that complex or inaccessible fact does not make those facts unknowable in principle. There is always possible some consciousness in some possible situation that can have that fact as the object of an intuitive presentation.

Now some qualification. Like Bertrand Russell, Husserl maintains that both objects and facts can be known.⁶¹ This follows from his conception of fulfillment, since fulfillment is possible for every sort of object, and states of affairs are merely one distinctive sort of object. It is important, though, not to dismiss the distinction between states of affairs and other sorts of objects. It is the apprehension of states of affairs that functions prominently in our logical notions of knowledge and belief, and it will be knowledge of states of affairs that dominates the discussion that follows.

Along this line the objection may be raised that knowledge, in the form of belief, always has a proposition as its object.⁶² The objection, and this way of talking about knowledge, need not present any problem to understanding Husserl's theory. On the face of it, believing a proposition to be true or false appears different

⁶¹ E.g., Russell 1913.

⁶² Assuming we are not equivocating on the fact believed and the subject of predication involved in that fact.

than believing a state of affairs to obtain, and both look different from believing a sentence to be true or false. For Husserl, they are different, yet essentially correlated. To be more precise, declarative sentence tokens in their normal usage express judgments. Judgments have meanings or senses. Propositions are the meanings or senses of judgments, and propositions are of or about states of affairs. A sentence (token) is true just in case it expresses a judgment that has as a part a sense or meaning that is of a state of affairs, and that state of affairs obtains.⁶³ If these distinctions are kept in mind, then claims to know a proposition, sentence, judgment, or state of affairs can loosely be regarded as knowing the same thing. Husserl can agree that belief is a propositional attitude, and even that beliefs always relate to propositions or propositional contents (what ever those are), but this does not necessarily make a proposition the object of one's belief in lieu of the state of affairs that the proposition is about.⁶⁴

4.3.1. *The First Condition (I): If p exists then p is knowable.*

The first condition of the knowability thesis is: *If p exists then p is knowable.*⁶⁵ Husserl finds this condition to be constitutive of our sense of reality, and claims its rejection is a "counter-sense".⁶⁶ While an argument might be

⁶³ For discussion on these relations in Husserl see Simons 1995, and Smith, D. W. Forthcoming.

⁶⁴ Otherwise, it is difficult to see how beliefs about propositions about the weather and beliefs about the weather could differ. Of course propositions too can become the object of thought and knowledge as when one learns a certain proposition entails another.

⁶⁵ By reference to the ideal of an omniscient agent the condition can be otherwise expressed: Nothing lies beyond the cognitive accessibility of an ideal knower.

⁶⁶ See ID Sect. 47-48, Sect. 142 and Sect. 1. It seems to me that Husserl's "Transcendental Idealism" amounts to little more than this first condition.

constructed from various Husserlian texts, the thesis is plausible in its own right, and is shared by many realists, and anti-realists alike.⁶⁷ Husserl agrees with the anti-realist demand that propositions could not be true independent of their means of coming to be known, but he does not identify truth with any such means. For example, he does not identify truth conditions or existence with verification as some positivist might, or with warranted assertability, or any other such epistemic conditions. He simply supposes instead an inseparable link between thinking, knowing, and being. He also places no a priori limitations on the ways of coming to know things (e.g., empirically, causally, etc.) and thus holds very few potentially anti-realist positions.

The knowability thesis itself is clearly a direct rejection of unknowable things-in-themselves. Though the postulation of an unknowable thing-in-itself leads to many well known absurdities,⁶⁸ Husserl's critique of Kant and the Kantian thesis is grounded differently. It is not the rejection of Kant's thesis by admonishment of absurdities that follow from it. Instead, it is a series of phenomenological insights into the character of thought and knowing acts themselves, distinctions and characters neglected by Kant that proves the thing-in-itself to be an unreal postulate. Quite simply, Husserl rejects Kant by describing the experience of knowledge, and particularly, knowledge of things themselves. Here is not the place to investigate the

⁶⁷ Barring of course, concerns over the so-called "knowability paradox".

⁶⁸ For instance, in order to know that some object is intrinsically unknowable requires some knowledge of its essential character, and hence, requires what is impossible, to know the essence of the unknowable. As a consequence, it seems that we are stuck with the truth that if there are unknowable things, or even if they are possible, no one can know so.

quality of Husserl's critique of Kant and unknowable things-in-themselves. (The quality of that critique depends on the quality of Husserl's positive characterization of knowledge.) Suffice it to say, the brief discussion of knowledge as fulfillment in the previous section (Sect. 1) both requires and allows for the possibility of seeing fulfillment itself, truth itself, and knowledge itself. From this perspective, Kantian style epistemology is also out of the question.⁶⁹

The value of Husserl's exposition on a priori knowledge to contemporary analytic rationalists, however, does not lie in his rejection of unknowable things-in-themselves. That rejection is a precondition for any positive theory of knowledge generally. Though I believe that anti-realism and Kantian idealism turn on the failure to make many of the distinctions presented thus far, these positions are not the target of my discussion. The possibility of a priori knowledge is my target, and to that end it is sufficient for me to assume with Husserl a general realist position regarding knowability, and to demonstrate that from this assumption a comprehensive, non-mysterious, non-metaphorical account of the a priori is ready to hand.

4.3.2 *The Second Condition (II): If p is knowable then p exists.*

The second condition of Husserl's Knowability thesis is that *if it is possible to know p then p exists*. This condition, I believe, unlike its converse does not

⁶⁹ None of this automatically makes Husserl an idealist either. Husserl rejects the idealist's phenomenological description of the transcendence of conscious acts. The link between knowing and known is not one of creation. See e.g. LI VI Sect. 61.

explicitly depend on one's particular views about knowledge. The reason is that the condition is a specification of an entirely general law of relations that states that if it is possible for a given relation $R(a,b,\dots n)$ to obtain then its relata $(a,b,\dots n)$ must obtain. There are no possibilities concerning relations between merely possible, but non-existent, objects. Since knowledge (fulfillment) is a genuine relation, if it is possible to know p then p obtains.

Quite generally, nothing is possible with regard to non-existent objects whether they are possible or not. The reason here derives from the nature of possibility. Merely possible, but non-existent, individuals are not really individuals at all. They simply do not exist, and consequently, have no properties, no identity, and enter no relations with other individuals. They are just not individuated, and therefore, they can ground no possibilities. Possibilities, on the other hand do exist, but possibilities are not individuals (be they facts or objects).

To see these two points consider the assertion that it is possible to run the non-existent, though merely possible, streetlight at the intersection of Main and 3rd. To this assertion we can legitimately raise the question, "Which one?", that is, "Which light?" The one with a faulty bulb? The one replaced last year by the superintendent? The one whose paint is peeling? Clearly, there is no matter of fact about which one, just as there is no matter of fact about which 20th century King of France survived an assassination attempt, and which U.S. prince was not so lucky. In all of these cases there is a failure of presupposition in the question. The failure derives from the fact that any affirmative answer to these questions must relate or

predicate something of a non-existent individual whose individuality and identity are presupposed. All such answers must say, “*That particular* individual (as opposed to this one) is so and so or such and such”, yet no particular *this* as opposed to *that* is to be found. Quite plainly, the *possibility* of running *that very* red light on the corner of Main and 3rd depends on the existence of *that very* red light at Main and 3rd.

Neither some other actual light, nor a merely possible non-existent light will do.⁷⁰

While it may be possible for there to be *a* light at main and 3rd, the existence of this distinctive possibility is not a sufficient truth maker for any claim about an actual and specific individual light. The original claim concerns actualities, and only those actualities can make the claim true. Consequently, if there is no actual street light at main and 3rd, and hence no truth maker for the modal assertion, then there is no possibility of running *that very* individual street light. Likewise, just as it is not possible to run the light at Main and 3rd, it is not possible to know there is a light at Main and 3rd.

Of course one might mean to say that it is possible to run some possible light at main and third. True enough. Certainly, it would make sense to suggest that it is possible to run *a* street light, and clearly possible to run *a* street light at main and 3rd (at least in my town). Possibilities involving indefinite relata, however, may conceal an ambiguity and thereby have different truth makers than possibilities involving particular actualities. On the one hand to mean “*a*” streetlight may be to mean some

⁷⁰ It is not obvious that this claim runs contrary to either the actualist’s or possibilist’s views. Even David Lewis’s view that requires counterparts in possible worlds to make modal claims true also requires the actual object that the counterparts are counterparts of.

particular and actual streetlight, on the other hand it may be to mean some merely possible streetlight. In the latter case, the relata meant may be merely possible and yet the possibility of a relation among them still obtain. This is just to say that a possibility concerning other possibilities depends only on those other possibilities existing, not any actualities. For example, to say that the relation of friendship is possible means that it is possible that two or more persons are friends. This does not entail either that any two persons exist or that there are any actual friends. It entails only that it is possible for there to be two persons that are friends. No individuated persons are meant in this assertion, merely the possibility of persons is mentioned, and no individual persons are required to make the claim true.⁷¹ We are free to speak of possibilities concerning both actual individuals and merely possible individuals, but which ever we mean, talk of actualities is made true by actualities and talk of possibilities is made true by possibilities.

4.3.3 Adequate Fulfillment, Intuition, and Existence.

When the intelligibility thesis is combined with Husserl's theory of knowledge as fulfillment a number of significant consequences concerning modal knowledge and its relationship to conceivability can be drawn.

⁷¹ The term 'it' in the assertion "It is possible for there to be friends", may also conceal a reference to the actual state of the world at present, as in the claim "It is raining." If it does, then the assertion also refers to, and its truth depends on, particular actualities, namely, the state of the world at the time of the assertion. If it does not, the assertion concerns a "pure" possibility and no actualities are involved in its truth maker.

First off, according to Husserl's theory of knowledge, adequate fulfillment is the immediate apprehension of truth, and as such, is the paradigmatic case of knowing. Hence, from the existence of an adequate fulfillment it follows that knowledge, truth, and hence, the object known obtain. Given condition II of the intelligibility thesis, it also follows that from the mere possibility of adequate fulfillment, the possibility of knowledge obtains, and along with it, the existence of the fact or object it is possible to know.⁷² In Husserl's words, "Conversely, if this possibility is guaranteed, then *eo ipso* the object truly is." (ID, Sect. 73)

As stated earlier, fulfillment is the identification of an object presented intuitively with the same object merely thought of. Adequate fulfillment is the condition of complete and perfect identification of every part and property illustrated through an intuition with every part and property meant in a corresponding empty thought. An intuitive act in which nothing of the object presented remains outside of the immediate illustrative presence of the presentive act is likewise an "adequate" intuition. Since anything that can be meant in an intuitive act can be meant non-intuitively (i.e., merely thought), and since knowledge in the form of adequate fulfillment consists in the filling of an empty act by an adequate intuition, it follows that the existence of an adequate intuition of any object or state of affairs guarantees the existence of that object or state of affairs. The reason is that the existence of an adequate intuition guarantees the possibility of knowledge and if knowledge of

⁷² What ever the modality of that fact, possibility included.

something is possible, then that state of affairs capable of being known obtains.⁷³

Likewise, if we re-apply the same general law of relations (condition II) it follows that the existence of the possibility of an adequate intuitive presentation of an object entails the existence of that object.

Given the considerations up to this point a number of essential correlations between the existence of objects and the possibility of adequate fulfilling acts directed to those objects have been laid out. The following diagram expresses the structure of these entailments. The first concerns the correlation between objects and their knowability, the second, the entailment from knowledge to the reality of the known.

Concerning the existence of an object O

Existence and the possibility of knowledge:

$\diamond(\text{Knowledge of O}) \leftrightarrow \diamond(\text{Adequate Fulfillment of O}) \leftrightarrow \diamond(\text{Adequate Intuition of O}) \leftrightarrow \text{O Exists.}$

Condition (I) yields the right to left series of entailments, Condition (II) yields the left to right series of entailments.

Where 'O' designates any object or fact in the wide sense, ' \diamond ' designates "the possibility of", ' \leftrightarrow ' can be read as a bi-conditional. (However, these relationships are de re and hold of the objects, species, and possibilities directly. They hold of propositions or sentences expressing correlative logical relations only indirectly.)

The object of knowledge in the widened sense includes possibilities as well as the other modal relations. So, for example, if it is possible for George W. Bush to serve a second term in office, then it is possible for there to be an adequate intuition of this (ideally considered), and hence it is possible for this modal fact to be known.

⁷³ Likewise, whatever that state of affairs requires for supplementation also obtains.

Thus, with these two theories Husserl draws a link between thought, being, and the modalities (possibility, necessity, etc.) That link boils down to an inseparable tie between intuitive representation and all forms or modalities of being. For every sort of object there corresponds a consciously realizable intuitive representation that is the manner or quality of acquaintance with that object.

These essential relationships between knowledge, thought, and intuition, form the backbone of Husserl's epistemology, and as will be shown, make intelligible the connections we find among conceivability, possibility, impossibility, and ultimately, necessity. To achieve these latter correlations the details about the acts and objects of modal knowledge are required. Of course, an account of a priori knowledge will be an account of the act of knowing and intuiting modal facts, but, as Jerold Katz's has rightly insisted, one of the demands on rationalism is to provide an adequate account of the object of knowledge.⁷⁴ Husserl would agree, for understanding the object of knowledge is the first step in broaching the inquiry into its modes of givenness and ultimately knowledge. What is needed is a clarification of both the act and object of knowledge to which the relations designated above correspond. We must therefore ask what exactly possibilities and the correlative modalities (impossibility, necessity, contingency) amount to. The remainder of this chapter will provide Husserl's response to this demand. When the character of these objects has been clarified, chapters (five & six) will then tackle the phenomenological task of laying out the "modes of consciousness determinately

⁷⁴ See Katz 1998, xxxi.

belonging to them... in which objectivities of such a character become objects of consciousness, and above all become evidently self-given." (PP, 20) That is, we will show the kinds of intuitive representations that generate the presentation of modal facts and the sorts of acts they constitute.

The next two sections will continue to focus on what we can call the ontology of Husserl's epistemology. It constitutes the ontological component to the question of the possibility of modal knowledge, by describing the character of modal relations, and thus establishing not only their possibility, but the character and possibility of their coming to be known.

4.4 The Objects of Modal (& A Priori) Knowledge: Husserl's Mereological Constituentism.

Modal relations, for Husserl, are grounded in the categorial structure of objects, and that structure is cashed out in mereological terms. As will be shown, in virtue of what they are and how they fit together into more comprehensive complexes, objects may or may not, necessarily or contingently, obtain in various contexts and relate in various ways.

Husserl is a constituentist and his approach to ontology is mereological. His study of part/whole relations has its affinity with the scholastic theory of distinctions. There, in the works of philosophers like Suarez, Scotus, et.al, this was not a theory of differences so much as a theory of how different things come together as parts in

greater wholes.⁷⁵ Inherited by Husserl from his teachers Brentano and Stumpf the theory became a formal ontological tool incorporating mereological components.⁷⁶ In the following I will briefly lay out some of the more important tenets of Husserl's mereological constituentism as they pertain to possibility, impossibility, necessity, and contingency.

4.4.1 *On Parts and Wholes.*

Husserl's study of unity in Investigation III of the *Logical Investigations* opens with the following observations.

Objects can be related to one another as Wholes to Parts, they can also be related to one another as coordinate parts of a whole. These sorts of relations have an *a priori* foundation in the Idea [Essence] of an object. Every object is either actually or possibly a part, i.e. there are actual or possible wholes that include it. Not every object, on the other hand, need perhaps have parts, and we have therefore the ideal division of objects into the *simple* and the *complex*. (LI, 436)

In a wholly categorical tone, this passage brings every object under the purview of mereological analysis. Every object is a simple or complex whole that may itself enter into more comprehensive wholes as a part. A part is taken to be anything which can be distinguished "in" an object, or is "present" in it. (LI, 437) Parthood is primitive on Husserl's account, and although it may be axiomatized in

⁷⁵ See Suarez 1947 VII.

⁷⁶ See Smith and Mulligan 1982 for a discussion of the theory and its evolution.

terms of related notions (e.g., “disjoint”, “overlap”) it is clearly not reducible to or clarified by such definitions.⁷⁷

As the last sentence of the passage professes, objects divide into complex and simple. Every object is complex in so far as it has proper parts. It is simple in so far as it does not. These assertions, in keeping with the whole of this section, range over every object in the wide sense mentioned earlier.⁷⁸

4.4.2 Dependence and Independence. (Parts and Moments)

Concerning any complex whole, its parts and properties can be distinguished according to the way they are united with other elements in that whole. Any two objects combined in a given whole are “independent” from each other if their combination permits their removal and continued existence apart from each other. For example, the buttons on my shirt sleeve are independent from my shirt sleeve. The doors of my apartment and the tires on my car are also independent in this sense. Brentano called this relation separability, while those in the scholastic tradition called it a real distinction.⁷⁹

Contrary to Hume, not all distinctions are real distinctions, and therefore, not all elements distinguishable in a given complex whole are separable.⁸⁰ For example, the wrinkles in my shirt are not separable from the shirt sleeve to which they belong.

⁷⁷ Husserl explicitly rejects the possibility of definitions of primitives such as ‘parthood’. See PA Chapter VII.

⁷⁸ Section 3.1.

⁷⁹ See e.g., Suarez, *Metaphysical Disputations* VII, and Descartes *Principles of Philosophy* I, Sect. 60f.

⁸⁰ See Hume, *Treatise on Human Nature*, Book I Part I Sect. VII.

While the shirt can exist independently of its wrinkles, given a good ironing, the wrinkles are not so lucky. The color of my shirt is another example. It too is inseparable and non-independent from the extension of material it occupies.

Obviously, these facts are not limited to my shirt and its color and wrinkles, but are true of all colored and wrinkled material. Independence or non-independence holds, quite generally, of every wrinkle, color, and material extension, and does so in virtue of what wrinkles, colors, and material extensions are. It holds because of the species of objects found together in the complex wholes under discussion. Wrinkles and colors, because of what they are, i.e., their species or essences, are non-independent and inseparable from the coordinate material extension they find themselves unified with.

The relation between my shirt and its wrinkles and color is a relation of one-sided separability. Two objects are only one-sidedly separable if and only if one member can exist without combination with the other, but not vice versa. While my shirt is one-sidedly separable from its wrinkles (e.g., it can survive an ironing), the wrinkles are not. They cannot survive the destruction of my shirt. The wrinkles are inseparable from the shirt that bears them. Constituents of a given whole can also be mutually inseparable from each other. The frequently used example of the pitch, volume, and timbre of a tone is an excellent case. Each of these aspects of any respective tone cannot exist without unification with the others.

As these examples suggest, Husserl accepts the reality of property instances or 'tropes' (also called "abstract particulars"), and regards them as parts of

individuals. The unity of property instances into more comprehensive wholes derives wholly from their nature, and their nature also prescribes the sorts of unities they can partake in. Not just anything can be joined to anything else, and not just anything can be a part of any whole.

It is not a peculiarity of certain sorts of parts that they should only be parts in general, while it remains quite indifferent what they are conglomerated with, and into what sorts of connections they are fitted. There are fixed, necessary connections, pure laws definite in content, which vary with the pure Species of non-independent contents, and accordingly prescribe one sort of completion to one of them, another sort of completion to another. (LI, 454)

Inseparable, non-independent objects, Husserl called 'moments'. Moments are intrinsically partial. That which provides the needed supplementation for a given moment is its fundament or "foundation".

If a law of essence means that A cannot as such exist except in a more comprehensive unity which associates it with M, we say that an *A as such requires foundation by an M* or also that *an A as such needs to be supplemented by an M*. (LI, III, Sect.14)

The wrinkles of my shirt find foundation in my shirt. The shirt grounds their being, and their possibility. Wrinkles are essentially partial beings that are instantiable only in union with certain other specific elements. While my shirt and most garments can be wrinkled, a poem, a country, and a battle cannot. These latter sorts of things cannot provide supplementation for wrinkles, and this evident triviality is prescribed by the very nature of wrinkles, as with all moments, themselves.

Independent parts, on the other hand, do not require supplementation for their being. They can exist alone. In so far as they find themselves as parts of greater wholes, unified with other independent wholes, they are so unified, not necessarily but accidentally. Independent parts are, so to speak, only accidentally parts. Their unity with other parts is not necessitated by their nature. Unlike dependent parts (moments), they require a bonding principle, a sort of “glue”, to hold them bound up with other things. The bricks of my house are a good example of this. On the other hand, non-independent objects like the property instances of color, shape, pitch, hue, mass, etc., are intrinsically partial and in need of supplementation. Their inclusion into more comprehensive complex wholes is essential to their very being. Consequently, no external relation, no glue or force, no moment or principle of unity is required to hold them bound to their fundament.

Non-independent objects are objects belonging to such pure Species as are governed by a law of essence to the effect that they only exist (if at all) as parts of more inclusive wholes of a certain appropriate Species. This is what we mean by the terser expression that they are parts which only exist as parts, that cannot be thought of as existing by themselves. The color of the paper is a non-independent ‘moment’ of the paper. It is not merely an actual part, but its essence, its pure Species, predestines it to partial being : a color in general and purely as such can exist only as a ‘moment’ in a colored thing. In the case of independent objects such a law is lacking: they may, but need not, enter into more comprehensive wholes. (LI, 447)

The value of this mereological excursion lies in its emphasis on species. That is, on the nature or essence of each object and object part. Objects are either dependent or independent according to their species. Further, dependent parts find supplementation due to their species and the species of their respective supplements.

Objects are not unified willy nilly, nor are the bonds of their unity found among them qua existent or qua individuals. The form of dependence that elements of a given unity enter into derives wholly from what they are. It is the relations among species, among what each actual or possible object is, that determines the form of unity that various parts have with each other in the wholes they are parts of. As will become evident shortly, the account of unity in terms of species and their instances forms the basis for Husserl's account of the various modal relations.

4.4.3 Compatibility and Incompatibility.

Not just any object can be joined with just any other, and not just any partial object can find supplementation in just any other. The specific requirements attaching to the various species of possible constituents result in a division of objects into compatible and incompatible. Two objects are compatible if they can, "suffer each other in the unity of a whole" and are "incompatible, to pursue the opposed case down to its general grounds, if they cannot..." (LI, 753) For example, the legs of my chair and the seat of my chair can combine as parts into the whole object that is my chair. The same goes for the particular property moments of the chair like its color (green), shape, and style (modern office). The proof of their compatibility lies in their exhibition in my chair. On the other hand, my chair cannot suffer the visual qualities of black and transparent, rough and smooth, or red and green, all over. These pairs of property instances are incompatible.

There are two points to emphasize about Husserl's notion of compatibility. First, compatibility is determined by the species of the elements united, not their "dispersed individual specimens." (LI, 752) It is in virtue of what they are that two objects can enter into the unity of a whole with each other. Trivially, individuals qua individuals are never the basis of any relation. It is not because I am David Kasmier that I can enter into contractual relations with other persons, but because I too am a person with certain capacities and powers. Second, parts are never compatible (or incompatible) simpliciter. Compatibility always pertains to a whole of a certain form.⁸¹ If two objects can suffer each other in the unity of a whole then they can be combined according to the form laid down by that whole. The form of unity is important, for two objects that are incompatible under one form of unity may be compatible under another. For example, whereas no material object can be red and green all over, a material object may be both red and green where the color moments lie adjacent to each other.

Colors conflict with one another, not in general, but only in specific contexts... This is universally the case. A content [object] of the sort q is never simply incompatible with a content [object] of the sort p: talk of incompatibility always relates to a definite sort of combination of contents [object] $W(a, b...p)$ which include p, and should now include q as well. (LI, 753)

There is one exception to this rule and that is the case of simples. Simples, Husserl claims, have a limiting case of compatibility in the sense that they are compatible with themselves. Since simples have no parts, they are wholes incapable

⁸¹ See also LI VI, 752.

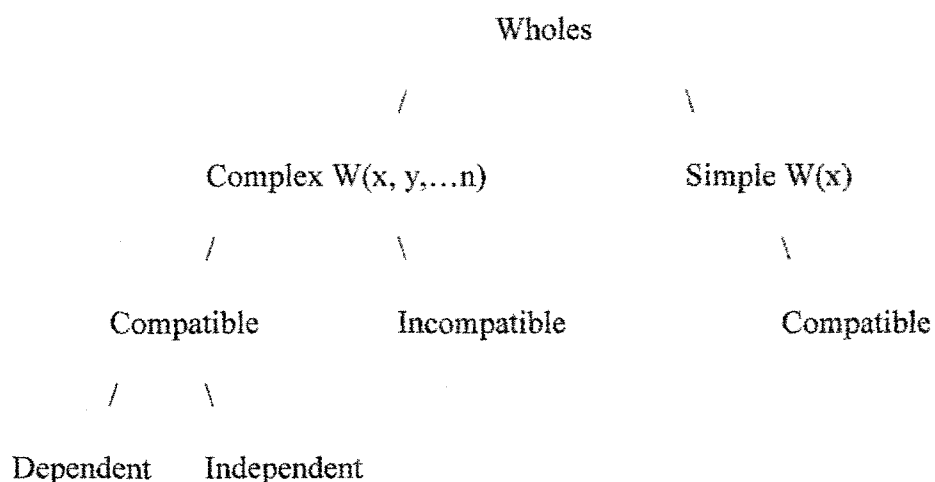
of internal conflict, and their compatibility relative to a form of unity, if it means anything at all in such a case, means that they are compatible with themselves according to their own form. It should be noted that every simple, if there are any, is necessarily a partial non-independent object. However, it does not follow that the instances of all simple species obtain, for simples as intrinsically partial entia, live and die with the individuals they find themselves constituents of.

It might be suggested that every combination of objects is compatible, for any set of objects, even contradictory opposites, can be members of the same set and sets are genuine wholes. Therefore, nothing is really incompatible with anything else. Within the Husserlian framework, there is no problem or counterexample here at all. It is the form of combination of sets and sums that permits membership to most any object. Thus, there can be a set of red and green and some material extension. But no such set or sum has the form of a colored material object.⁸² A colored material object that is red and green all over has an entirely different unity than a sum consisting of the same elements.

Objects that are compatible subsequently fall under the categories of dependence relations described above in section 5.3. The parts of every compatible whole divide into those that are independent (separable) of each other, those that are one-sidedly dependent (one-sidedly separable), and those that are mutually

⁸² A set or even a mereological sum can have as parts a color, a material extension, and WWII. However, no colored material object can have WWII as a part. This suffices to show that the form of unity of sums and material bodies are not identical.

dependent (mutually inseparable).⁸³ Thus, the mutual dependence between shape and size exhibit a defacto compatibility, and every inseparability entails the possibility of combination. Obviously, dependence relations do not obtain between incompatible objects where there is no possibility of union. This hierarchy can be expressed in the following chart.



To summarize, given any purported object W , W is either simple or complex, thus having parts or not. If W is complex, its parts are either compatible or incompatible with each other relative to the form of unity determined by W . If W is simple then its part is self-compatible. If the parts of W are compatible then each part is either dependent or independent from each other part in that whole.

⁸³ Naturally, a complex of mutually dependent species, may itself also be dependent on yet further species.

4.4.4 Compatibility, Possibility, and Species.

Compatibility (and incompatibility), as has been noted, is due to the nature of the parts of a given complex. Two or more objects are compatible (relative to a form of combination) if and only if their respective species permit their union in a more comprehensive whole according to the form laid down by that whole. Clearly, this definition invokes modal notions. It states that if parts x, y, \dots, n are compatible in some whole W , then it is *possible* for x, y, \dots, n to be unified as parts of some whole W . But if it is possible for x, y, \dots, n to be unified into a whole W , then it is possible for there to be a whole W made up of the parts x, y, \dots, n . Thus, from the possibility of unity we get the possibility of the resultant unit. It follows from this that every whole, all of whose parts are compatible (relative to the form of that whole), is a possible object. For example, if it is possible for an instance of the property of red and an instance of the property round to be unified into a whole according to the form Material Object, then it is possible for there to be a red round material object. Likewise, if it is possible for the walls of my room to combine with an instance of the color yellow into a whole according to the form of a wall, then it is possible for my walls to be yellow. The same entailments work for relations as well. Thus, if it is possible for every nation state to combine together as terms in a greater relational whole of the form [Being at Peace], then there can be world peace.

We get a similar account for impossibility. If two or more objects x, y, \dots, n are incompatible in a given whole W relative to the form of unity of that whole, then

it is impossible for there to be a whole W consisting of parts x, y, \dots, n relative to the form of unity of that whole.

The entailment from compatibility to possibility is an entailment from one possibility to another, and equating the possibility of a whole with possibility of the union of its parts leaves open just what possibility in either case consists in. In response, one might invoke the statement made several times already that compatibility relations are established by the nature of the parts and wholes in question. For Husserl, however, this statement is not the final word (though it is close to it). Husserl's metaphysical realism demands the existence of those natures to support modal relations. According to Husserl, compatibility finds its ultimate ground in the existence of a universal. Specifically the universal that is the essence of the purported whole W that has x, y, \dots, n as parts. Any set of species that permit such combination of their instances, in turn, constitute out of themselves a complex universal.

It is the ideal 'existence' of this complex Species in which compatibility of redness and roundness, in each thinkable instance, has its a priori foundation, a compatibility which is an ideally valid relationship whether empirical union occurs anywhere in the world or not. (LI VI Sect. 31)

In the existence or non-existence of a universal lies the ontological ground, the final court of appeal one might say, of compatibility and thus possibility. The account is congruent for impossibility as well. An object is impossible if and only if it is a whole any of whose parts are incompatible relative to the form of that whole.

Accordingly, there is no complex universal that is the essence of such an object.⁸⁴

Though the component species (universals) of an impossible object may be compatible in other combinations or under other forms of composition, they fail to unify under the form of the whole in question.

Husserl's conception of possibility, however, asserts more than a correlation between possibilities and universals, it asserts an identity. Concerning the reality of a species Husserl states, "...to reduce it to the possibility of corresponding particulars is not to reduce to the possibility of anything different, but merely to employ an equivalent turn of phrase." However, this identity holds only "When 'possibility' is given its 'pure', and therefore non-empirical, sense, and is 'real' only in this pure fashion." (LI, 749-750) The import of 'pure' in this assertion is to distinguish possibilities that concern actualities and those that do not. The point being made here is similar to the point made about truth makers for modal claims in section 3.1.2 above. "Pure" possibilities involve no actual objects. For example, the possibility that there are colored material objects is a pure possibility as long as it is not read to indicate only the colored material objects limited to this universe with its origin, history, etc. In the "pure" case, the existence of the complex universal [Colored Material Object] is both a necessary and sufficient condition for the possibility of there being colored material objects. For "impure" possibilities, possibilities that concern actualities, the reality of a species is a necessary but not sufficient condition, for the existence of the individuals referenced is also necessary.

⁸⁴ Though there may be concepts and propositions concerning impossible objects.

For example, if it is possible that Jim has blue hair, then the reality of the complex universal [Blue-Haired Man] alone is not sufficient. Jim too must exist. All of these components then must be compatible, and not willy nilly, but in the form of a man with blue hair on his head.⁸⁵

Husserl offers no argument for the identity thesis and, in fact, often speaks merely of a correlation between species and their possible particularizations.⁸⁶ Whether or not an identity can be maintained the correlation that holds between universals and their possible particularizations is doubted by few.⁸⁷

4.4.5 *A Paraphrase.*

If the reader finds talk of universals and species extraordinarily unpleasant, I think that much of what has been said can be otherwise stated without a loss of sense. If we paraphrase away terms like 'species' and 'universals', I suggests we get the following thesis regarding possibility: If there is something that it is to be for an object O, consisting of parts (x, y, ...n) unified according to a form F, then it is possible for there to be an object O consisting of parts (x,y,...n) and unified according to the form F. In short, O is a possible object. From the mere consistency, or better, the mere intelligibility of a union of its parts, the possibility of an object is guaranteed. If there is something that it is to be a round material object, to be a

⁸⁵ On this account, possibilities come in two kinds. Those grounded in universals alone, and those grounded in actualities and universals. There seem to be no possibilities grounded in actualities alone.

⁸⁶ See E.g, ID Sect. 7 and EJ Sect. 96(c).

⁸⁷ To deny this requires either acceptance of impossible objects or acceptance of the existence of universals of impossible objects, an unpopular pair that would seem to go hand in hand.

moral property, to be a disembodied mind, or to be a material object that is red and green all over, then it is possible for there to be round material objects, moral properties, disembodied minds, and things that are red and green all over.

Conversely, if there is nothing that it is to be a disembodied mind, a moral property or a round square, then the existence of such things is impossible.

4.4.6 Dependence and Necessity.

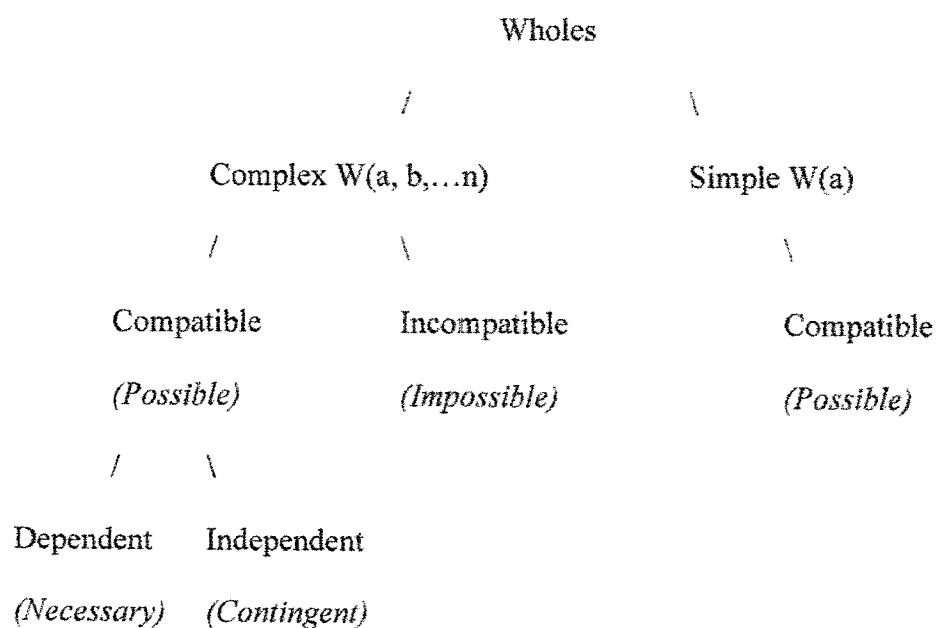
As stated above, any pair of objects unified as coordinate parts of a given whole are either separable or inseparable from each other. Universals prescribe to their actual and possible instances their relative dependencies. These dependence relations serve as the final ground of both necessity and contingency. According to Husserl, necessity and contingency are rooted in relations of dependence and independence, respectively.⁵⁸ According to this theory, it is the mutual dependence that shape and size (for example) have with one another that makes it the case that everything with a shape necessarily has a size and everything with a size necessarily has a shape. This mutual dependence is grounded in the nature of shapes and sizes themselves. Every actual and possible instance of shape and size, could not be and be what they are without combination in some greater whole. Thus, that a certain proposition is necessarily true, a material object is necessarily extended, a person is necessarily obligated, etc., are all made true by the form of unity the relevant proposition, material object, or person has with its truth, extension, or obligation,

⁵⁸ Whether de dicto or de re.

respectively. Contingency is explained in a like manner. For example, if my desk is contingently brown, then my desk and its brown moment are compatible relative to the form of a desk, and the desk is such that it can exist and be what it is without being unified with its brown color moment.

On this account, it is the form of unity found among objects themselves in which necessity lies, forms of unity prescribed by what those objects and their properties are. Necessities are not grounded in the fact that all cases of x are cases of y , or even that all actual and possible cases of x are cases of y (though this is sufficient), but in the kind of unity that obtains between x and y in virtue of their natures.

The following chart amplifies the division of wholes in light of the analysis of modality provided in the last two sections.



4.5 Intuition and Modal Unity.

Now my overarching aim in the previous section is not an exhaustive ontology of modality, but an account of the intuition of modal relations, in particular the necessities so frequently cited as a priori truths. The excursion into Husserl's constituentism has served this end through a clarification of the object of modal knowledge. Specifically it has provided a straightforward way to specify the form of intuition demanded by each modality. Since the possibility of a whole W of type T consists in the compatibility the parts $(x, y \dots n)$ of W relative to the form of combination laid down by T , to intuit the possibility of W consists in intuiting the compatibility of $(x, y \dots n)$ relative to the form T . In short, to intuit a possibility is to intuit a compatibility. The same story can be told for each modality. Since an object is impossible if and only if any of its parts are incompatible relative to a form of combination, to intuit an impossibility is to intuit an incompatibility within the unity of a whole relative to a form of combination. As for necessity, since necessity is rooted in the dependence relation (inseparability) holding between objects within the unity of a given whole, to intuit a necessity is to intuit a dependence relation. Likewise, to intuit a contingency is to intuit the independence and thus separability two or more objects unified within a given whole.

These forms allow us Husserl to begin the search for, and description of, the acts that take these relations as their objects, and thus to answer the question of modal and hence a priori knowledge, i.e., how do we come to see necessities or the

“necessary character of reality”?. In Chapter one that question took the form: How do we come to know the specific modal status of universal necessities? Universal necessities come in a variety of forms. What I have been calling impossibilities and necessities are both universal necessities in this regard. Possibilities too are always necessarily possible and subsequently fall under the class of universal necessities. For if it is possible for an obligation of a certain sort to be fulfilled, then trivially it is necessarily the case that obligations of that sort are fulfillable. The possibility of knowledge, on the Husserlian account, depends on the possibility of intuition. With the intuition of the various modal relations given a form in terms of unity the inquiry becomes the search for the acts and act types that constitute the intuition of dependence and compatibility relations. That is, with the ontology of the objects and acts specified (the ontology that makes modal knowledge possible), the character of the realization of that possibility can begin. Consequently, the question of modal knowledge can be reformulated. What we want to know, within the Husserlian framework is how “seeing” separability, inseparability, compatibility, and incompatibility is accomplished. How is it possible to intuit dependence and compatibility relations among both actual and possible objects, and quite generally, among entire classes of objects of various sorts? Wherein do these relations arise in our experiential life to become objects of thought and knowledge? What is the structure of the experiences that bring these relations to light?

The short answer to these questions is that both compatibility and dependence relations are established by way of intuitive presentations. This follows from

Husserl's theory of knowledge and the intelligibility thesis. Take the case of compatibility. Two or more objects are compatible under a given form if they can suffer each other in the unity of a whole according to that form. Given the correlation between intuition and being it follows that two or more objects are compatible if and only there is a possibility of intuitively presenting their combination. Furthermore, if there exists an adequate intuition of their combination it follows that the resultant whole that they compose exists. Thus, if two or more objects can be intuitively presented as combined into the unity of a whole *W* according to the form laid down by that whole, then they are compatible and their unity is a genuine possibility. Similarly, if they can be intuitively presented as separated then their unity is not necessary. If they cannot be intuitively presented as separated, then their unity is essential.

To find these relations holding among various sorts of actual and possible objects requires that we attempt to intuitively present the combination, isolation, and separation of the objects of the species and relations we aim to illuminate. Of particular significance then is the fact that intuitive presentations are not limited to perceptual acts.

It is likewise irrelevant if this fulfilling intuition is a precept, or a pure construction of fantasy, etc. Since the summoning up of imaginative pictures is more subject, in varying degrees, to our will, than that of precepts and assertions, we incline to relate possibility specially to the picture life of fantasy. A thing counts as possible, if it allows itself, objectively speaking, to be realized in the form of an adequate imaginative picture, whether we ourselves, as particular empirical individuals, succeed in thus realizing it or not. (LI, 760)

As mentioned in section 2.1 perception is not the only intuitive act.

Imagination, according to Husserl, is not only capable of intuitive presentation, it has an essential tie to perception that guarantees that to each adequate imagination there is a species of perception whose content is qualitatively identical to that of the imagination. In a nutshell, Husserl theory is that we freely and creatively imagine various unities and divisions. If we accomplish this without a loss of intuitive adequacy, we win the modalities.

Dependence and compatibility relations are relations prescribed by the natures of the objects in question. Accordingly, his account of modal intuition begins with an account of the intuition of universals. Again, it is not because I am David Kasmier that I essentially have certain rights, but because I too am a person. What is determined to be essential to an individual is always found to be essential in virtue of its kind. Universals as the final arbiter in modal matters play the central role in Husserl's theory. The first question to be dealt with then is how do we intuit universals? The second, how do we discover the dependence and compatibility relations among them that ground the various modalities? To answer these questions Husserl takes on the task delineated in section 2.1 above. He attempts to describe the experience we have that fulfills our general meanings, our concepts of general objects such goodness, color, justice, humanity, etc. He then proposes a method for revealing the dependence structures prescribed by such general objects. I will take up his answers successively in chapters five and six.

4.6 Conceivability and Possibility.

Before I take up those issues, there is another service provided by the Husserlian theses presented thus far. In conjunction with the mereological analysis, Husserl's theory of knowledge specifies the nature of the relation between modality and knowability in such a way as to provide a conceivability criterion for possibility (and impossibility). For note, that if any of the modal intuitions (of compatibility, dependence, etc.) are adequate, it follows from Husserl's theory of knowledge that their objects obtain.

In this last claim we have an explanation of the recently much sought after tie between conceivability and possibility: The adequate intuition of an object all of whose elements are compatible entails that the object is possible. Therefore, conceivability, in the form of adequate intuitability, entails possibility.

Knowledge entails both truth and the existence of the object known. The perfection of knowledge according to Husserl's theory is adequate fulfillment, the identification of every part and property meant with the same parts and properties intuitively presented. According to the Intrinsic Intelligibility thesis the mere possibility of this fulfillment, or the intuition it depends on, guarantees the reality of its object. Thus, the possibility of an adequate intuition of compatibility guarantees the existence of that compatibility and hence possibility. Consequently, conceivability, in the form of adequate intuitability, is essentially tied to possibility.

One benefit of this theory is that it accounts for the fact that conceivability has any thing to do with possibility in the first place. That is, it provides an answer

to the question: why is conceivability a guide to (or evidence for) possibility?⁸⁹

Conceivability in the form of adequate intuitability is a guide to possibility because it entails the reality of a possibility. The tie between intuitability and possibility does not require supplementation by external factors such as reliability for its unity, their bond follows from the very character of the objects in question.

The inclusion of the mereological analysis into this theory has the benefit of providing an independent criterion for adequate conceivability. An adequate conceiving, which in turn entails the possibility of its object, consists in an intuitive representation of every part and property of the object meant. In terms of compatibility, to present every part and property of two or more objects as combined relative to some form of unity is to present the possibility of that union, and thus, the possibility of the resultant object.

Of course, intuitions of compatibility need not be adequate, and when they are less than ideal, the possibility of the intuited object is not guaranteed. Nevertheless, the epistemic value of intuitions is not to be sought from without in the form of truth-tracking, causation, reliability, etc. The value of conceivability in the form of intuitability is due to the nature of intuitive presentations. They are systematically and intrinsically revelatory of reality. Whether adequate or not, they always purport to directly present the matters as they are, whether actual or possible.

The significance of inadequate intuitions leads to another important consequence of this theory. There are categories of objects, e.g., material

⁸⁹ Many have supposed a connection but no one to my knowledge has proposed an explanation why. See For example, Chalmers 2002, Yablo 1993, VanCleve 1983, et.al.

substances, whose possibilities fall outside the scope of a priori determination. The reason is that material substances, like most material objects, are incapable of being adequately intuited in any closed or finite set of experiences. It is part of their character that they are inadequately perceived. Thus, no matter the degree of intuitiveness with which one presents a possible material substance or a possible state of affairs concerning an individual material substance, that possibility cannot be guaranteed. There is always more of object than is illustratively presented in any finite act or set of acts, and thus there is always the possibility that these acts have missed a relevant feature that may make an apparent possibility impossible. For example, one might suppose that it is possible that I take the train to San Diego. They may perfectly clearly intuitively imagine me on a train going to San Diego, and they may be right, but their intuitive illustration cannot guarantee this possibility. I may have many features and parts that have not been taken into account. Any speculation about what I may or may not do, is just that, speculation, not insight. Only by presenting the whole of my nature and properties, the nature of travel, the nature of trains, and the nature of the properties of the city of San Diego can a mere conceiving guarantee possibility.⁹⁰

There is yet a further laudable consequence of Husserl's theory worth mentioning here. His theory entails that there can be no adequate intuitions of either impossible objects or non-existent universals. In Husserl's words, "no unified intuition must be possible which presents such a whole with complete adequacy."

⁹⁰ This inadequacy accruing to material substances, transfers over to their natures as well. This issue will be broached in the next chapter.

(LI, 753) This too follows from the intelligibility thesis, specifically condition II. That condition asserts that if p is knowable then p exists. In terms of Husserl's theory of knowledge it amounts to the claim that if p is adequately intuitable then p exists. Consequently, if p does not exist, p is not adequately intuitable.

This does not mean there cannot be adequate intuitions of the specific elements allegedly constitutive of an impossible object. It means only that those elements cannot be adequately intuited as combined according to the form laid down by that object. Thus adequate intuitions of round squares and other impossibilities are ruled out. But adequate intuition of round objects and square objects (or roundness and squareness) are not. This, it seems to me, is exactly the sort of thing we want from our modal epistemology. This is not however, what we get when we turn to recent debates on conceivability and possibility. Instead, we get the widespread acceptance of such sets of claims as that one can conceive Goldbach's conjecture to be true and one can also conceive it to be false, or the claim that one can just as equally conceive that God exists as that he does not exist.⁹¹ These observations are then used to support the view that conceivability is suspect as a guide to possibility. The reasoning usually runs as follows. Since Goldbach's conjecture (that every even number is the sum of two primes) is either necessarily true or necessarily false, if it is possible for it to be true then it is necessarily true and if it is possible for it to be false then it is necessarily false. Let us suppose that it is true. Given that Goldbach's conjecture is true, it is necessarily true, and its negation

⁹¹ Van Cleve 1983, Yablo 2000

is necessarily false. Thus, its negation is not possible in spite of the fact that persons conceive it to be possible. Hence, the so-called conceivability of the falsity of Goldbach's conjecture fails as a guide to possibility, and so too does the conceivability criterion in general.

The Husserlian response to this objection is to distinguish intuitive from non-intuitive conceiving and then to distinguish adequate from inadequate intuitive acts of conceiving. With these distinctions in hand we can ask whether the truth or falsity of Goldbach's conjecture is adequately intuited by anyone. The answer would appear to be no, at least not by any one involved in the philosophical debate over conceivability and possibility. On the Husserlian account, each claim and its negation are only conceived in the sense that they are inadequately intuited. From this, the possibility and impossibility of Goldbach's conjecture cannot be established. On Husserl's account, if Goldbach's conjecture is true and hence possible, there is a species of adequate intuition of it and there is no adequate intuition of its negation. Thus, it is not the case that some persons have adequately intuited (by way of imagination or otherwise) every part and property of the fact that some number is sum of two primes. The same goes for the conceivability of God's existence and its negation. These consequences however, have no bearing on the value of conceivability or the necessity and truth of the claims. They allow that conceivability has an essential tie to possibility and can function as a guide to possibility under certain ideal conditions. The value of inadequate intuitions is a

substantially different issue that would require an analysis of their qualities relative to their subject matters as well as the conditions under which they arose.

4.7 Conclusion

Husserl's ontology of modality in terms of mereological constituentism has provided us with precisification of the object of modal knowledge, the ground for our modal claims, and the path to an account of our apprehension of these objects. With the characterization of the object of modal knowledge in place, the account of our apprehension of those objects can begin. The following chapter will take up the first issue: The intuition of universals.

Chapter 5

The Intuition of Universals

If we ponder the peculiarity of eidetic abstraction, that it necessarily rests on individual intuition, but does not for that reason mean what is individual in such intuition, if we pay heed to the fact that it is really a new way of conceiving, constitutive of generality instead of individuality- *then the possibility of universal intuitions arises, intuitions which not merely exclude all individuality, but also all sensibility from their intentional purview.*
(LI VI Sect. 60)

Husserl was a realist about universals. Accordingly, he held that all similarities are grounded in identities. For the realist, a universal or type just is that grounding identity; it is that in virtue of which things ultimately are similar or different.⁹² To apprehend that identity, a genuine “one over many” that runs through two or more similar objects, amounts to grasping a universal. In the following I will explicate that apprehension first with a sample case, and then in theoretical detail according to Husserlian texts.

5.1 A Sample Case: How to become acquainted with a universal.

Take a look at the following two occurrences of a familiar numeral printed below. Obviously they are identical. Look again, if you will, and observe some of their parts and properties.

2

2

⁹² I am excluding, of course, simple numerical difference among individuals.

The process of observing and noting the features of one, and then the other, naturally motivates a comparison between them. Speaking for myself, when I let this motivation guide me I begin to systematically make comparisons.

In reflection upon the process of comparing the two figures, I note that I examine no more than one or two features at a time. I find that I look closely at the '2' on the left, note its shape, color, size, etc., and then look to the other and its respective shape, color, size, etc. I do not merely see the pairs of features, but I look with a determinate intention. My aim is to see if the latter is like the former. Systematically, my intentions find fulfillment, as I find that the shape, color, size, etc., of the second is exactly like the shape, color, size, etc., of the first. More than that, the degree of similarity is also made manifest. In the case above, I find the shape, color, size, etc., of the one to be exactly like the shape, color, size, etc., respectively, of the other.

Of course, it was immediately apparent that both figures are very similar even without an explicit or systematic comparison being made. As soon as they visually appeared certain similarities jut out at the observer. Their similarity is to some extent presented even before a comparison is made. But when an explicit comparison is made, the natural affinities between the objects becomes fixed upon and determined. To put the matter in Husserlian terms, the respective similarities become intuited and fulfilled. We might say that in comparing the figures I moved from a perception of their likeness to knowledge of their likeness.

My interest in the figures, however, does not stop at the determination of their exact similarities. I also find it obvious that the figures are identical. I do not mean that I find them to be the same individual figure, but that I find them to be the same figural type. Let me be more specific. By way of my systematic comparison, it appears to me that the figures are qualitatively identical. For each property I note in one I find the other also shares it. Each appears to have exactly the same shape, color, dimensions, etc., as the other. With respect to any given feature, they are not just similar, they are really *the same*, and likewise for their other non-relational properties.

These latter judgments, that the figures are identical with respect to their shapes, colors, etc., are judgments of identity. Yet, it is no individual that is being identified. Instead it is a universal (e.g., shape, color, figural type), as the respect in which the figures are similar, that is identified. Each such identification, grounded in a perceptually based act of comparison, constitutes the apprehension of a universal (a genuine “one over many”) among a multiplicity of individuals.

One may suspect that there is some sleight of hand at work. They may suspect that this is an attempt to get the reader to swallow universals without showing wherein they lie before us. Still unexplained is how one legitimately moves from the comparison of two distinct individuals to a consciousness of identity. Without that explanation there appears to be a gap in the account. To help alleviate this sort of concern let me say what I think has happened in my transition from comparison to identification above.

In that transition my thoughts turned from the like in relation to like to a new unity, to a type (e.g., their shape). The type appeared as the respect in which each is similar to the other. That respect became wholly demarcated in the coincidence found between the two distinct, yet similar individuals. The figures were still like each other, and appeared so, but when regard was given to their type, they were seen to bear a distinct relationship to each other. The type of the one appeared to be the same as the type of the other. By turning my regard away from the individual figures and their individual property moments, to their respective types, it became possible for me to make this identification. It is just such an identification that an intuition of a universal consists in.

This identification required that I direct my thought to a type as the category or essence of the individuals found congruent through that comparison. When I so judged with the concept of that type, my judgment geared towards identity found fulfillment and I recognized that the figures have the same shape. The shape to which I attended in the one appeared to be the same (in type) as the shape present in the other. It did not appear as the same individual property instance or moment present in each figure. Instead, each moment appeared as identical with respect to its concept, with respect to its "whatness", i.e. its essence.

Objects that have properties are similar or different in virtue of those properties, but property instances (moments) themselves are similar or different wholly in virtue of what they are. That is the rock bottom basis of similarity, and that is what gets apprehended in the intuition of a universal.

In short, the intuition of a universal is a consciousness of sameness. More precisely stated, to intuit a universal is to become conscious of an identity of type on the basis of a comparison between two or more intuited individuals. To be conscious of an identity of type is to recognize an identity between what one thing is and what another thing is. That literal sameness found holding between the two individual (e.g., shape) moments of the figures above *is* a universal, and it is found holding between them not as a part they share, but as a true one over many.

5.2 Husserl's Theory.

The account just given is essentially Husserl's position on the intuition of universals. Universals appear via an identification based on comparison of like objects. The following lays out more precisely Husserl's theoretical account of just how universals arise for intuition, their nature, and the character of the acts which apprehend them.

5.2.1 The Consciousness of Types in the Life-World.

For Husserl, our primary encounter with the world lies in the perception of the everyday objects of the common sense world. On a short commute, for example, one usually perceives cars, people, roads, noise, music, wind, and road signs, among other things.⁹³ Consciousness of objects as houses, cars, and people means consciousness of things as certain types of things. Hence, a reference to types is

⁹³ These are all objects of what Husserl's calls our "Lebenswelt" (Lifeworld).

implicit in our normal everyday perceptual regard. But reference to types does not entail the intuition of types. The reference to types in our perception of the common sense world is merely an empty (non-intuitive) component of our explicit intuitive reference towards individuals. And though there is already a reference to a type, “there is a fundamental difference between the case where this reference to the universal in the act of judgment is itself thematized and the case where it is not.” (EJ, 318) In perception of the common sense world, types are not yet made the object of explicit attention, and certainly not intuited.

To actively apprehend an object’s type is to intend and find fulfillment in a universal. The process which makes the universal intuitively present for the sake of fulfillment usually begins with the perception of individuals and their similarities. In visual perception, for example, we may be presented with several similar objects, such as a set of white coffee cups. Each particular cup may be further explored and explicated by our perceptual regard.⁹⁴ One may turn their regard to the cups parts and pieces, its dependent parts like its shape, color, or rim, and to its independent parts like its handle. Each moment in the cup attended to on the basis of this unified perception and its perceptual regard is seen as belonging to *this* same cup as opposed to another adjacent to it, or any other object. Thus, e.g., we see this cup’s color aspect and this same cup’s surface texture, etc. All of these perceptive acquaintances have individuals as their objects, whether concreta (e.g., cups, handles) or abstracta (e.g., shape moments, color moments). Another cup may take up our interest and its

⁹⁴ See EJ Part I Chapter 2 on the role of explication in perception.

parts and pieces may be explored. In passing from one cup to another and from one moment to another, natural affinities may motivate our explicit attention, and we may pass from one color moment to another in an act of comparison. If two like moments are compared, an identity running through both of the moments can emerge. When this happens, we become intuitively presented with a universal as the type of that which coincides in comparison between two or more like moments. In the case of two white color moments we become acquainted with a certain species of color.

When we pass from like moment to like moment a unity emerges in the coincidence, a unity in the duality of elements which are both separated and linked together, and that this unity emerges over and over again as totally and identically the same when we pass to a new member S'' and S''' , in which we have the moment p which is always like. (EJ, 324)

The conscious registering of this unity on the basis of a perception is an intuition of the universal. The universal apprehended is "already there"

...in the passive coincidence of likeness of the moments p' , p'' , and so on as the unity of the species p : on the strength of this an active judgment orientated in a new direction is possible, in which, if we return to S' and re-effect the identification, we no longer determine S' by p' as its individual moment but by p as identically the same in S , S' , and so on. There result the judgments S' is p , S'' is p , and so on, in which p no longer designates an individual predicative core but a general one, namely the universal as that which is common to two or more S 's successively apprehended. (EJ, 324)

Husserl stresses that the identity of the universal p among two or more like moments p' and p'' does not present itself as a sensuous unity. The universal white, for example, identified among a set of white coffee mugs, is not presented as another

color quality to be sensuously perceived and compared with the color of the mugs.⁹⁵ For that matter, the universal is not presented as an individual object or moment at all. Though it is essentially meant in connection to a plurality of individuals, it is meant precisely as the essence of the individuals presented. That is, it is meant as what each of them is in the case of quality moments, and derivatively in the case of qualified objects, as how each of them is qualified.⁹⁶

5.2.2 Fulfillment and Categorical Identification.

In every apprehension of similarity there is necessarily a reference to the respect under which the comparison is made. Two items can only be similar or different with respect to some aspect or feature, be it shape, color, etc. Two white coffee mugs, for example, are like each other with respect to their color. Cashed out in terms of color moments, this means that the color moment of the one cup is similar to the color moment of the other cup. *Their respective color moments, however, are more than like each other; they are identical to each other with respect to what they are, to their category or essence.*⁹⁷ To take heed of this respect, to each moment's category or essence, is to take heed of an item distinct from the individual relata involved.

⁹⁵ See E.g., EJ Sect. 81 and LI VI Sect. 60.

⁹⁶ In EJ Sect. 81c, Husserl notes that colored objects that have color moments as parts are only in an "improper" sense particularizations of the universal color.

⁹⁷ "We cannot predicate exact likeness of two things without stating the respect in which they are thus alike. Each exact likeness relates to a species, under which the objects compared are subsumed; this species is not and cannot be, merely "alike" in the two cases, if the worst of infinite regresses is not to become inevitable." LI, 342-43.

There is no doubt that we can think of general objects, but only on the basis of an identification of categories grounded in the intuition of the relevant individuals does that universal find fulfillment and become "seen". To "see" the universal shape that the figures above share, one recognizes that the shape of one is the *very same* shape as the shape of the other. The mugs have something in common; the category of the shape moment of the one is the same as the category of the shape moment of the other. It is the essence of a universal is to be something identically one and the same, not among different "modes of presentation" or among different times, but among a plurality of similar individuals. This is the reason that the universal is encountered through an act of identification. To make this identification is to be presented with that unity running through a plurality, and running through that plurality as what each of those members are. In contrast, to find an object to be one and the same between to different modes of presentation or description, is not to identify what each of those presentations or descriptions is but to identify what is presented or described.

In consequence of these observations, whenever and wherever similarities are made manifest, judgments of categorial identification and universal intuition become possible.

Consequently, the possibility of the formation of general objectivities, of "concepts", extends as far as there are associative synthesis of likeness. On this rests the universality of the operation of the formation of concepts; everything which, in some way or other, is objectively constituted in actuality or possibility, as an object of actual experience or of imagination, can occur as a term in relations of comparison and be conceived through the activity of eidetic identification and subsumption under a universal. (EJ, 329)

General concepts can be formed and fulfilled (i.e. one can intuitively present universals), based on any plurality of similar objects that can be brought into a unity of intuition and compared. The further fact that comparison among imagined objects is sufficient for the intuition of universals frees the formation and fulfillment of general meanings from a dependence upon actually experienced particulars. This fact will play a critical role in the account of modal knowledge and a priori insight presented in the next chapter. For the remainder of this chapter I will attempt to clarify and defend the account of universal intuition presented in light of potential misconceptions and objections.

5.2.3 Why a Multiplicity is Needed.

According to the account provided, the intuition of universals depends on a comparison of two or more similar objects. In the *Logical Investigations*, Husserl claims that no more than a single individual is required⁹⁸, yet his later works quoted above obviously do not bear this simplification out. Consciousness of a universal essentially points towards that universal's realization in particulars. But more importantly, the idea of a universal is the idea of a "one over many", as something identically the same among its particularizations. This sense of identity and reference simply cannot be fulfilled in the contemplation of a single case.

⁹⁸ See LI II Sect. 4.

Furthermore, the apprehension of a universal is inseparable from the consciousness of similarity, and thus two or more relata are always required. Yet, unlike the case of similarity, the intuition of a universal is not a relational judgment, nor is the universal apprehended a relation of similarity. Interest toward the universal is an interest toward unity as opposed to multiplicity, and according to Husserl, “does not aim at the determination of the like in relation to another as its like. Hence it is not the synthesis of coincidence of the like, presenting itself passively.” (EJ 325-26) Interest is taken in the product, what is given “in the coincidence of the like as individually apprehended.” (325-26) Of course, what is given in this production requires the appropriate conceptualization for its recognition. Without general concepts, similarities might be noticed, and comparisons made as well, but categorization would not be possible.⁹⁹ Nor does this mean that two or more actual instances are required, for imagined cases prove sufficient for universal identification.

A consciousness of similarity, no matter its degree of intuitiveness, retains reference to the individuality of the relata, and means both relata as elements of its object, namely, the relation. It is a judgment that A is like B, which is not merely the consciousness of a likeness, but of a particular likeness of A with B. In contrast the judgment directed to the universal is the judgment that A and B are the same with respect to something else, e.g. Color. (Color here is the meant universal, and so

⁹⁹ Psychological studies have lent empirical evidence to these claims. Individuals lacking the ability to form categorial acts directed at general objects retain the ability to note similarity and make comparisons, but they cannot categorize according to a things type. In essence, these subjects are truly nominalists. See Gurwitsch 1949.

meant by way of a general concept.) Their sameness is not another particular, not a relational moment shared by one or both. The apprehension of that sameness is a consciousness of non-particular common to them.

5.3 Circumscribing the Content of a General Meaning: The Necessity of Instances.

There are two seriously underdeveloped issues in Husserl's account. The first concerns the determination of an objects type. To find that two or more individuals have the same essence seems to require that one determine, to some extent, just what each individual is in the first place. Without knowing what some moment *p*' is, how can one identify what it is with any other object's category? I will call this the content problem. How is the content of my general meaning in each case determined? That is, when I think of what this color moment is as opposed to that shape moment what determines my meaning? The second issue concerns the individuation of universals themselves. What determines that I mean this universal as opposed to that universal? How does one definitely circumscribe one simple or complex universal as opposed to another? I will call this the individuation problem.

Husserl did not directly address these concerns, but his theory provides the resources for a pair of tidy answers. In a seemingly paradoxical way, the answers revolve around the importance of examples or instances to the apprehension of a universal. Put simply, a general meaning would have no fulfilling sense if there were no examples to give it sense. Merely thinking of a type at one time and then the same type at another time, may allow for an identification, but not an

identification of a universal as the type common to a plurality of instances. It merely allows for the identification of a type as thought at one time and a type as thought at another. This sort of identification is possible even for meant types that are not real (impossible), and therefore, incapable of intuitive apprehension. Thus, the relation to instances is vital to the intuition of a universal.¹⁰⁰ The precise way in which instances serve that vital role is both the solution to the content problem and the individuation problem. I will take up these solutions in reverse order, for the solution to latter will shed light on the solution to the former.

5.3.1 Individuation.

In answer to the second question, in the act of universal intuition, instances serve to individuate the type being apprehended to the extent that they coincide in comparison. A universal meaning can signify the essence of some multiplicity of objects, only if those objects can be definitely circumscribed. The “overlapping coincidence”, as Husserl calls it, resulting from comparison establishes that circumscription, and does so to the extent to which any number of similars exactly coincide. For example, the exact similarity of the two shades of yellow on the sheets of paper before me determines my intuition to be of the type belonging to just those moments to the exclusion of others, and just to the extent they coincide to the exclusion of their differences. Thus, if the shades are exactly similar in hue, but differ in value, then it is just those moments of hue whose type is intuitively

¹⁰⁰ Keeping in mind that merely imagined individuals also suffice.

identifiable. If one were also to intend the category of the moment of value in the one sheet of paper, one would not find the same type in the other sheet of paper. Every comparable, and thus, qualitative difference between moments corresponds to a difference in kind. Hence, one cannot intuit the same qualitative type of two dissimilar property instances. In the example at hand, the two yellow color moments that differ in hue are dissimilar in some respect and therefore, differ in kind. This is just to say that, there is no similarity holding between the moment of value in the one color instance and the moment of value in the other color instance.¹⁰¹ Thus, exact similarity, and coordinately, qualitative difference serves to divide types from one another. In this fashion, individual examples provide the basis for the individuation of types so far as the apprehension of those types is concerned.

This does not mean that types lack structural relations. Two or more complex objects can provide the basis for numerous identifications of various levels of generality. For example, two yellow color moments, of exactly similar hues are identical with respect to the type [Hue], but also at a higher level of generality they are identical with respect to the type [Color], and higher still with respect to the type [Sensuous Property]. Anyone one of these types, and many more, may be intuited upon the basis of but two or more color moments of yellow. Clearly, the intuition of universals is not restricted to least specific differences. Species and genera of higher levels are intuited in the same fashion as any other universal.

¹⁰¹ Adopting Aristotle's terminology, I will regard only individuals as similar or different (including cases of exact similarity). Kinds and categories, on the other hand, are either identical or diverse.

5.3.2 Content.

In answer to the problem of content let me begin by characterizing just what a universal for Husserl amounts to. Husserl preferred to call universals “essences” and in *Ideas I* characterized them as “what is to be found in the very own being of an individuum as the What of an individuum.” (ID Sect. 3) However, Husserl does not limit essences to substances or even to individuals, for Husserl embraced also formal essences of such objects as Essences themselves. Essence is an appropriate term, for it captures the meaning of every general sense. Every universal is the essence, the “What”, of some object. The universal Red, for example, is the essence of every red color moment. Red is just what this red color moment belonging to the match head before me is. The universal Humanity is the essence of every individual instance of humanity. Humanness is precisely what my humanity amounts to. The universal is thus “what” each property instance is. Conversely, every instance is an example of its essence. Instances provide an illustration of the *ti en einai* (what it is to be) for each of their essences, and thus provide for the content of their respective essences. While in the presence of a property instances, an intention towards its type has an intuitive sense by being of “what this instance is”. Without intuitive reference to that character manifest by each moment, an intention towards its essence would remain entirely empty.

In light of the identification of universals and essences, the structure of the judgment of universal identification can be can be specified. That judgment takes the following form: “This moment coinciding with that moment are identical with

respect to what they are” or “what this moment is, is identical to what that moment is.” Applied to the example of colored coffee cups we get the following: This color moment of cup one coinciding with that color moment of cup two are identical with respect to what they are.” or “what this cup’s color moment is, is identical to what that cups’ color moment is.”

With reference to the example I began with, not only can one see and distinguish the shape, color, and size moments of the printed ‘2’, but one can also think of what those individual shape, color, and size moments are. To put the matter more simply, most of us have the capacity to think of essences and to think of them in relation to their perceived instances. Under the conditions of perceiving a ‘2’ and its shape, one’s regard to its type (to what it is) is given a precise content. What that shape moment is, is to be shaped thus and so as intuitively presented here in this object. If one is drawn to another object and its shape moment, one can effect a comparison. To the extent that the shapes are found to be exactly similar, one can effect an identification of the general content attributed to the one with the general content attributed to the other. Thus, one can then recognize that the “what” of this shape moment is identical to the “what” of that shape moment.

It may be objected that an identification of two meant generalities can take place independently of the appearance of any instances of those types, and therefore, independent of any comparison among individuals. However, conceptual thinking alone, (i.e., mere thought) is insufficient for the apprehension of an identity of types, for recognizing an identity between two objects requires relating those two objects.

The universal Color can be merely thought twice, and the content of those two acts can be identified, but if one cannot relate that meaning to an intuitable moment either through perception, imagination, or otherwise, then they have absolutely no sense accruing to their meant generality. In other words, they cannot know in the sense of fulfillment that being a color is what individual color moments are without intuiting individual color moments. This is the sense in which a person blind since birth does not know what being red for an object amounts to. He can think about red, and even talk about red, but he cannot fulfill his concept of red in an illustrated instance, whether actual or imagined. For the person that can see, the recognition of red in its instances, whether actual or imagined, is the recognition of the universal color red itself.

5.4 The Universal is not a Part, and the Theory of Abstraction.

The universal is something “in” each similar individual and yet according to Husserl, not a part of the individual. Although Husserl holds that all objects can enter as parts into larger wholes, he maintains that no universal can enter into the unity of an individual as a part. He argues that similar individuals can be separated, something no two objects that share a part can do. Separation can be understood in several ways. In its most dramatic sense, neither of two objects that share a part can survive unaffected the destruction of the other.¹⁰² Since most individuals can survive the

¹⁰² See EJ Sect. 81 for Husserl’s discussion.

destruction of other similar individuals, similar objects need share no parts in spite of having a common property.

The tendency to regard the universal as a part of its individual instances clearly motivates the so called theory of abstraction and its attendant “abstract” objects. However, historically, the notion of abstraction is equivocal between the intuition of non-independent parts within a whole, and the consciousness of universals. The former takes place when one notices the surface, corner, or color, of a table. These non-independent parts of the table, when noticed or even merely thought, are said to be mentally “abstracted” from the table. To attend to and take notice of a table’s color, then its shape, then its style is to abstract in one sense of the term. Since these components of the whole table are not physically separable, i.e., they are not independently removable parts, one can only conceptually remove them and consider them in isolation. That is, one can only mentally “abstract” them from the whole.

Abstraction, in the latter sense merely signifies the intuition of a universal. The term is inherited at least from Aristotle, but came to modern prominence through the empiricists that took abstraction in the first sense to be the apprehension of the universal.¹⁰³ There is a problem with equating abstraction in the first sense with abstraction in the second sense. The problem is that parts of individuals are also individuals, whether those parts are separable or not. As the argument above

¹⁰³ In Locke, for example, it is the activity of a power to separate our simple ideas from our complex ones. See Locke, *Essay* BK II, XI, Sect.9 and XII, Sect.1.

purports, if the universal were a part of its instances, neither it nor other similar individuals would survive the destruction of any one of those instances.

5.5 Frustration.

Without the unity of intuition and comparison, and without a subsequent coincidence, the meant identity of a universal cannot find fulfillment. If, for example, I take two checker pieces one red and one black and compare them, in comparison their shape qualities coincide, but their color qualities contrast. The judgment, that the color of the one is the very same as the color of the other, meets with resistance. The judgment remains entirely empty, and in so far as it asserts an identity of the two color categories, it meets with an intuitive conflict. Contrasts cannot support an intuitive judgment of qualitative identity. They can, however, support an intuitive judgment of qualitative difference. Difference too requires an active employment of a general concept. Qualitative difference is not numerical or individual difference, and demands there be a respect in which things differ. Every respect in which things differ is ultimately a difference between what something is, namely, a difference between what certain property instances are.

5.6 Universal Intuition is a Higher order act.

While its foundational basis may reside in ordinary sensuous empirical experience, the apprehension of the universal is not itself a sensuous experience. Instead, upon the basis of sensuous acts, such as perception, imagination, or memory,

more complex acts are possible which build upon these are allow us to “see” categorial (i.e. formal) objects and relations.¹⁰⁴

In general we may say that the intuitive, and accordingly likewise the imaginative, fulfillment of categorial acts, is founded on acts of sense. Mere sense, however never fulfills categorial acts, or intentions which include categorial forms: fulfillment lies rather, in every case in sensibility structured by categorial acts. (LI, 670)

A categorial act is a founded act with a distinctive sense that comprehends the objects “already given” under a form of unity distinct from any sensuously perceptible or other real forms of unity. Other examples of categorial acts are judgment, collection, relation, and knowledge.¹⁰⁵ Naturally, talk of founded acts presenting categorial objects that cannot be sensuously perceived lends itself to constructivist ways of talking and thinking about acts like fulfillment, judgment, collection, and universal intuition. However, categorial intuitions according to Husserl do not create their objects but result in a “view” of reality.

Evidently the outcome of a [intuitive] categorial act, e.g., one of collection or relation, consists in an objective ‘view’ of what is primarily intuited, a ‘view’ that can only be given in such a founded act, so that the thought of a straightforward precept of the founded object, or of its presentation through some other straightforward intuition, is a piece of nonsense. (LI, 820)

In contrast to the material basis upon which the act is made, that view is of a distinctive sort of object with a distinctive form of unity. The formal object, in our

¹⁰⁴ This gives us the difference between sensibility, and even perception, and understanding. While sensations, and the perceptions that require them, provide us with consciousness of empirical real objects, the world of meanings, understanding, facts, and logic is not yet made available until the capacity of categorial operations goes to work on this underlying substructure.

¹⁰⁵ See LI VI Chapter 8.

case the universal, is found and viewed by the forming activities of categorial acts upon a material basis. This formal object is not seen in or among its founding objects; it is but a possible formation grounded on the basis of these objects. It comes to presence and is thereby “seen” as a result of such forming.

Similarly, the fact that every sensuous consciousness allows for various, even infinite, sorts of intuitive categorial acts does not make the reality of their corresponding objects arbitrary or a matter of choice. Upon the basis of several similar objects I may make numerous identifications of types, but this does not entail that I have made numerous types. Likewise, upon witnessing one and the same event, e.g., a sunset, I may make numerous predicative judgments: For example, the sun is red, the sun appears larger than the city skyline, the sun is sinking, the sunset is beautiful, the sunlight is diminishing, etc.) Yet, these facts hardly come into being upon my intuitive judging of them.

Thus, on Husserl’s view, one cannot make a universal.¹⁰⁶ One can make an act that apprehends that universal, but not make the universal itself. This is true of all categorial objects. The lack of sensuous and material unity among the individuals that make up the basis of a categorial act is a sign of the formality of the apprehended object, not a sign of its creation by the mind.

Categorial functions... “in ‘forming’ sensible objects, leave their real essence untouched. The object is intellectually grasped by the intelligence, and especially by ‘knowledge’ (itself a categorial function), but it is not thereby falsified.” (LI VI Sect. 61)

¹⁰⁶ Bound Idealities may be an exception to this rule.

For Husserl, the real unity of things is unaffected by the forming and manipulating of them in thought. For example, I can count things but their internal and external relations do not alter. I can judge about you, but you are not thereby affected. At best, all we might say is that you are being related by me to other things, but this is no feature to be found in you or between you and myself.

Categorial formations do not remove or glue unites and parts in any real sense. The same is meant to apply to comparison and categorial identification. The objects compared are not affected in any real way by the acts of mind that compare, and subsume them.

5.7 The Sense of "In".

The possibility of two editions of one property *is* the traditional problem of universals. The correlative epistemic problem is the possibility of apprehending two editions of one and the same property, i.e., apprehending a "one over many". The solution presented here is that on the basis of comparison, two like individuals can support a categorial act of identification with respect to the types of their like elements. The meant identity is a universal, and it finds fulfillment wherever an exact similarity of its correlative instances is presented. That fulfillment consists in an identification of "what" one thing is with "what" another thing is. The same "what" is presented in two editions. *It is presented not as a part, but precisely as what each edition is.* This sense of the general object is irreducible. Subsequently, there is no use in using analogies for something quite literal. The universal stands

before us as *what* something is. The universal [shape] is what, or at least a proper part of what, some shape is. The universal dog is what a dog is, and the universal color is what a color is. To say that what something is, is “in” that thing, makes matters less clear, not more.

5.7.1 The Classical Debates over Universals: The Contention over their Reality and Nature.

We obviously have the capacity to mean universals, i.e., we have general concepts, this much seems unarguable. What is arguable is where those concepts find fulfillment.¹⁰⁷ This issue is traditionally debated on two fronts. First, it is debated what the proper ontological status of general objects is. Differences in this regard have historically divided persons into nominalists, conceptualists, and realists. Realists accept that general objects are truly as they appear to be: objective, transcendent, and universal. Nominalists and conceptualists claim general objects are other than they appear to be. They invariably claim that general objects are some sort of individual, be it a set, an idea, a name, a “scattered” particular, etc.

Second, it is debated wherein our knowledge and acquaintance of general objects lies. Though these two sets of issues are separable from each other, they usually, and rightly, walk hand in hand. For example, one can agree with Ockham and Hume that universals are general terms, but disagree over how terms come to be

¹⁰⁷ It is also arguable just what those concepts are. However, if they are not objects that can refer or represent, then they cannot find fulfillment. Thus, Husserl’s account is compatible with any theory that regards concepts to be representational, (i.e., intentional).

perceived and intuited. Ultimately, however, if to mean that something is white, one means that something is a word or is called by a certain name, then that meant generality can only be intuitively known by encountering it as what it is. That is, by perceiving a name. If we are realists we assume the genuineness of the appearance of universals. If we seek their origin in experience, I suggest we are likely to end up here at a Husserlian perspective.

Obviously, many difficult questions on the metaphysics of universals are being passed over in this presentation. Questions pertaining to the relation of the universal to its individual instances, and the existence of categories themselves provide unending pressure on philosophic inquiry. I am not here presenting solutions to these problems. However, I believe that only a correct understanding of what universals are can enable one to answer, and only a correct account of the intuition of universals can clear the way for us to grasp the true sense of what they are.

5.7.2 Limitation of our Abilities.

It is important to respond to the potential confusion between categorial capacities and Human capacities. Naturally, human and/or other limitations may affect one's ability to perceive sensuously, form general concepts, recognize identities, and accomplish any of the higher order categorial tasks discussed here. These de facto limitations of this or that person, people, or species in no way affect the essential relationships described here between universals and the various

cognitive activities whereby they are apprehended. Gelb and Goldstein's patients are a case in point.¹⁰⁸ Their patients, sufferers of certain brain injuries, had seemed to lose their categorial capacities. They were no longer able to recognize universals, and were thereby condemned to what, for all intents and purposes, looked like a brand of nominalism. They were, in essence, blind to categories and doomed to struggle with Wittgensteinian family resemblance and other nominalistic strategies as their only generalizing methods for dealing with reality. The fact that such conditions exist, however, in no way diminishes the essentials of Husserl's theory.

5.8. *The Limits of Knowledge based on the Intuition of Empirical Types.*

Universals apprehended on the basis of perceptions and comparisons of actual objects Husserl's calls an 'Empirical Types'. While an empirical type can become the object of attention and a subject for inquiry, it is insufficient for the intuition of an unconditionally universal and necessary truth, and hence it is insufficient for a priori knowledge. Intuiting universals, it turns out, is not the sole province of a priori inquiry as some might have it.¹⁰⁹ Instead, according to Husserl (and most realists) the intuition of types is an ubiquitous function that plays a vital role in everything from the meaning of our everyday talk of types, to the systematic investigations into those types we call scientific disciplines.

It is sometimes supposed that the mere apprehension of universals and their features will yield knowledge of necessity. Thus, by moving from an intuition of

¹⁰⁸ Gurwitsch 1949.

¹⁰⁹ E.g., Casullo 2001, but most anti-realists about universals accept this too.

individuals to intuitions of universals one moves from the a posteriori to the a priori. This idea is motivated by the traditional objection to empiricism. That objection states that empirical experiences are insufficient to account for our knowledge of necessities. Thus, if we apprehend the abstract forms residing in some platonic realm, the fact that they are eternal and have all their features necessarily will give us the insight into necessity we need.¹¹⁰ But of course, so called empirical sciences concern themselves with universals too, for they study the nature of various sorts of natural objects.

For Husserl it is not just that empirical experiences cannot yield knowledge of necessities because they are always of individuals, it is that the universals that we intuit on the basis of empirical experiences demand empirical experiences of actual individuals for their elucidation. The intuition of a type based upon perception of actual individuals essentially co-posit an empirical sphere of actuality as the place of that type's possible realization in particulars.¹¹¹ Constitutive of the concept of an empirical (sometimes called "inductive") type is the acceptance of existence , "whether it be with regard to the objects of the sphere of comparison or whether it be with regard to the total province to which they are thought of as belonging."¹¹² (PP,

¹¹⁰ E.g., Katz 1998, 36-40 and 190.

¹¹¹ A type intuited on the basis of several actual instances is a type whose extension initially corresponds to the actual number of particulars compared and judged from. Through various acts the extension is almost always broadened. Yet, even when broadened to include actual and actually possible particulars universals derived from actual experience retain an essential attachment to the actual world.

¹¹² Husserl interchangeably talks about the empirical concept and the empirical types. Clearly, these are two different categories. To clarify, the empirical type is the universal intended by way of the empirical concept. See PP, 63.

63) Consequently, types intuited on the basis of such comparisons have an essential attachment to the actual world.

The difference then between empirical disciplines and a priori disciplines is a difference in subject matter, but that difference is not between individuals and universals, but between one sort of universal and another sort; between empirical types and what Husserl calls "pure" types. Pure types are proper parts or subsets of empirical types and, as will be shown, they are reached when the attachment to the actual world is removed from the empirical type. These "left over cores" of empirically gathered universals make up the subject matters for the a priori disciplines from Mathematics to Law.

5.8.1 Attachment to Actuality.

Two characteristics of this attachment to actuality are of particular significance for our discussion. They concern what might be called the epistemic essence our empirical concepts and their respective types. The first is that intuitions of empirical types, natural kinds for example, necessarily present those types inadequately and thus as open to further determination by way of subsequent experience. The second is that the nature of each empirical type is wholly rooted in the properties and unity of actual objects and thus, only actual instances can inform, confirm, or falsify one's knowledge of those types. I will discuss these in turn.

5.8.2 Openness to Further Determination.

According to Husserl, a universal presented on the basis of two or more like individuals is presented not just as a determinate universal, but always as a yet further determinable universal. Our intuition of such a type is always inadequate such that further experiences of more objects of the same kind will enrich its sense. Their apprehension is always presumptive, referring beyond what is intuitively presented, just like the intuition of the individual it is based upon. Perceived individuals of the common sense world are presented only partially. Much of each apprehended individual remains emptily intended. Yet, these partial presentations do not remove the possibility of universal intuition. Their inadequacy points to a “horizon” of further experiences that will fill out the empty anticipations (intentions) directed towards their objects. For example, while I perceive a large cockroach scurrying across my office floor, I perceive an insect only some of whose parts and properties I am intuitively presented with. I presume there is “more than meets the eye”, that can be determined about this cockroach. I perceive the insect as something that I might continue to perceive in such a way so as to reveal more of its parts and properties. Any universal that is intuited on the basis of this and several similar cockroaches retains this non-intuitive, yet anticipatory sense. That is, the type [Cockroach] is essentially presented as the type of a number of actual and actually possible creatures whose nature is yet to be wholly revealed, but which can be pursued by way of further instances.

This sense, that there is more to learn not just about this cockroach but of cockroaches in general, is an essential component of our experience of any type intuited on the basis of actual instances. The idea that my concept of cockroaches can be modified expanded or diminished is a corollary of this feature.

This brings me to the second point. Empirical types are open to further determination, but only through experiences of actual instances of the type.

Thus, empirical concepts are changed by the continual admission of new attributes but according to an empirical idea of an open, ever to be corrected concept which, at the same time, contains in itself the rule of empirical belief and is founded on the progress of actual experience. (EJ, 333)

The development of our concepts of empirical types is dependent on actual cases, and that means dependent upon empirical experience. The nature of empirical types is only to be garnered by further experiences of actual instances of those types. If my aim is to understand the nature of dogs, only actual dogs can be of value to me, and only empirical investigations into instances of dogs will help me.

The universal that we intend when we think of actual animals is wholly rooted in the properties and unity of actual animals. The properties meant by thinking of dogs are those very properties that make each individual dog what he is. This is so whether I am aware or knowledgeable of more or less of those properties. Thus, Dogs are the actual 'dog-like' things of my acquaintance, whose whole

essence I may not be familiar with, but at least some of whose instances I am, and in fact must be to have an intuition of the type Dog.¹¹³

In contrast, merely imagined fictitious un-real dogs can neither produce nor alter ones empirical concept of dogs. Fictitious species or sub-species are not additional kinds of things, and as such, do not affect the unity of our empirical concepts. Fictitious animals are not real animals, they do not belong to any animal species, and are not instances of any animal species. The same goes for all imagined non-actual types. No imagined tool is a kind of tool, and no imagined element belongs on the periodic table.

Epistemically, finding a new animal species is a totally different exercise from inventing a new animal species. Imagining talking dogs does not establish another sub-species of dog, and imagined experiments on dogs do not inform one as to the properties of dogs. Merely imagined individuals alter neither the sense nor extension of the empirical type. Only actual instances can do that. Hence, only additional encounters with actual dogs can inform one about the properties of dogs, and thereby modify or confirm one's current empirical concept of dog.¹¹⁴

5.8.3 *Pure Essences.*

Husserl's proposal is that this attachment to actuality present in empirical types can be sidestepped, and the value of merely possible but non-actual cases

¹¹³ Or at least someone must be, so that I can derive the concept from them.

¹¹⁴ According to Husserl our concepts of Empirical Types aim towards, and in time, approach the real scientific essence of the Types and individuals in question.

(thought experiments) can be enjoyed. But more importantly, Husserl's suggestion is that only by removing this attachment can the modal knowledge constituting the a priori disciplines be acquired.

To remove this attachment to actuality, Husserl turns to imagination. On the basis of imagination we acquire "pure" types or "pure" essences, in contrast to empirical types. They are called pure because the dependence and attachment to actuality and the experience of actual cases is removed. "Pure" essences, it turns out, are the proper subject matter of a priori inquiry and imagination, independent of empirical experience, is the method by which they are accessed.

The seeing of universalities therefore has a particular methodic shape wherever the point is to see an a priori, a pure eidos. For example, it is then a question not of something common to this and that factual color and possibly of optional colors which might ever confront us in this space here on earth, but of the purely ideal kind, "color" which is common to all colors which are at all conceivable without the presupposition of an factual actuality. (PP, 64)

"Pure" essences stand in contrast to empirical types. The extension of a pure essence is not limited to the actual world. Pure essences do not depend on actual instances for their becoming known or conceptualized, merely imagined a fictitious cases will do. Furthermore, actual experience does not modify or enlarge the concept of a pure essence. Additionally, imagined and fictitious colors and sounds are species of colors and sounds. A fictitious tool is a species of tool, and a fictitious element is a species of element taken purely, in some possible world for some possible culture and on some possible periodic table, respectively.

The intuition of pure essences requires a total detachment from existing individuals and the actual world. This is achieved by imagination in a process Husserl calls 'eidetic variation'. That which is invariant and identical among all imaginably intuitable cases (all variations) is the pure universal. It is that component of empirical types that all empirical types themselves fall under. It characterizes the fundamental categories out of which the species of actualities are composed and thus it is a proper part of every empirical type. I will take up Husserl's method for intuiting pure essences in the following chapter.

Chapter 6

Consciousness of Pure Universals

6.1 The Method of Essential Seeing: Free (Imaginative) Variation.

To drop the relation to the actual world and achieve independence from any real existence, Husserl offers the method of “Free Variation” (also called the “eidetic method” and “eidetic reduction”). The method is a systematic procedure for breaking the tie to actuality through imagination.

Already in the *Logical Investigations (1900/01)* the process of “Variation” is introduced as the means for establishing dependence relations, and thereby a priori laws of wholly universal and necessary character.¹¹⁵ The rather straightforward account presented there is successively expanded and subsumed in Husserl’s continuing work, and by 1913, the role of imagination in the establishment of dependence relations is given a methodic prescription and the title of “Free Fantasy” or “Free Variation”. However, by this time, the focus of the method has changed. Where variation originally provided insight into dependence relations, it now provides one with an intuition of a “pure” universal, the acquisition of dependence relations being surreptitiously subsumed, and no longer discussed at any length. For example, Husserl freely speaks in his 1925 lecture, *Phenomenological Psychology*, of variation as the manner whereby “all intuitive essential necessities and essential laws and every genuine intuitive a priori are won.” (PP, 53) However, the specifics

¹¹⁵ See LI III Sect. 5.

of his exposition there relate only to “the seeing proper of the universal as eidos.”

(57) While the focus of this dissertation is on the former, (the acquisition of necessities), Husserl’s method, with its emphasis on the intuition of pure essences, cannot be ignored. For one reason, Husserl’s early exposition on the process of variation itself presupposed the “purification” of essences which only later took up so much of his attention.¹¹⁶ For another, Husserl’s commentators and critics have generally accepted his methodology for seeing pure essences as the whole of his account of a priori knowledge, thus, not always distinguishing the two ends themselves.

The following chapter will briefly describe the method and then incorporate Husserl’s much earlier explicit account of the acquisition of dependence and compatibility relations that we find in the *Logical Investigations*. The success of the latter requires that the types we investigate be both adequately intuited and “purified” as per the eidetic method. For the sake of my critical remarks, I will divide the method into three steps. (Husserl did not divide it into any.)

(1) Taking an arbitrary example as a guiding model.

The method begins by choosing an object and turning it into an example of the type you care to investigate. Suppose I wish to investigate the “pure” essence of the category Material Body. To begin, I bring to mind the intuitive presentation of some material body. Right now I can visually perceive my work desk, so I will start

¹¹⁶ This fact alone may be the reason for Husserl’s change of emphasis.

with it. This object must, according to Husserl, be “turned” into a mere example of the type I aim to investigate. Turning an object into an example is not a modification of the object but of the way the object is regarded or taken up. Every consciousness of an actual object can be modified so that its object is regarded, not for its own sake, but merely as one possibility among others.¹¹⁷ In Husserl’s words,

I can in fantasy imagine the brown bench as painted green; then it remains an individual existent in this lecture hall, only imagined as changed. But I can as it were transform each and every fact into a fiction in free arbitrariness. (PP, 53)

In the case of my desk, the point is to regard it as merely one more possible material body among other possible material bodies. In Richard Zaner’s terms, I “possibilize” the desk. By treating an actual object on equal footing with imagined objects of the same kind, the fact that the object is actualized is disregarded.¹¹⁸

Since my desk is to be treated on par with any other imagined desk, the fact that I began with an actual desk becomes irrelevant. I could have begun with a merely imaginary, and even non-existent object from the start. In this important, but limited sense, the process of variation that leads to the apprehension of pure essences and the necessities that hold among them is neither dependent upon empirical experience, nor even the existence of an actual case exemplifying the type in question.¹¹⁹

¹¹⁷ As Arron Gurwitsch puts it, any actual object can be regarded merely as an “actualized possibility”. Gurwitsch 1949, 195.

¹¹⁸ Zaner 1973a and 1973b.

¹¹⁹ It is this role of imagination that establishes one sense of independence from experience that “a priori” truths are to have on Husserl’s account. The other sense that Husserl enjoins to this one is the

(2) *Free Fantasy (Variation)*

The next step in the method involves the free and creative use of imagination. The example from stage one becomes what Husserl calls a “guiding model” in a process of imaginative variation. (EJ 340) This process consists in imagining a series of additional objects, each exactly similar to the original in the specific respect that is under investigation though arbitrarily differing in other respects. For example, in the case of my desk, it is its materiality whose essence I wish to investigate. Thus, I treat my desk as an example of the type material body and its aspect of materiality as an example of the type Materiality or Material Object. I then imagine additional objects which are exactly similar to my desk with respect to their material aspects. In short, I imagine other various sorts of material objects, e.g., cars, trucks, planets, etc.

In the imaginative production, the original example functions as a proto-type for the process. The resultant imagined objects or “variations” are essentially copies, “concretely similar to the original” example, with respect to the property instances whose types are under investigation. (PP, 53) This means that in the process of variation I must hold the item whose type I wish to investigate fixed in the sense that each additional object I imagine must have an exactly like aspect. The complexity and nature of the aspect is irrelevant. In this way, I am not only guided by my

sense that a priori affairs prescribe the conditions for the possibility of experience and knowledge of their respective objects. This latter sense will not be discussed here. See EJ Sect. 90 for a discussion of this sense.

example, but really by the specific simple or complex property instance in my example. The benefit is that it is those property instances that make the whole they are part of an example of the type under investigation. Since every variant has an exactly similar constituent to my original, I am guaranteed each is an instance of the same type in the relevant way. In the case of my desk's moment of materiality, each variant with a like moment will fall under the same type as my desk, namely, the type Material Object.¹²⁰

(3) Intuition of the pure universal.

As long as the variants retain an exact similarity in the relevant respect there will remain the permanent possibility of recognizing the universal that grounds their similarity. The universal identity that becomes evident running through the multiplicity of successive variants Husserl calls the "pure essence" or "eidos" of the object began with. That universal, according to Husserl, appears as the "necessary general form, without which an object such as this thing, as an example of its kind, would not be thinkable at all." (PP, 54)

In order to guarantee that no hidden reference to the limits of actuality accrues to our pure concept, Husserl proscribes two conditions under which variation must proceed. Firstly, each variant must be freely and arbitrary imagined in the sense that nothing but exact similarity to the original property instance is to restrict or limit its production and legitimacy. (EJ, 343) There must be no restriction on what

¹²⁰ This does not mean that the examples will have their materiality essentially. Establishing whether that is the case is determined by way of further variation.

can be joined to the collection of variants. The point of this condition is to rule out any limitation to what is actual, actually possible, humanly possible, possible according to the latest scientific theories, or any other limitation imposed on the creative freedom of imagination. Thus, when I consider what is common to material bodies, I must not covertly limit myself to bodies that have been seen or can be seen by men, or to bodies that are static, or of some limited size, etc. Consequently, the universal grasped on the basis of this process will have an unrestricted extension, an extension intended to include as a proper part what is actually possible.

Secondly, the process of variation itself must proceed freely and arbitrarily in the distinct sense that one may break off or continue producing variants at liberty. (EJ, 342) The point of this condition is to establish that the universal apprehended appear as common to something Husserl calls an "open infinity" of possible particularizations. In short, the extension of the universal must be conceived as limitless. According to Husserl, when one acquires the sense that they are free to continue or break off the production of variants at any time, they thereby conceive of the collection of variants as an "open infinity".

...we may gain from this red here and that red there something identical to both and a universal. But only a universal of just this and that red...Of course by bringing into play a third or several reds whenever they are presented we can recognize that the universal of the two is identically the same as the universal of the many. But thus we gain always only common characters and universalities in relation to empirical extensions. But as soon as we say that every optional like instance which can be newly brought into play must yield the same, and say further that the eidos "red" over against the infinity of possible single instances which belongs to this red and to any red which coincides with it, we have precisely an infinite variation in our sense as an underlying basis. (PP, 59)

We do not run through every possible like case, yet we acquire the sense that the universal common to the already imagined cases is common to an endless number of exactly similar cases. In this way we conceive of the universal as what is common not to this or that finite set of objects already perceived or imagined, but to every like imagined object that may be produced at liberty, and thereby any like objects capable of intuitive presentation.

Of course, Husserl not only thinks that we can acquire these senses (intentions) towards universals, but that they can find fulfillment in their meant objects. That is, we not only come to be thinking of a universal as what is common to an “open infinity” of arbitrarily imaginable like objects, we literally perceive this universal too; a universal whose extension thereby includes the infinity of actual and possible exemplars. As a result our empirical concept is “purified” and the universal apprehended is deemed “pure”.

6.1.1 The Exclusion of Family Resemblance.

There is one other condition of the process worth mentioning. The method also prescribes that each variant imagined is to coincide not only with the original example but with every other variant already run through. A “pure” essence, according to Husserl, is not grasped by merely having all of the variants come to mind, but by having “all the optional single cases... appear as variations of one another; and then, in further consequence, as optional sequences of single instances in which the same universal as eidos is singularized.” (PP, 58) If the method

proceeds faithfully, each variant will be seen as exactly similar to the original, and likewise exactly similar to each other in the same respect. Thus, all will equally appear as variants of each other, and consequently as particulars in which the same universal is manifest and isolated. The condition that each must appear both as a variant of the original example and capable of substituting for it precludes the possibility that one's variations lead to a unity of family resemblance. Since any can be the proto-type for all others of the set, their unity derives from something identical and common to all.

6.1.2 The Result

Despite the apparent extravagance, the gist of the method is simply the invocation of an unrestricted imagination. The aim of the method is to drop the attachment to actuality and its inherent restrictions constitutive of our empirical concepts and their empirical types. The solution invoked is to use imagination in a systematic way with the key prescription to respect every intuitively presentive imagination as legitimate. Since universals appear as what is common amongst their instances, when the range of instances is opened to the merely imaginable, the universals apprehended on this basis are "purified".

For example, given the intuition of the type Flatness, I can bring illustratively to mind any sort of flat item, and through a further comparison determine that the imagined item is also flat. But I can also do more. I can easily bring to mind as many and as varied illustrations of flatness as I choose, and barring any mental

ailment, I will easily succeed with each new example. As I begin to imagine various examples I can at will vary the features of my examples. I might imagine a flat wooden table, then a flat sheet of paper, then flat icy tundra, etc. *As far as such examples are concerned, an intuition of the "pure" type has already taken place.* Directing attention to the universal flatness, in the exchange of arbitrarily imagined examples, is to be directed to a universal devoid of connection to the actual world. To accept wholly imaginary cases as legitimate examples of the type at hand is to have already apprehended the pure universal. The "purity" of a pure universal is not achieved through a change in the subject matter. The purity is the result of opening up the feature to an unrestricted imaginative effort.

6.2 Eidetic Structure and Modal Relations.

The primary aim of imaginative variation is not merely to leave the restrictions of actuality and the actual world behind. It is to straightforwardly establish dependence relations along the way. The value of this "purification" process is that universals and their necessary connections are opened up for investigation. In Husserl's words,

What can be varied, one into another, in the arbitrariness of imagination...bears in itself a necessary structure, an *eidōs*, and therewith necessary laws which determine what must necessarily belong to an object in order that it can be an object of this kind. (*EJ*, 352)

Recognition of this structure is the recognition of an important class of universal necessities, namely, the long sought after a priori truths. The question that

concerns this dissertation is just how that necessary structure is displayed and how the essential necessities inherent to it are “won”. The answer returns the route through the intuition of universals in chapter five to chapter four and the establishment of dependence relations. It is from the recognition of dependence and compatibility relations holding among “pure” essences that modal relations are discovered, and consequently those relations make up the subject matter for a priori inquiry. This means recognizing dependence and compatibility relations among objects that are presented and varied in imagination.

6.2.1 Dependence (Necessity) and Independence (Contingency).

As stated in chapter four, an object p is dependent on an object q if and only if p cannot exist and be what it is unless in union with q . As also stated, the dependence between any two objects p and q derives from their natures. If p depends on q then the nature of p prescribes to it a partial existence that requires union with objects of another sort for its being. To simplify matters we can speak of types right from the start. The type P , we can say, is inseparable from the type Q if and only if objects of type P cannot be and be what they are unless bound up with objects of type Q .

The role of imaginative variation in the establishment of such dependence relations is straightforward. To find that two objects (p, q) of types P and Q respectively, bound up in some actual or possible whole $W(p, q, \dots, n)$ are dependent and thus inseparable, one simply attempts to separate and isolate them from one

another by way of imaginative variation. That is, one attempts to intuitively present some whole *W* that includes an object exactly similar *p* to the exclusion any object exactly similar to *q*. To the extent that one achieves such a presentation they are presented with the possibility of something having the property *P* without also having the property *Q*. Consequently, if the types *P* and *Q* can be independently varied, the unity of their instances in any actual or possible whole is contingent. If they cannot be independently varied, then at least one depends on the other and the union of their instances in any actual or possible whole is necessary.

When two items are independent of one another, then in the intuitive presentation of an exactly similar property instance, Husserl writes, "...we are not necessarily referred to something else, included in which, or attached to which, or associated with which, it has being, or on whose mercy it depends, as it were for its existence." (LI, 445) In the case of dependence, just the opposite is the case. If some object *p* is dependent on some object *q*, then any intuitive presentation of *p* will necessarily include a reference to *q*. Specifically, it will include an intuitive reference to *q*. Consequently, according to Husserl, and Stumpf before him, the attempt to sustain the intuitive presentation of the one without the other will result in "the modification or elimination" of that presentation. (LI, 439) For example, take shape and size. It is quite easy in the variation over my desk to produce variants of my desk that differ in size while remaining the same with respect to their shape. However, the attempt to imaginatively illustrate a shaped object whose size is

excluded is not so easy. It results in the elimination of the object began with. When size is reduced to nothing, shape is extinguished with it.

This is an important point about the kind of thinking that reveals dependence relations. Dependence is such an imposing a relation th

at were all the other components of $W(p,q...n)$ empty meant the two whose dependence is in question (p and q) would still require each other were they mutually dependent. Instances of shape are simply not presentable without instances of size, no matter how empty the rest of the shaped thing is presented. This sort of dependence is apparent in cases where we get only a quick glimpse of something. For example, if an animal jumps in front of my car as I am driving and all that intuitively appeared was a blur of brown, in so far as color depends on extension, the brown blur will have appeared as extended. This does not entail that one always attends to or takes notice of such conjoinedly presented properties. The conscious and intuitive presentation of an object does not entail that the object is attended to or made the theme of other acts of awareness. For example, one may hear a sound without being aware that they also hear the pitch, volume, timbre, and every other element that sound depends on. Though these mutually dependent components of sounds are intuitively presented, they need not be noticed or attended to.

6.2.1.1 Some Clarificatory Remarks.

It is important to keep distinct the dependence that holds between objects in virtue of their types and the relations that those types have to each other. While one

cannot intuit a possible shaped object without also intuiting it as sized, one certainly can intuit the universal Shape without intuiting the universal Size.

Related to this is the fact that in the process of variation we are not eliminating or modifying individual existent objects, or our presentation of those objects. The point is not to attempt to present this individual without that individual bound up with it. The method of variation is designed to establish the dependence relations derived from the nature of an item. Thus, one does not attempt to intuit some individual *p* and vary its unity with some other individual *q*. Instead, one imagines other individuals, exactly similar to *p* either excluded from or bound up with other individuals exactly similar to *q*. In the case of pictured objects, variation is the process of picturing an object of one type without picturing an object of another type. Through variation, copies of an object, not modifications of it, are presented. The value of exactly similar copies is that upon the presentation of any set of similars, whether perceived or imagined, the universal common to them remains the same and always marginally present. In this way, the reality of those types and the possibilities they establish are likewise always present.

Thus, for example, in the imaginative presentation of a material body, I may be picturing my desk. The desk may appear as cluttered, brown, scratched, etc. To determine the sort of unity the desk has with its scratches I treat the desk as an example of its kind and think of other like objects but without scratches. In so far as I succeed and intuitively present an unscratched desk I present the separability and the contingency of the union of desks and scratches. They exhibit merely a

compatibility of kinds. But that is the key. Only their kinds have been examined, and so far this says nothing about my desk and its scratches. Objects of one type are found to be independent of objects of another type. To determine that *this* desk is contingently scratched requires establishing the existence of the desk and its scratches, and then applying the general law to this particular case. Even though an actual desk may be the starting point, modal unity among actual individuals is always established derivatively.

6.2.2 *Compatibility (possibility) and Incompatibility (impossibility).*

Compatibility relations are pursued through variation and imagination in a similar manner. As stated in chapter four, an object is possible if and only if it is a whole all of whose parts are compatible relative to a form of combination. To find that something is “purely” possible one simply attempts to imagine it. To the extent that one succeeds in adequately imagining some whole *W*, then *W* is possible. For on the basis of the presentation of *W*, the intuition of its type and hence its possibility is always possible.

An object is impossible if and only if it is a whole some of whose parts are incompatible according to the form of that whole. To find that some complex whole *W* consisting of parts (*p*, *q*, ... *n*) is impossible, one attempts to imaginatively combine the elements *W*, *p*, *q*, ... *n* into the union of a whole of the relevant form. To the extent that they find the elements incapable of entering in the union of *W*, *W* is impossible.

To see an incompatibility among properties -and thereby according to Husserl, an impossibility- is to see a conflict. The recognition of incompatibility falls out of the attempt to intuit two or more properties p, q, \dots, n unified together relative to some form of combination. The attempt consists in producing a partial intuition of a whole $W(p, q, \dots)$ within which some member (q) of that whole is merely emptily thought. A separate intuition of q is then produced $I(q)$ along with the overarching intention to bring $I(q)$ into the unity of one intuition with $W(p, q, \dots)$. If this overarching intention is fulfilled by the inclusion of the intuition of q , then the union of p and q is possible, if it is unfulfilled or frustrated then their union is impossible.

Since the partial intuition of the whole $W(p, q, \dots)$ remains unfulfilled despite the clear intuitive presentation of each of the elements needed for its fulfillment, one becomes aware that p and q cannot be and be what they are in union, according to the form laid down by W . The failure to fulfill the intention towards unity between $W(p, \dots)$ and q is, according to Husserl, the consciousness of conflict, a relation with its own character and quality.

...incompatibility is not the mere privation of compatibility, not the mere fact that a certain unity does not objectively obtain. Union and conflict are notions with different phenomenological foundations, and we are therefore really uttering a statement with content if we say that if a p conflicts with a q as regards the form of unity $W(p, q, \dots)$ - such conflict is a phenomenologically positive character - the union of a p with a q in the sense of the same W is 'impossible'. (LI, 757)

On this account, the fact that nothing can be red and green all over is made true by the incompatibility of two color qualities within the same quality space of an object. Accordingly there is no complex species $W(\text{Red}, \text{Green}, \dots)$ and thus, there are no actual or possible individual instances of such wholes. Seeing this impossibility consist in the attempt to present an object or piece of an object that is both wholly red and wholly green. Specifically, the attempt begins with the partial intuitive presentation of a red and green colored extension $W(\text{Red}, [\text{Green}], \dots)$ where the green component is merely thought of as unified, but not intuitively illustrated. In addition the intuitive illustration of something green must be produced for the sake of combination. The attempt to combine these elements consists in an overarching intention to bringing the intuitively illustrated $W(\text{Red}, \dots)$ that emptily includes an intention towards (Green) and an intuitively illustrated instance of (Green) into the unity of one intuition $W(\text{Red}, \text{Green}, \dots)$ by way of imaginative variation. This intention seeks out fulfillment in an imaginative product that presents the elements again, but this time as unified according to the form of combination specified by W . In the color example, that form would be the joint coloring of the same quality space. The intention to bring the intuitively presented green color moment (Green) into unity with the intuitively presented whole $W(\text{Red}, \dots)[\text{Green}]$ admits of frustration. The representation of $W(\text{Red}, \dots)$ will not admit the inclusion of (Green). The intention remains unfulfilled, and this is so despite the intuitive presence of all of the relevant components.

6.3 Against Psychologism: When Conceivability Entails Possibility and Isolability Entails Contingency/Necessity.

In Chapter four I stated that the entailment between conceivability and possibility only holds infallibly in the case of adequate intuitions. I also stated that the factual failure to adequately intuit on the part of individual thinkers, does not entail the ideal non-intuitability of matters, and thus does not entail an impossibility. For one thing, another person whose powers of imagination are better may be able to adequately present what another cannot.

There are at least two ways in which one can fail to adequately present, isolate or combine various sorts of items, one of which entails impossibility and one of which does not. In one case one might have separate and adequate intuitions of several elements $I(p)$, $I(q)$, as well as an adequate intuition of the form of the whole $W(p\dots)$ under which they should be unified, but fail to produce the resultant whole $W(p, q, \dots)$. In this case, the failure to conceive entails the impossibility of the supposed whole. In contrast, the failure to intuitively present some whole W may simply be the result of failing to intuitively present some or all of the elements of W . That is, one may fail to imagine a whole $W(p, q, \dots)$ of a certain sort because one cannot imagine some or all of its constituents W, p, q , etc. In this case, the lack of intuitive presentation does not entail the impossibility of W . The fact that one cannot present several parts and properties of some complex object W says nothing about the internal consistency and thereby the possibility of W .

For example, I cannot right now imaginatively present a sound whose pitch lies beyond 100 MHz. I just cannot imagine what such a tone would sound like, but I cannot thereby establish the impossibility of such a sound. Its impossibility does not even follow from this fact. For one thing, some other thinker might hear or otherwise intuitively present such a tone. For another, I cannot intuitively present all of the components of this would-be sound. Specifically, its pitch is simply absent from my attempted imaginative effort. I am essentially deaf to such tone qualities. My deafness, however only entails that I cannot pronounce on the possibility or impossibility of such sounds. Impossibility is seen in the conflict among intuitively presented items. If the items to be unified are not presented, nothing about their compatibility can be determined,¹²¹ and thus, nothing about the possibility of wholes that have those items as parts.

This point is important in the establishment of dependence relations too. The parts and properties one attempts to isolate must be intuitively presented. The inability to isolate by way of variation some property P from Q is not significant merely because one psychologically fails. For as in the case of impossibility, one might merely lack the appropriate powers and “concepts”. Without being able to form an intuitive presentation of p’s and q’s one simply has nothing to say on the matter of whether object of type P can be separated from object of type Q.

¹²¹ It might be objected that on this account we have no reason to believe there are such sounds, yet we clearly know that there are. It is not obvious how this would follow since we can discover possibilities mediately. Even if it were the case it is nothing to be alarmed about. We should rather be suspicious of the claim that so-called tones of 1 billion Hz sound like anything at all.

The failure to isolate some object p from the whole $W(p, q, \dots)$ cannot depend on my ability to present p in the first place. Only when $W(p, q, \dots)$ is adequately intuited does the failure to isolate entail the necessity of union. Assuming I am deaf to all sounds, it does no good to ask me if $C\#$ can be sounded without $D\#$. My inability to isolate them has no bearing on their unity.

It was Husserl's explicit aim to avoid the psychologistic interpretation of his theory. He writes that these relations among presentations and dependence relations... "...are no mere contingencies of our subjective thinking. They are real differences grounded in the pure essence of things, which since they obtain, and since we know of them, prompt's us to say that a thought which oversteps them is impossible, i.e. a judgment deviating from them is wrong." (LI, 445) It is not the fact that one can or cannot imagine that is being thought of or discovered in the imaginative attempt. It is what is being presented that is one's subject matter. One's role as imaginer is analogous to the role of an experimenter. One produces cases for the sake of combination and separation. In the process they discover how the relevant elements fit together. When one conceives of all of the parts adequately along with the form of their combination, the failure of the items to be imaginatively combined is no fault on the part of the imaginer, but an impossibility on the part of the objects imagined. The consciousness of incompatibility, for example, is the consciousness that one or more items cannot be unified according to a certain form. The subject of these thoughts is always the properties and unities themselves, not our experience of them.

Chapter 7

Objections

7. Introduction.

Husserl's method has not gone without criticism. In the phenomenological tradition, sympathetic objectors have attempted to mollify Husserl's methods, aims, and results, in order to make them (surprisingly) more amenable to analytic and naturalistic programs. Several of these objections have gained widespread approval, and have gone unchallenged as far as I can tell. I find the attempts to soften Husserl's method flawed, and hope to defend the importance of the method as originally conceived. The various modifications of the method are touted by their authors for their resultant continuity with contemporary naturalism. Clearly, this modification does violence to the spirit of Husserl's efforts whose whole philosophy depended on the legitimacy and priority of a priori inquiry, but more importantly, it suffers many of the weaknesses that empirical methods suffer as accounts of our modal knowledge. The following chapter lays out and evaluates those objections as well as their proposed remedies and defends the method against them.

7.1. The Circularity Objections.

The most prominent and widely accepted charge has been that there is a vicious circularity in the method. The following is John Scanlon's recent summary of this criticism.

If the method is meant to achieve knowledge of eide [Pure Essences], how can anyone be asked, in advance, to select an instance of an eidos and then to imagine a series of arbitrarily varied instances of the same eidos? If I do not know what green is, I cannot be expected to select an instance of green and then to vary additional instances arbitrarily, while remaining steadfastly in the scope of green. On the other hand if I already know what green is, I do not require a cumbersome method to acquire the knowledge I already enjoy. (Scanlon 1997, 169)

Looked at carefully there are really two charges of circularity brought to bear on the method. The first concerns the creation of an example (step I). How, it is asked, can an example of a type be produced unless something about that type is already known? The second objection concerns the process of variation (step II). How can I produce variations of a type, or more importantly, how can I realize which of my variations are of the same type without grasping the essentials of that type before hand? I will address each of these objections by considering and evaluating the solutions offered by the critics themselves. I will then point out what I take to be the mistake in the objection

7.2 Two Charges of Circularity.

The first and most obvious charge of circularity concerns choosing an example to begin with. How can I choose an example of the type I wish to investigate without already knowing what that type is? In order to choose a green object I need to know a thing or two about what makes something green. Hence, the method presupposes that I know what the type is that I plan to investigate.

Though clear, the objection is not specific enough. According to my description of step I (Sect. 6.1) there are really two possible starting off points for the method. One can begin by choosing an object and treating it as an example of its kind, or one can start by choosing a type they have already apprehended and then finding or imagining an object that falls under that type. In either case the object must then be turned into an example of its type. The objection seems only to apply to the latter case. That is, how can I find or imagine an example of a type without yet the knowledge of that type? Of course, a similar objection can be leveled against the other starting point as well. How, it might be asked, can I treat an object as example of its type, without knowing a thing or two about what being an example of that type would consist in? For example, right now I can perceive my work-desk, but if I am to treat it as an example of a material object, I need to know what a material object is. Otherwise, what restrains me from treating my desk as an example of the type Non-offensive Adult Contemporary Pop Music? If I treat it as one possible instance among others is remains unspecified which others. Other desks? Other material objects? Other tools? Other things used by me during the last year? Other sorts of music? It looks like I not only need to know a thing or two about the object I am dealing with but also about what constitutes it as an example of its type. This certainly entails that I know a thing or two about its type. Thus, we have an apparent circularity.

The second charge of circularity is that the method requires that we be able to recognize whether or not each variant is an instance of the type we are investigating.

Since the method requires that we produce variants totally arbitrarily and without restriction, objects that are not of the type being investigated will invariably enter into the process. According to Mohanty this is not just a likelihood, but a necessity, for “the method requires that at some point in my imaginatively fabricating variants, I must be able to say ‘this is *not* any longer a \emptyset ’ ” (Mohanty 1989, 33) In doing so I find both the essential limits and essential components of the type I am investigating. The idea here is that in variation we remove and replace the elements constitutive of our exemplar until we feel pressure upon our variations not to go this or that way any further. When removal of an element destroys the example as an example of the kind, this account supposes, we know that that element was essential to objects of the type under scrutiny. For example, when varying my desk, if I imagine an example whose size is nullified or reaches zero, my object ceases to be any sort of material object at all. “But”, Mohanty argues, “how can I say ‘this is not any longer an \emptyset ’ unless I have already an acquaintance with what something must be like in order to be counted as an \emptyset or what something must be like in order to be ruled out as an \emptyset .”¹²² (33)

Faced with these apparent circularities, some have suggested that although the method requires that we begin by shifting our attention from an individual object to its pure essence, this pure essence is not yet fully grasped in the process of turning the object into an example of its kind. This “turning of attention,” Richard Zaner notes, requires making an explicit intention towards the type “however unclarified

¹²² Robert Sokolowski makes the same point in his 1974, 81-82.

the specific content of the “type” itself may be initially.” (Zaner 1973a, 202) Then, through the process of variation, our initially vague and partial grasp of the object’s essence is made determinate and complete. The essence in question becomes precisified and made salient. In this way the apparent circularity is not vicious, for the method of free fantasy is a method for clarifying essences that are initially given in an unclear manner. Thus, it is true that the method requires that we think about types and subsume objects under them, but that does not entail that we need to know or “grasp” the essence of something in order to treat that object as an example of its kind. Free Fantasy deals with unclarified types that can be clarified in the process of variation. Something like this solution to the circularity problem is held by most who take this objection seriously.¹²³ Thus, the method is not in fact one of discovery, but of clarification.

This solution, however, is inadequate. The process of variation grounded upon vaguely intuited types can never yield a less vague precisification of that type. The reason is that given an unclear grasp of an object’s type, it is not possible to know which properties or complex of properties of the object are to be varied and which are to remain constant in the process of variation. If I have merely an empty intention towards an object’s type, and some of the properties that constitute its qualitative character lie hidden from me, I will not be capable of bringing those hidden properties out of the original or any imaginary example by producing variants exactly similar to my original. Each such variant, if faithfully similar, will carry the

¹²³ See e.g., Mohanty 1989, Levin 1970.

same vagaries and empty anticipations as the original. If I do not know what features are present in the first place or those features lack intuitive illustration, imagining examples exactly similar will result in examples that also lack an intuitive illustration of these features. On the other hand, if I produce examples that are not faithfully the same as my original, I have no reason to believe the process is leading anywhere at all. Therefore, variation cannot clarify types, in the sense of completing our partial grasp of them.

7.3 Circularity Resolved.

Despite the weakness of the solution offered, I believe that the circularity objection can be dissipated, for it contains an error from the start. The error is that it misconstrues the aim of Husserl's method. Given the discussion of universal intuition in chapter five, and the empirical type in section 4 of that chapter, it should be clear that the apprehension or misapprehension of pure essences does not arise for persons who cannot intuit types to begin with. The purpose of the method is to "purify" an already apprehended universal and in the process to uncover the structure of dependence relations in which it is embedded. It is not an account of the apprehension of universals, or of the apprehension of the elements constitutive of a given universal. It presupposes these. The mistake that leads to the charge of circularity is the belief that the method of free variation is the method for apprehending universals. This is not right, and it was not Husserl's intention. The method itself is introduced to account for our insight into necessity given our already

established intuition of universals on the basis of experience. Thus, it is absolutely true that the intuition of a universal is required to give direction and rationale to the method. However, since the aim of the method is the purification of an intuited universal and subsequently the establishment of dependence relations, there is really no circularity involved.

That said, I do not want to diminish the obvious fact that the method can in fact provide one with an essence, and even a pure essence, simply on the basis of a single perceived or imagined object. The production of variations exactly similar to that object does not require an identification of that object's type to get off the ground, but can itself lead to such an identification as its outcome. The apprehension of a type can always be accomplished on the basis of comparison and categorial judgment among the imagined particulars presented through the method.

The problem with the initial charge of circularity is that it misconstrues the role of the type being investigated in the production of variants. An intuition or intuition of a type does not determine the inclusion or exclusion of variants from the process of free fantasy. Husserl's only demand is that each variant be exactly similar both to the original and to every other variant. The relation of exact likeness determines whether an item belongs among the variants, not the ability to subsume newly imagined individuals.

Since similarity holds among particulars and their property instances, not among species, it is not necessary to determine if imagined cases are cases of the

same type as long as they coincide with respect to the property instance or complex of instances that has been singled out in the initial example.

Of course, if one cannot imagine exact likenesses, then they cannot perform a free variation with any consistent results. It is also important that the example one begins with is truly an example of the type one wishes to investigate. If it is not, the process will surely lead one astray. In fact, it will lead one to the purification of a type different from that which one intended to investigate. But this possibility is not an inherent flaw in the process. It merely points to the necessity for clear cases, either real or imaginary, for the sake of eidetic investigation. Simply put, whether or not one can find a clear case is not a weakness of the method but a contingent fact about the investigator.

7.4 The Induction Problem.

It has been argued that due to the finite number of variants one can hope to work with, any extrapolation to the essential features of an object is at best an inductive generalization.¹²⁴ The reason is that no matter how many variants one has considered, one never has every possibility, and thus, cannot pronounce on the basis of some finite number of cases what is essential to every actual and possible example of the kind under investigation. For example, if all of the examples of persons I imagine are language speakers, then linguistic ability would appear to be essential to

¹²⁴ See e.g., Levin 1970, Zaner, 1973a, Mohanty 1989, and Stevens 1992.

persons, for it would appear as an invariant among the multiplicity of persons I had imagined.

Husserl's claim that the process of variation must proceed with the sense that one can break off the production of variations at any time is seen to be especially problematic. It indicates, according to David Levin, that one can break off the process of forming variations prior to running through every possible variation, and thus, before necessity can be guaranteed.

The process of eidetic variation, as he [Husserl] sees it, proceeds by absolutely arbitrary exemplars, mere possibilities. He therefore thinks the series of variations, which in principle could go on ad infinitum, can be terminated at any point, provided only that there have been enough variants to engender a satisfactory eidetic congruence. (Levin 1970, 8)

Naturally the question arises, "With what justification can Husserl proclaim the adequacy of eidetic insight when the method of variation is terminated before the gamut of possibles has been run through?" (Levin, 8) Levin's specific criticism here is directed at the potential for adequacy and the certainty that would seem to follow from it, but it just as well functions as a criticism directed at the possibility of apprehending general necessities.

This critique it is widely accepted to be valid and even seen as a virtue of the method, many pointing out its compatibility with a criteria of reflective equilibrium, and its ability to account for error in a priori thinking.¹²⁵ Furthermore, in light of this

¹²⁵See Levin 1970, Zaner 1973, Mohanty 1989.

objection, several authors sympathetic to the method have reinterpreted it, modifying its aims and results. I will discuss some of these options now.

7.4.1 Cobb-Stevens's Aristotelian Solution.

Richard Cobb-Stevens tries to work with Husserl's solution. He emphasizes that "what matters is that the manner of variation should be such that not only do we have the sense that the process could go on indefinitely, but that it would be fruitless to continue." (1992, 267) But upon what basis this sense of "fruitlessness" is grounded Stevens does not take a stand. Instead, Stevens offers an Aristotelian answer to the problem of when and why to stop the process of variation.

Neither Aristotle nor Husserl attempt to provide anything like a clear-cut rule for deciding when the intellect should "take a stand," or when the process of "free variation" ought to come to an end. They tell us only that there comes a point in any inquiry when it is reasonable to conclude that there are no further pertinent questions to be asked. It is then imprudent or even pathological to continue to consider alternative possibilities. A sense of the mean between extremes is as necessary in intellectual inquiry as it is in practical affairs. (Stevens 1992, 268-69)

The thorn in the side of Stevens's solution is the difficulty of establishing what "reasonableness" and the "mean" consist in, and are grounded upon. If it is reasonable to accept the deliverances of variation, then there must be a rational connection between thought and being that makes it reasonable, and that connection must be elucidated before the claim of "reasonableness" is accepted. That connection, according to Husserl, must be grounded in the nature of concepts and their relations to the categories of being. Concerning the case at hand the same

general point applies. If, at a certain point, it is imprudent or even pathological to continue the process of variation, this can only be due to the rational consciousness of some fact or feature that makes it imprudent. Hence, without an account of what that consciousness consists in, and what fact or feature becomes apparent, Stevens's suggestion is more a shrugging of the shoulders than anything else. The Aristotelian criterion of the mean with respect to reasonableness only has value if that something is in fact reasonable and apprehended as such. The inductionist simply claims that it is not. It is up to the Aristotelian to explain how a finite set of variations may be reasonably sufficient for an intuition of a pure essence and essential necessities common not to just the cases considered so far but to every actual and possible object that has that essence. In light of the gap between the examples one actually considers for the sake of identification and the infinitely large number examples they have neglected, it is not obvious how this approach will succeed.

7.4.2 The "Take Stock along the Way" Interpretation.

Some critical commentators (Mohanty, Follesdal) see the insuperability of the induction problem as a virtue of the method. They interpret Husserl's comments merely as a rejection of absolutism about truth and knowledge of essences and essential necessities. The fact that the process of variation proceeds *ad libitum*, Mohanty suggests, allows us to stop and "take stock of the invariant structure that has emerged along the way". (Mohanty 1989, 27) The clarification of an essence, as well as the apprehension of necessities, is an achievement that is always in progress

and never complete. The idea is that given our experiences and imagined examples up to any point in time, an assessment of the essence of a given object can be made. This presumptive assessment can then be modified later on by further cases, but will always remain presumptive.

Obviously it is possible to take stock of what is common to some finite number of imagined examples. The problem, however, is that taking stock means realizing that your knowledge is but a rough guess. Consequently, the central components of the critique of psychologism can be leveled against this view. The sense of necessity and the other modalities is never fulfilled or fulfillable on this account. Quite simply, this account fails to explain how necessities appear as necessities. Some, (e.g., Dagfinn Follesdal) are quite happy with this conclusion, denying that there are such modal facts to be had, and even denying that Husserl believed there were either.¹²⁶ Obviously, this sort of Neo-Quinean eidetics cannot be maintained as an account of our modal knowledge, for it simply denies the possibility of such knowledge. I do not wish to delve into the inadequacies of the Quinean and naturalistic theory of knowledge. Instead, I will undercut the terms of the debate as I have expressed it, for I believe these solutions share a common, yet mistaken assumption: that the induction problem is real.

¹²⁶ Follesdal 1991 and from colloquia presentations at UC Irvine 2000.

7.5 Rejection of Induction and Extensionalism.

There is a problem with the initial charge of inductionism that motivates these maneuvers. The inductionists critique presupposes that the acquisition of general modal knowledge must be extensionally grounded. The whole basis for pointing out the inadequacy of induction is the presupposition that no number of individual cases (whether real or imaginary) can provide one with what is common to or true of all possible cases. Clearly, this is true just as much for empirical generalities based on actual instances as it is for pure generalities based on possible instances. The problem for Husserl's method is that even though it provides a criterion for possibility (imaginative intuitability), it lacks a criterion for when all possibilities have been taken into account. That problem, however, is only a problem for one who thinks general knowledge depends on purviewing all the instances (whether actual or possible). I think this is a mistaken assumption.

One observation that indicates extensionalism is on the wrong track is that it makes it increasingly difficult to see what is essential the higher the category of object for the simple reason that more general categories have more kinds of exemplifications. If the acquisition of pure essences were dependent upon an extensive purview of the possibilities, then it would seem that higher levels of generality would require far more examples than lower level generalities. But just the reverse is true. The more general a necessity the easier it is to apprehend. For example, it is easier to realize the transitivity of parts and wholes than to realize whether minds depend upon bodies. It is also easier to discover that shape and size

are inseparable then it is to discover that the square of the hypotenuse of a right triangle is equal to the sum of the square of the other two sides. The more general a category, the more differentia fall below it, and the more possibilities that exemplify that type there are. Simply put, examples of parts and wholes include persons, cars, and colors. Examples of persons do not. This is no knock down argument, but it inclines one to think there is something dubious about the inductionist's assumption.

There is also a serious objection to the inductionist account. Namely, that it fails in principle to provide for knowledge of necessity. Consider the situation for an observer or imaginer who, by whatever recourse, does have every instance of a certain kind presented before him. According to the inductionists this is the only sufficient condition for knowledge of necessity. The problem is that a cognizer in such a situation still could not determine which properties are essential and which are not. The reason is that being intuitively presented with the total extension of a kind does not establish which properties are essential to those presented objects. It establishes at most that every object presented shares something in common. Examining the totality of objects for common elements, however, will not help. For example, even if one could determine that all of these instances of red share in common the properties a, b, and c, this does not entail that a, b, and c are essential to either those instances of red or every instance of red.

Of course, if one knew that *every possible* red moment is a, b, and c, then one should be able to conclude that every red moment is necessarily a, b, and c. However, this response presupposes what it sets out to establish. In order to

establish that one has every possible instance of that kind requires grasping what is essential to that kind. Given the complete set of possible instances of a given universal does not help unless one can realize that they have the completed extension. How might that be determined? To determine whether or not a possibility is being left out can only be resolved in one way: by attempting to consider cases that fall outside of that extension. One who purviews all the possibilities and then wishes to know whether a property common to them all is essential to them all, needs to know if every case has been considered. Their only recourse is to see if an instance that falls outside the extension is possible, i.e., they have to look for a counterexample. On the Husserlian account this will require an intuitive presentation of that counterexample as produced through the process of imaginative variation. If every object in that extension is a, b, c...n, then one will have to consider whether something without a, b, c...n respectively also belongs to that extension. If one can imaginatively isolate some feature a, b, c...n from its object by way of variation then they can establish the contingency of that property. If the attempted isolation fails, or better, results in the extinction of the subject, the property is essential.

The apprehension of modal properties may be founded upon the intuitive presentation of actual or possible individuals, but it is not a judgment about them, no matter what quantity of them one is presented with.

7.5.1 Revisability: *The Adequation Problem.*

For some, the concerns that generate the inductionists argument are part of a more general critique concerning the adequacy and apodicticity of our knowledge of essences.¹²⁷ They accept the inductionists assumption that the finite number of cases that are produced in the process of variation fail to provide insight into the essence and essential necessities as true of all actual and possible cases. They then reason that the same sort of probabilistic evidence one has in empirical induction is shared by this sort of a priori induction. Consequently, they argue that every modal claim is revisable in light of future evidence. This is the extent that these authors can align themselves with Quine's similar maxim. Thus, they too, hold a sort of "take stock" account of essences. According to Richard Zaner, the inherent inadequacy of the eidetic method means that any stand taken on the basis of free variation is "subject to deception, modification, revision and even denial - in short, continual criticism." (Zaner 1973b, 216) Therefore, he concludes that a "tentativeness" or "open availability" turns out to be "*a formally necessary characteristic of every epistemic claim, most especially eidetic ones.*" (217) Consequently, "the rigid fence traditionally placed between the eidetic (or a priori) and the empirical (or a posteriori) is in serious disrepair, if not a wholly chimerical one." (1973a, 42)

It is important to comment that, as stated, these concerns only apply to the results of eidetic researchers with finite capacities. In principle, and even according to the inductivist's own assumption, an ideal imaginer could determine what is

¹²⁷ For example, Zaner 1973 and Levin 1970.

necessary. Thus their skeptical conclusion only follows for an investigator of limited capacity.¹²⁸ However, as I attempted to show above, this concern over adequacy is not necessary. The claim of inadequacy depends on the inductivist interpretation rejected above. If this inductivist reading is wrong, and can be replaced along the lines I have suggested, then the basis for concern can be lifted too.

There still may be grounds for tentativeness with respect to eidetic claims, but these grounds are not rooted in the subject matter or the method of knowing, they are the result of the possibility of an imperfect performance on the side of the would-be knower. This difference makes all the world philosophically. For no one would deny revisability theses were all they to say is that “we can never be sure” or “we may have made a mistake.” But it is entirely something different to say that no claims are verifiable or falsifiable.

Individual persons can be less than ideal investigators in many ways. Damaged faculties of perception, imagination, judgment, etc. may prove difficult to overcome for any method for acquiring knowledge. Prejudice, impatience, and other psychological conditions pose equally troublesome contingencies. Furthermore, as John Scanlon remarks, no method is “an infallible safe guard against ignorance.” (Scanlon 1997, 171) Thus, if my abilities to imagine are poor, my examples are dubious, and my attention and concentration weak, then most likely I will not achieve an insight. If on the other hand, I am a capable thinker, practiced at eidetic insight, worldly, and with a good imagination, insight becomes more likely. My

¹²⁸ This is another significant difference between these and the Quinean view. For a Quinean the revisability thesis holds for ideal knowers

psychological condition, however, has no bearing on the validity and necessity of this process for the possibility of a rational intuition.

Despite these concerns and sources of error, Mohanty nicely points out, “by *intention*, however, - and this is the point of the phenomenologists’ exaggerated claims - in case an essence has been discovered, such discovery must be apodictic.” (Mohanty 1989, 29) Just in case one comes to see a necessity, then, contrary to Zaner’s statement, it is a formally necessary characteristic that their insight it is not subject to continual criticism and revision in light of future evidence.

Since creativity and imagination play a significant role in the method, it seems to follow that individuals whose experience and imaginations are richer will perform better and certainly make fewer errors. Husserl himself acknowledged that an excellence in fiction aides and in fact is necessitated by the method proscribed here; a fact Husserl notes, “as a quotation, should be especially suitable for a naturalistic ridiculing of the eidetic mode of cognition.” (ID, 160)

7.6 *The Limitation to Noemata.*

Some claim that the theory is limited to an investigation of the Senses (Noemata) of various acts of conception, and not the essences of things in any rich realist sense.¹²⁹ This view is bolstered by some of Husserl’s statements on the relation between object categories and categories of experience, as in the following.

¹²⁹ See e.g., Mohanty 1989.

Every object-category (or every region and every category in our narrower, pregnant sense) is a universal essence which of necessity is itself made adequately given. In its adequate givenness it prescribes an intellectually seen generic rule for every particular object becoming intended to in multiplicities of concrete mental processes...It prescribes the rule for how an object subordinate to it would be fully determined with respect to sense and mode of givenness, how it would be made adequately given in an ordinary way. (ID Sect.142)

This statement and others like it demonstrate the potential ambiguity of Husserl's position concerning the ontological status of individuals and universals. In the statement above, Husserl claims that essences (universals) prescribe the characteristic way their instances come to be known. Specifically, they determine the character and structure of the complex of experiences through which objects become intuitively presented and find fulfillment. This much was stated in chapter four. Some, however, take the relation between categories and the systems of experiences through which an object under that category come to be known to be identity. On this account, individual objects are identified with systems of appearances through which those objects are adequately intuited. Categories themselves no longer prescribe "rules" for the character and development of those systems, but are identified with those rules.

Gilbert Null offers just such an interpretation of essences and essence analysis. Null's explicit aim is to find a way "of accounting for the details of generalizing abstraction on the basis of Gurwitsch's version of the general theory of intentionality." (485) To this end he adopts a phenomenological idealism that identifies individual objects with collections of appearances (or "noemata") through which an adequate experience of the object would be constituted. More important

for our discussion is his conception of types. Types are not the ontologically objective and transcendent entities the realist supposes. Instead they are rules or structures of experience somewhat analogous to Kantian Categories. According to Null, the “limits of typicality are the vague specification as to general style and type within which the non-actually present parts of the inner horizon of the noema...are expected to conform when they become actually present parts. I suggest that the *type* finds its most foundational and rudimentary embodiment in conscious life as these limits. If we make these limits...into a theme...and then give this new theme a name, we will have abstracted the type, or the empirical general concept.” (Null, 482-483) In grasping these limits Null suggests that we have grasped the intension of a class term.

On this account universals are the limiting conditions under which objects that fall under them appear. Types *just are* limits or boundaries to the unfolding of appearances that constitute the conscious fulfillment of an object. To illustrate his point consider the continuous and unfolding collection of visual appearances of a tree as one strolls past. The actual sequence of perceptual “content” that makes up the perception of a tree may have gone differently than it actually did, yet it typically proceeds within limits. Thus, as one moves around the tree they may perceive the continuity of the surface of the trunk broken up by a hole or a branch. The color of the trunk on one side may shade off into another, the leaved branches may begin to move or come to rest, etc. The perception of a tree however, will never unfold in such a way that the tree appears two-dimensional, divided into several trees, or

lacking some surface color and texture altogether. These limits, that restrict the way a tree can appear, make up the type Tree.

The process of variation comes into play, according to Null, when one wishes to pin down precisely the intention of their class term and specify exactly when an object falls under it. Through variation one imagines the general style filled out in this or that way, and learns what “sort of variations violate the delineation as to general style and type set up by the inner horizon.” (486-87) Whenever a violation is experienced, e.g., when one imagines perceiving a tree that lacks a surface, “it can be thematized and expressed as a law pertaining to the type (concept, or propositional function) at issue.” (487) His point is that imagination purifies a type by exposing the limitations that type imposes on any object whose possible appearances are imaginatively filled out. He goes on to say that every imaginable violation of the style through imagination yields a law. “It would then seem that an “eidos” must be considered as the conjunction of *all* the laws which make the limits of typicality of a given nucleus into explicit themes.” (487) Furthermore, “Such an accomplishment would be nothing less than the adequate intensional definition of a class term as a complete axiom set, the sort of definition which has interested philosophers since Socrates (if not since Thales).” (487)

Since there is little in Husserl’s work that agrees with this account, and Null’s explicit aim is to provide a Gurwitschean account of the intuition of types and their modal relations, it is not really an objection to Husserl’s method. Instead, Null offers us an alternative. This alternative however is untenable for a number of reasons.

The first problem with Null's view is that as stated it is blatantly circular. Types, he tells us are the "vague specification as to style and type". I do not believe this is an accident on Null's part. The view that types are sets of laws delimiting some style or character for a class of objects, unavoidably makes reference to that character (i.e. type) which unifies that class. Thus, the best we can hope for in expressing Null's thesis is to downplay the circularity. We might say, types are the laws that prescribe the essential character and limitations of the modes of appearance that constitute the experience of an object of a given class.

The sense that a circularity is at hand derives from the ontological inversion that Null is attempting. The potentialities and possibilities inherent in an experience that prescribe for its further development and fulfillment are made to be ontological prior to the object which those possibilities concern. This puts the cart before the horse. Instead of appearing in certain ways in virtue of what they are, on Null's account, in virtue of the way something appears it is what it is. This fails what we might call the explanatory test. Whereas it makes some explanatory sense to say that red and green appear a certain way and in fact in similar ways *because* they are both colors, it does not make sense to say that red and green are both colors *because* they appear in similar ways.

There is a more serious problem for this theory that I will put in the form of a dilemma. If we ask what the laws constituting color theory, for example, apply to - what their subject matter is, we end up with a dilemma. Either they are about or apply to types, or they are about or apply to the objects that fall under those types. In

the former case, since the laws of color theory just are the type Color, we get the consequence that color theory is a theory about color theory. In the latter case, since types just are the laws of color theory, it follows that color theory applies to objects that fall under the laws of color theory. Or better, color theory is about the class of objects that color theory has as its subject matter. But why does color theory have that class as opposed to another as its subject matter? There are no resources in the account to answer this question. For objects fall under the classes they do, not in virtue of a common element or feature (e.g., a universal), but in virtue of sharing in common a set of laws that apply to them. The problem is that if the class is unified in virtue of sharing in common some set of laws that apply to them, we can no longer ask what sort of objects the laws of color theory apply to, for there is no sort over and above those laws themselves.

We also cannot ask what makes the propositions constituting color theory parts of the same theory. The suggestion that they apply to all and only colored objects does not help, for that which all and only colored things have in common is just those set of laws. Thus, both horns of the dilemma lead to an absurd circularity.

Phenomenologically, the view is also untenable. First, the view fails to distinguish laws, which are propositions, from their non-propositional subject matters. Laws are about things, types are not. The universal Red does not make reference to anything. The proposition "Red is a color" does, namely, the color Red.

Second, if an essence is but a rule concerning modes of appearing then apprehending an essence will only inform one as to the rule or rules of appearance.

That is, it will inform one as to what appearing and being known amounts to for some object. More precisely, it will only inform one as to what it is for something belonging to that category to be intended to and intuitively fulfilled. This might go as follows: For red to be fulfilled is for red to appear as belonging to an extended object, as a moment of the object, as with a hue, saturation, and brightness, etc. The problem is that in thinking about red, color, and extension, one is evidently not concerned with the qualities of thought, experience, and intuition. This is the case for every subject except thought, experience, and intuition themselves. Null's nominalistic idealism distorts the true sense of our thoughts and fails to capture their genuine meaning. Simply put, one can think about what dogs are without thinking about how dogs appear. Dogs bark a lot, but the appearances of dogs do not bark in the least. Furthermore, appearances (and senses) themselves are intrinsically representational. Every appearance is the appearance of something. Neither Dogs nor the type Dog have this quality, and certainly not intrinsically.

Chapter 8

Assessing the Husserlian Alternative.

8.1

In Part (I) of the dissertation, I argued that contemporary rationalism has two failings: an inadequate phenomenology of the knowing act with respect to modal knowledge, and the problem of psychologism. These are two potent motives for developing a more adequate theory of a priori knowledge, and it is doubtless that they were Husserl's too. Though his phenomenology is well known, it is often overlooked that his critique of psychologism at the turn of the century was considered by many to be a definitive refutation, and remains the most extensive treatment of the issue to date. The recently dubbed "Rationalist Renaissance" has emerged without these motives and in my opinion is worse off for it.¹³⁰

The concern over phenomenological adequacy is far from trivial, for even the naturalist can agree with Laurance Bonjour that it is reasonable to believe that an intelligence can see the necessary character of reality,¹³¹ but what remains to be spelled out is just how an intelligence does that, how it is possible. In short, we need to know what the character and quality of that seeing consists in. An answer to this question, I have argued is noticeably lacking among contemporary rationalists. Thus, in chapter two we saw that many accept that some sort of presentation of necessity is essential to the process, but how that presentation arises in a manner

¹³⁰ This term is from Bealer 2002.

¹³¹ See e.g. Cassam 2000 and Rey 1998.

constitutive of knowledge is left unanswered. Though a reliable tie between intuitions and the truth is often demanded by rationalists and naturalists alike, none have yet to draw out the nature of that tie or the sort of experiences that constitutes it in even a single case.¹³² The realist maneuver that we find in J. Katz is insufficient for the same reasons. Katz asserts the importance of abstract objects in the characterization of a priori knowledge but leaves us in the epistemological situation we began with. Namely, he leaves unspecified how we come to recognize the modal character of the properties and relations that hold among these objects. What we need is the *how*, or in Christopher Peacocke's account the *way* of coming to believe, accept, and know. How do necessities appear, how are beliefs in modality acquired in a rational way, how is evidence of necessity revealed to us? Without answers to these sorts of questions, the very possibility of a priori knowledge as a rational achievement should, and has rightly come into question.

These sorts of questions get to the heart of the general philosophical problem of a priori knowledge, namely, the problem of the very possibility of modal knowledge.

In chapter one I characterized that issue as the problem of how we come to have immediate knowledge of the specific modal status of certain classes of universal necessities.¹³³ I also suggested that these issues are resolved to the extent that the questions posed in chapter one are answered. Namely, (1) What elements go

¹³² Even those naturalists, like George Rey, who are willing to engage in faculty talk, have little to say about the nature of the exercise of that faculty and its tie with modal realities. See Rey 1998.

¹³³ In its *de re* formulation it amounts to the question of how knowledge of the necessary character of certain universal predications are possible.

into the make up of a piece of a priori knowledge, and (2) How are those elements bound up so as to achieve that end?

The second weakness in contemporary rationalism, the problem of psychologism, is resolved by providing an answer that avoids the perils of psychologism. In chapter three we saw that the tendency to psychologize the evidence of rational intuition leads to skepticism and invariably destroys the very possibility of modal knowledge. The lesson of that chapter was that the basis of our immediate modal knowledge and beliefs must be an experience that by its own nature purports to reveal modal reality, and under certain conditions, actually succeeds.

Within the Husserlian epistemological framework (chapter four) that problem became the question of the character of the mental acts and act complexes that yield the intuitive presentation of modal reality. Coupled with Husserl's mereological constituentism it became the question of the character of the mental acts and act complexes that intuitively present dependence and compatibility relations. I will summarize Husserl's answer now.

Dependence and compatibility relations are constitutive of the kind of unity objects must or may enjoy. According to Husserl, dependence and compatibility relations appear through the intuitive presentation of inseparability and conflict among properties. Inseparability and conflict are made present when various properties (i.e., universals) are related by way of free and imaginative acts of isolation and combination. Inseparability, and thus necessity, is presented through

the attempt to isolate one sort of object from another by way of imaginative variation. When the unity between two or more objects prevents their separation in an act of variation, one sees that objects of one sort cannot exist without combination with objects of another sort. In terms of universals this amounts to the claim that one sees that there is nothing that it is to be for an object of the one kind in isolation from an object of the other kind.

Conflict, and thus impossibility, is presented through the attempt to combine two or more elements by way of variation. When the nature of an object prevents its combination with an object of another sort, one sees that there is nothing that can have those properties according to the specified form of combination. That is, one sees that there is nothing that it is to be for complex objects of that sort. Through our attempts to imaginatively combine and isolate we determine what various *sorts* of objects can and cannot be, thereby revealing what they must and must not be.

The process of variation, on this account, depends on the intuitive presentation of properties as general objects (i.e. Universals). Universals themselves, on Husserl's account, are perceived through an act of categorial identification, itself grounded in the presentation of two or more similar objects. For any two or more similar objects intuitively presented, a higher order act is possible which comprehends the common category of which both are particularizations. Once we are thinking of general objects, and through examples can intuitively illustrate and fulfill our general meanings in such higher order acts, it is possible to

engage in thought experiments (variation) and systematically reveal the essential character and relations those general objects prescribe to their instances.

The achievements of the cognitive acts described thus far are made possible because of the tie between the categories of being and the categories of intuitive presentations. When presentations are intuitively adequate, an object (modal or otherwise) is as it is presented as being. Intuitive presentations form a unique class of mental acts whose characteristic quality is to make a thought about something a self-presentation, or a “presencing” of an object, to use Robert Sokolowski’s term. (Sokolowski, 1974) This character of intuitive acts functions not just as the basis for rational progressions of thought, but as the final arbiter of questions of genuine being (truth and falsehood, reality and appearance). Thus, the adequate intuitive illustration of the combination or isolation of a pair of objects guarantees the reality (in the case of perception) and possibility (in the case of imagination) of those objects as conceived. It guarantees their reality by guaranteeing the possibility of knowledge in the form of fulfillment. Thus, the tie between thought and modal reality is governed by a formal tie between knowledge and reality generally.

8.2 How does the Theory fare?

Trivially, we can note that Husserl’s theory succeeds in providing a response to the phenomenological and ontological demands on any adequate and defensible rationalism. This is not usually something important, but in dealing with questions of possibility failing to answer a question at all is grounds for suspicion. I suggested

earlier that the dominant charge against a priorism in contemporary philosophy is the charge of mysticism and obscurity. This charge can hardly be made willy-nilly at the rich and explicit account presented here. What this means is philosophically and practically important. It means that a rejection of a priorism must be grounded in an argument against actual theses constituting a whole theory. It can no longer be grounded upon the rejection of direct perception theories or rational intuition wholesale as undeveloped, occult, or mysterious. This trivial advantage would be had even if the Husserlian account were largely false. A bad explanation is not necessarily worse off than no explanation at all. But it hardly seems one need stand by this perversely meek thesis, for the Husserlian account is plausible in its own right, defensible against the canonical critique (chapter seven), and clearly avoids the problem of psychologism.

In defense, let me say that first and foremost, Husserl's theory provides the desperately needed phenomenological description of rational intuition entirely lacking in contemporary rationalism.¹³⁴ Consequently, it shows that it is also possible to have a non-reductive descriptive analysis of the intrinsic character of intentional phenomena. In other words, it shows the possibility of a phenomenology of knowledge. Such analyses stand in contrast to the phenomenalist search for qualia, feelings, tinctures, etc., that has wrongly motivated many discussions of intuition; a motive that tends to lead to psychologistic errors.¹³⁵ It also stands in

¹³⁴ I can only speculate as to the reasons for this lack, but the invisibility of the phenomenological tradition to analytic rationalists is clearly a factor.

¹³⁵ See Chapter three of this dissertation.

contrast to the sort of functional analysis offered by Bealer, Peacocke et.al., that systematically leaves out the character and qualities of the mental acts and act complexes comprising modal knowledge.

Secondly, it provides an ontological framework for the possibility of modal knowledge and rightly shifts the debate over the a priori away from its value and reliability and towards its possibility. The investigation and debate over the quality, value, reliability, etc., of one's evidence (via rational intuition or otherwise) is certainly of profound importance to the advance of human knowledge. But such discussions are always predicated upon the assumption of knowledge as a coherent possibility. The account of that possibility, and the essential structure of its realization, serves to clarify how such debates themselves become sensible. But more importantly, it serves the intellectual demand to make our cognitive achievements intelligible to us, thereby making intelligible a part of ourselves and our world. Genuine understanding, Husserl realized early on, requires answering the how and why questions, and ultimately, seeing how and why for oneself.¹³⁶

Moreover, it is in the details of one's phenomenological and ontological descriptions that the very possibility of a priori knowledge hinges. For those who invoke rational intuition to account for that possibility, it is in these sorts of details that the naturalist's charge of absurdity, mysteriousness, obscurity, or any other pejorative gets its legitimacy. While this charge may be legitimate for some it has no basis for application in the Husserlian account. Consequently, the dismissive

¹³⁶ See the *Idea of Phenomenology* (IP) and the discussion of Dilthey in *Phenomenological Psychology and Philosophy as a Rigorous Science* (PRS).

treatment of direct perceptions theories is no longer justified on these grounds or the grounds of inadequacy.

Thirdly, the account is defensible against its canonical critics. The sympathetic presentation (chapters four-six) and defense (chapter seven) presented in Part (II) speaks to what I believe is the viability of the Husserlian approach. My conclusion in chapter seven was that the rejection of Husserl's a prioriism within the phenomenological tradition has been shortsighted and quite likely complacent to the march of naturalism. When his earlier work on a priori knowledge is brought to bear on his method of Free Fantasy, a consistent account that avoids these stock criticisms is available.

Lastly, the theory avoids the error of psychologizing rational intuition. The essence of the new psychologism is to replace the requisite insight into modal reality with either insight into psychological phenomena or merely the concurrence of some favored psychological phenomena. Husserl avoids this substitution, and instead clarifies the character of the mental acts and act complexes that allow one to present modal relations themselves. While these mental acts and their qualities can be subject to investigation, and presented themselves, they are not the object of modal insight. On Husserl's account, it is not my awareness that I can or cannot imagine something that indicates a possibility or impossibility. It is my awareness that something is possible or impossible. More specifically, the seeing of modal reality is the conscious recognition of the separability, inseparability, conflict, and compatibility among properties themselves. Consequently, there are no

intermediaries or “feels” required for this achievement, and therefore, nothing to get in the way of consciously apprehending modal reality.

8.3

The viability of Husserl’s theory in an analytic environment, however, depends more than these just mentioned points. It depends on the way Husserl’s theory can handle the four (a-d) issues (and problems) raised in chapter one. I will now take up those issues. I will first describe for each issue how the Husserlian scheme treats of it and then I will suggest some ways that Husserl’s theory can handle the more serious charges that tend to evolve from these issues.¹³⁷

8.3.1 (a) The Possibility of Error and (b) The Relation between the Empirical and A Priori

The historical fact that errors have been made in every field of inquiry make it obvious that one’s epistemological theory must provide an account of error. The Husserlian account explains errors primarily in terms of intuitiveness and adequacy. Whether due to a partially intuitive or totally empty presentation, the quality and veracity of rational insight can be compromised. If, in the process of variation, one lacks an adequate intuitive illustration of the property instances and property types

¹³⁷ Another uniquely phenomenological contribution of Husserl’s account is that there is no mere posit of some faculty or power that must somehow get one to knowledge. Instead, there is the attempt to describe the essential character of that insight into necessity. On the Husserlian account the transparency of that insight to insight itself means that there is no act of hypothesizing to ridicule. And with these activities goes the basis for the charge of mystery and obscurity. Simply put, Husserl’s claims are open to direct refutation by further descriptive efforts.

they are attempting to analyze, there is no guarantee that their results will be veridical. One cannot establish necessities between properties some of which one has no intuitive presentation of. Thus, if one's initial presentation is partial, then any variation will remain putative and hypothetical. If I am trying to determine whether it is essential to a speech act like commanding that it be overtly expressed, have a content, be issued towards a person, or be heard or received by another, I must be able to intuitively present instances of commands to get the process off the ground. I must also be able to intuitively bring to mind these other questioned elements. Any lack of adequacy in the intuitive presentations of one or other of these elements leaves open the possibility of error and the failure of the attempted insight.

There are, not surprisingly, no shortages of the causes of inadequacy. Psychologically, there is always the possibility of failing to provide the imaginative effort required to bring to mind sufficient cases for illustration. One might just be lazy. One may also fail due to a pathology or injury. Brain damage like that suffered by the individuals in Gelb and Goldstein's studies certainly has an effect on one's powers to think, imagine, and apprehend either individuals or universals of various sorts.

The requirement that one be capable of intuitively presenting examples of the types they wish to investigate entails that one can also fail for lack of experience. A person blind since birth or one condemned to a world without light may simply not be able to illustrate a color for themselves. Seeing the necessity of color incompatibilities can hardly be expected of such individuals.

One's experiences need not be so grim to fall victim to this error though. An ordinary lack of experience with a subject matter may simply leave one ignorant as to what various sorts of objects look like. Consequently, any attempt to imaginatively bring an instance of those sorts to mind will be difficult at best. For example, few of us have experience with what weightlessness feels like, and thus few of us can imagine what features are present to one experiencing weightlessness. Since we are familiar with the features of kinesthetic movement in a weighted environment we can sensibly ask certain questions. For example, we can ask if it possible to handle things delicately or with finesse when they are weightless? We can also ask if it this is impossible or even necessary. Our lack of intuitive illustration makes answering a mere guess, for our thoughts and imaginations of the feeling of weightlessness are almost entirely empty.

This entails that the richness of one's life experiences matters to their capacity to have rational insights. A worldly person, who has learned to better empathize, sympathize, and imaginatively place themselves in other situations will, on Husserl's account, have a better chance of recognizing the limits and possibilities inherent in those situations. This is a welcome consequence of the view explicitly touted by Robert Sokolowski, as legitimizing traditional adages to the effect that with age and experience comes wisdom. (Sokolowski 1974, 65)

Mistakes are also possible in spite of the adequacy of a presentation. All processes of knowing depend not just on one being able to intuitively perceive, imagine, or remember an object, but to notice its parts and properties. The adequate

presentation of an object does not guarantee that one notice and differentiate all of its presented parts and properties. One's attention to detail and ability to discern is of paramount importance in all fields of knowledge. Just as a geologist must take painstaking descriptions of the properties of the rocks he finds, so too must researchers in the a priori disciplines. Cognizance of a property is a pre-condition for determining the sorts of dependence and compatibility structures it is embedded into. Thus, attention to detail and the ability to distinguish is of value to one's intelligence and thereby one's ability to reach results by way of variation. For example, prior to my exposure to music theory I had assumed tones only differed by their pitch. Through the process of comparison, I was made aware of the presence of timbre. Of course every tone I had ever heard or imagined also had this quality, but I was ignorant of its presence, and gave no attention to it. When attention is limited in this manner the whole class of a priori errors become possible. For example, although just about anyone can intuitively present their own thinking to themselves they may not take note of the various qualities their thoughts have. They may for example, not realize their thoughts are intentional, have athetic dimension whereby they posit or not the existence of the objects they are directed to, have a qualitative dimension that differentiates assertions from denials despite their shared content, etc. Without noticing these various features, an attempt to determine what is essential or impossible for thought will be difficult at best.

The success of rational intuition also depends on a corollary of noticing properties, i.e., making distinctions. For example, one who fails to distinguish

thoughts about things from images of things will, through the process of variation, likely find it essential that some sensuous content is present in every thought. And one who fails to distinguish the perception of something from the thing perceived, will likely be led to believe either that perceived things depend on their being perceived (idealism) or that knowledge of things external to perception is impossible (skepticism). These are crude examples, but they make the right point. Failing to notice the presence of various features and correctly distinguishing them is likely to lead to error whether in a priori or empirical endeavors.

One may also, consciously or not, limit the scope of one's inquiry. For example we might limit our investigation of shape to closed plane figures. Here we discover by way of variation the necessities inhering in shapes like triangles, squares, etc. but as systematically and arbitrarily limited. Removing this limitation, one is open to the possibilities of irregular morphologies and n-dimensional shapes. When such an assumption is not intentionally in play, however, errors in judgment are predictable. For what is true of every closed plane figure is not necessarily true of every possible figure in every possible space.

We also can not rule out the possibility that one can believe in spite of actual and possible cases being brought to intuition, and even in spite of recognizing the evidence of that intuition. Various nihilisms and many sorts of reductionism are predicated on this possibility. For rational nihilism and reductionism depends on cognizance of the relevant evidence, and appearances, some of which are surely adequate. But the failure to judge and believe on the basis of evidence does not put

in jeopardy the nature and quality of rational intuition. It puts into question the qualities and assumptions of the judger.

Many of Husserl's remarks seem to indicate that he personally believed the majority of errors in philosophy were not the result of the failure of intuition, but the result of wholly non-intuitive thinking – in the form of blindly accepted thesis, postulation, and speculative hypothesis – what Husserl's deemed "prejudice".¹³⁸ His view is not that philosophers and scientists lack reasons for accepting various thesis, but that it is *only* reasons that they have, as opposed to a genuine apprehension of the objects and relations they posit or deny. The process of forming hypotheses to account for the available evidence, saving hypothesis by rejecting some evidence for the sake of other evidence, and drawing conclusions from one's hypotheses in conjunction with this or that evident thesis, make up a great deal of the theoretical activities not only in philosophy, but in every field of knowledge. Husserl does not reject the value and legitimacy of these practices, but believes that their ultimate justification is to be had in acts of intuitive presentation. In place of hypothesis, Husserl's ongoing demand is that we look to "the things themselves". It is questionable whether errors in theorizing can be reduced by limiting oneself to intuitive descriptions, but it is according to Husserl the final and only arbiter we have in all theoretical matters. Thus, what is needed most of all, Husserl contends, "is not

¹³⁸ See e.g., ID Part I, Chapter 2, and PRS, 184ff.

the insistence that one see with his own eyes; rather it is that he not explain away under pressure of prejudice what has been seen.”¹³⁹ (PRS, 196)

There are likely to be many other manners of error. Neither Husserl nor any other phenomenologist or a priori researcher believes he has exhausted the properties and relations involved in thinking and knowing. Thus, there is always more work to be done, clarifications to be made, and possibilities to be discovered, etc. It is therefore reasonable to believe that many sorts of errors have been passed over, and even some as of yet discovered.

8.3.2 *Application.*

We can apply these analyses of error to the classes of error thought to be discrediting to the whole category of a priori knowledge.

1st Class.

The first and least troubling class consists of cases where a priori claims and insights are refuted by further a priori insights. Though these cases are not usually used as a basis for rejecting the a priori, their possibility must still be accounted for. Just about every work in philosophy purports to do this at least once by way of a counter example, deduction, or some similar means.

¹³⁹ Hence his principles of all principles in Ideas I, “that every originary presentive intuition is a legitimizing source of cognition, that everything originary (so to speak in its “personal” actuality) offered to us in “intuition” is to be accepted simply as what it is presented as being, but also only within the limits in which it is presented there.” (ID Sect. 24)

First off, it is important to note the difference between refuting a claim and refuting the veridicality of actual intuitive experiences. Since one who has the relevant evidential experiences may still claim and believe otherwise than those experiences warrant, one's claims and beliefs can in principle be refuted by their *own* experiences. One can claim or believe just about anything they want, even in the face of adequate evidence. I do not think this is a surprising phenomenon. Many intelligent persons refuse to accept what they see, even when adequately presented, when they find it conflicts with a dearly held belief, with what authorities demand, or with what they desire. While self-deception in these cases is not always possible, denial is. So it is not the claims to a priori status that are potentially troubling. Few would demand that claims of any sort must be indefeasible.

The more interesting cases then, are situations where one insight is legitimately usurped by another. On Husserl's account this possibility is accounted for in terms of adequacy. As long as the former insight was inadequate and the latter adequate, the latter can defeat the former. If one claims *p* on the basis of rational insight, the veracity of that insight is not necessary to its existence. The fallibility of modal insight, along the dimensions suggested above, leave open the possibility of error and correction through a number of means. For example, the latter insight may include a possibility that was previously ignored, a feature that went unnoticed before, effort that was left out, clearer cases that display their properties more perspicuously, etc, which can all account for this transition.

Consider an example: one may find it inconceivable that it makes any difference to their chances of winning whether or not they change their curtain when given the option in a Monty Hall game.¹⁴⁰ When first considering the situation one may view the choice as irrelevant since they realize that the odds of winning with one choice and three curtains is always 1 in 3. After considering the role of the game conductor they realize how he works to their advantage and improves their chances of winning. This and other errors are perfect examples of a partially intuitive insight being replaced by a more adequate one.

Another more common method for defeating a rational intuition is to deduce the impossibility of a previously held thesis from another that is more adequately intuited. If the deduction is also adequate, then one has a proof that their earlier thesis must be mistaken and any intuitive evidence they had for it must have been flawed, though they may not see why. Something like this seems to be the basis for accepting transfinite numbers. Through a number of fairly simple steps and assumptions about numbers and representations, one can prove through the diagonal method that no denumerable series of infinitely long strings of numerals (or any other finite set of characters) can represent every possible string of numerals. Thus, though no one has seen or positively proved the existence of transfinite numbers (or at the very least character strings), the diagonal method provides a negative, and partially intuitive, proof.

¹⁴⁰ In the Monty Hall game you are asked to choose one of three curtains. A prize lies behind only one of the curtains. After choosing the game conductor reveals what is behind one of the losing curtains and asks the contestant whether he would like to stay with his original curtain or switch to the remaining one.

2nd Class.

The second and more important class consists of cases where rational intuition has been proven false by empirical means. The empirical defeasibility of rational intuition is thought to throw the whole category of a priori knowledge as well as the distinction between the empirical and non-empirical disciplines in to doubt. On the Husserlian scheme there seems to be only one way that a rational intuition can be refuted by empirical means. Since it is always possible for a single instance whether imagined or perceived to refute a general claim, and a fortiori a general claim of necessity, an empirical intuition can provide a counterexample to a claim that is based on rational intuition. Thus, where one's imagination is inadequate and shortsighted due to the reasons listed earlier or otherwise, there is always the possibility that one fails to find a possibility that happens to be an actuality. The discovery of this actuality then serves like any relevantly similar example that could have been imagined. It serves as legitimate evidence of a possibility and thus is useful in the establishment and refutation of claims to universal necessity.

The critical suggestion often made, however, is that empirical *hypotheses* refute a priori insights not by providing counter examples, but by better explaining the relevant empirical phenomena than competing claims made on the basis of rational intuition. Rational intuition is then regarded as, at best, empirical speculation proffered from the armchair instead of the field.

On Husserl's account, an empirical hypothesis that better confirms all of the limited but available data cannot supercede an adequately grounded a priori claim. Likewise an adequate empirical claim cannot be superceded by an inadequate a priori insight. Since empirical facts cannot contradict universal necessities and vice versa, the establishment of one rules out the possibility of the other. Thus, to place the value and possibility of rational intuition in jeopardy, one usually argues that rational intuition fails to establish truths in a way that is immune to the advances among the empirical sciences.

On the Husserlian account, when one's claims (empirically grounded or not), are based on adequate presentations there is no possibility of refutation of either by the other. They must be consistent. Consequently, providing an example or proof for the defeasibility of adequate intuitions by one means or another would stand as a direct refutation of the Husserlian position.

Towards this end, there is a standard objection against apriorism no matter its adequacy, quality, clearness, distinctness, etc. Hillary Kornblith has recently reiterated this objection, noting the widely held belief that rational intuition has historically been shown to be false, and shown false by empirical theorizing and advances in the empirical sciences. Kornblith argues that this places the importance of a priori theorizing into doubt,¹⁴¹ although many, like Gilbert Harman, believe that it demonstrates that there is no special province of a priori knowledge as distinct from the practice of natural science.

¹⁴¹ See Kornblith 2000.

There are a number of standard examples frequently offered to support these conclusions. Kornblith, e.g., brings up the overthrow of our intuitions about time by Einsteinian physics. He assumes that pre-Einstein theorists simply could not conceive of the falsity of the transitivity of temporal precedence. (i.e., if *a* precedes *b* and *b* precedes *c*, then *a* precedes *c*.) Yet, Kornblith argues,

...the implications of relativity theory which showed that the absolute notion of simultaneity was indeed mistaken, so that, under conditions of causal independence, when one event *a* precedes another event *c* in a given frame of reference, it will be simultaneous with it in a second frame of reference, and it will follow it in still a third. In short, events in time are not linearly ordered in a unique way. (Kornblith 2000, 68)

Gilbert Harman echoes the view of many when he claims that Einstein's physics has also led to the rejection of Euclidean Geometry as an expression of the necessary character of space.¹⁴² These two stock examples are supposed to show that claims made on the basis of rational intuition are just as fallible if not more fallible than empirical hypothesis, and are subject to confirmation and disconfirmation just as all empirical hypotheses are. Thus, they are subject to evaluation on various explanatory, pragmatic, aesthetic, predictive, etc. grounds.

The assumption guiding this synthesis of a priori and empirical thesis is that empirical science makes use of whatever generalizations best explain the empirical data, for that data is the only available evidence to be had. Once this principle is adopted, the deliverances of rational intuition, no matter their adequacy are subject to acceptance and rejection like any other empirical hypothesis. The phenomena of

¹⁴² See Harmon 1994.

“intuitions” are then interpreted as merely naïve theoretical attempts to account for the empirical data. Furthermore, from this perspective, no evidence derived from an intuition is secure from revision in the face of theoretical demands. Hence, Quine famously suggested that theories in Quantum physics might do best to abandon the principle of excluded middle.

The account of error in rational intuition proffered by these thinkers asserts that so-called rational intuitions are really just generalizations made about empirical phenomena, and their justification is ultimately a matter of scientifically pursuing these naïve theses. Needless to say these claims run in the face of what has been argued for in this dissertation.

The examples offered however are far from decisive on these points.¹⁴³ The classic examples do not obviously appear to be cases of the empirical defeasibility of rational intuition and also do not appear to support the conclusion that needs to be drawn to put rational intuition into jeopardy. There are a number of ways that the Husserlian can address these objections. The least persuasive (but legitimate nevertheless) is to claim that the original intuitions were neither correct nor adequate, and consequently were rightly abandoned by theorists attempting to best explain the empirical data. This response is may be felt to compromise the value of intuitions for it will be said that few intuitions are ever adequate, and there is no systematic way to discover when they are or not. Hence, it is usually argued, it is best to

¹⁴³ In fact, the proper interpretation of the progress and nature of knowledge, and by implication science is what is in question and what the Husserlian theory attempts to provide. This makes any appeal to the history of science look question begging from the start. I will not pursue this line of argument here though.

proceed as the empirical scientist does, and give little if any weight to claims of rational insight. Whatever weight they acquire will be garnered from their explanatory power.

The response that I think more appropriate is to point out that the historical examples are not obviously cases of rational intuition succumbing to empirical hypothesis. The often cited case of Einsteinian physics is a case in point. The argument assumes that Einstein's efforts are an entirely empirical exercise, but this is not obvious at all. First, Einstein's efforts to get clear about the nature of time and space were governed almost entirely by his thought experiments (and hence variations) over the possibilities involving simultaneity and events. Second, Einstein explicitly claimed intuition as source of knowledge for himself and empirical science.¹⁴⁴ Third, his theory of relativity, far from refuting the first example (i.e., transitivity of temporal precedence), actually maintains it, though clarifying its sense. The theory of relativity claims that temporal relations can only be determined relative to a frame of reference. There is on this account no absolute time in which all events occur. Thus, the principle of the transitivity of precedence fails just as the claim that I wrote this chapter after I wrote chapter seven fails in the sense that it has not yet been relativized to a frame of reference, and thus, as it stands is an

¹⁴⁴ From a systematic theoretical point of view, we may imagine the process of evolution of an empirical science to be a continuous process of induction...It is, as it were, a purely empirical enterprise. But this point of view by no means embraces the whole of the actual process; for it slurs over the important part played by intuition and deductive thought in the development of an exact science. As soon as a science has emerged from its initial stages, theoretical advances are no longer achieved merely by a process of arrangement. Guided by empirical data, the investigator rather develops a system of thought which, in general, is built up logically from a small number of fundamental assumptions, the so-called axioms. We call such a system of thought a *theory*. (Einstein 1961, 141-2)

incomplete description of the temporal events. Within a frame of reference, however, both claims make perfect sense, and from my current frame of reference they are both true. (The former, in fact is necessarily true, and holds of any three temporally distinct events within a given frame of reference.) The so-called defeat of the transitivity of temporal precedence principle then is really an a priori defeat of the principle as unqualified. Those who believed this precedence was absolute were assuming that there is an absolute frame of reference.

The other more infamous case is the claim that Einstein's use of a non-Euclidean geometry (and the subsequent explanatory power of his resultant theory), rebuked the long held view that space obeyed Euclid's principles. This example fails for two reasons. First, as in the case before, Einstein accepted the principles of non-Euclidean geometries that had already been a priori established in the work of Lobachevsky and Riemann. These geometrical theories, if coherent, prove the possibility of different sorts of spaces and geometries. The suggestion that the explanatory success of Einstein's adoption of one of these geometries to actual space proves their possibility seems to forget the a priori origin of these geometries. The second mistake is the assumption that rational intuition can provide one with knowledge about the factual make up of the world. Rational intuition may be able to determine that there are a number of possible spaces, -but it cannot determine which of the possible are actual.¹⁴⁵ To paraphrase J. Katz, rational intuition tells us which

¹⁴⁵And as for the shape of actual space, recent data suggests that only space is only locally curved. As a whole, however, is in fact flat and Euclidean. This possibility has little to do with the validity of non-Euclidean geometries, and the possibility of different sorts of spaces.

of the supposable are possible, but only empirical experience can tell us which of the possible are actual.¹⁴⁶

The In-Principle Argument.

Although actual cases of the empirical defeat of a priori insight are not as obvious as their adherents believe there is an in-principle argument that has been made for the possibility of empirical defeat of rational intuition. It has been argued that we might give up an obvious claim like $2+3=5$ under the pressure of authority and scientific evidence. We are asked to imagine that our ordinary arithmetical beliefs systematically fail to adequately apply to empirical phenomena. We are to imagine further, that leading natural scientists have adopted an arithmetic where $2+3=6$, and that this unusual theory better accounts for and predicts the empirical phenomena than any previous theory, and even accounts for and predicts as of yet unexplained phenomena. In the face of this overwhelming evidence, it is suggested we would be rational to give up our belief that 2 and 3 total 5. Thus, through a thought experiment we can prove the in principle possibility of rational intuition succumbing to empirical theorizing.

Before criticizing this argument, it is worthwhile noting that it proceeds on the basis of a thought experiment, and is itself an example of the sort of evidence it aims to place into question.

¹⁴⁶ Katz's exact statement is a bit different. He writes, "Painting the picture in broad brush strokes, we can say that investigation in the natural sciences *seek to prune down the possible to the actual*, while investigation in the formal sciences seeks to *prune down the supposable to the necessary*." (Katz 1998, 59)

On the Husserlian account, however, this argument turns on a series of non-intuitive assumptions. The problem is that what we are asked to imagine and illustrate are not the details of an alternative arithmetic (thereby showing its possibility), nor the details of its theoretical applications, nor most importantly of all the details of how 2 and 3 might add up to 6. Instead, what we intuitively imagine are a number of situations involving ourselves being told about this alternative arithmetic: that it is believed, that it accounts for empirical phenomena, and that it does so better than any traditional arithmetic. What follows from this thought experiment, if adequately illustrated, is merely the possibility that such astounding claims can be made. But what is missing is the evidence those claims are supposed to have for our imagined scientists. We just don't see what the scientists and mathematicians in the example are said to see. The example fails to even partially illustrate 2 and 3 being 6, or what this alternative arithmetic looks like, or how it is successfully applied.

According to Husserl's theory the example demonstrates the character of imagination and its ability to present a series of empty acts. But this possibility is not valuable as a bit of evidence, no more than the imagination of a world where every one *claims* to have no knowledge is evidence for the possibility of universal ignorance. The non-intuitive claims imagined in these situations must get their authority ultimately from some intuitive evidence. Without intuitively illustrating this evidence, the so-called counter example is no more valuable than the imagination of a world where every one claims to have money because someone

owes them a debt. In such a world, no one has any money, just as 2 and 3 never add up to 6.

3rd Class.

A third class of cases thought to be problematic are cases where a priori claims are shown not to be a priori at all. These are claims grounded upon or at least purportedly grounded upon rational intuition that are not only sometimes false, but are wholly empirical matters to begin with. For example, claims such as "Cats are Mammals" were thought by some to be analytic truths, the most obvious of tautologies, and thus paradigms of a priori knowledge. Hillary Putnam however, supposedly showed us that we can imagine that cats are radio controlled robots from Mars, and thus there is nothing necessary or tautological about the proposition. But more importantly, he showed us that the truth of the claim is an empirical matter. These cases raise a great deal of suspicion for they seem to show that the evidence of so-called rational intuition cannot be distinguished by a normal intelligence from an empirical speculation. Consequently, it is thought that the authority of rational intuition is compromised.

Husserl's account seems to leave room for this sort of error, since nothing prevents one from claiming a priori evidence for a posteriori propositions as well as claiming a posteriori evidence for a priori claims (as Korblieth does above). I do not, however, think the error here is without a rational motivation and is likely to be more common than supposed. I believe that in the case of genus/species relations, like

cats being mammals, the rationale for regarding them as a priori derives from the formal and wholly a priori insight that every genus is predicated essentially of its species. So that if it turns out that cats are mammals then they are necessarily mammals. Since it has become common knowledge that cats in fact are mammals, it is a short deductive step to the modal insight that they are necessarily mammals. The problem, of course, is that finding out what cats are is an empirical exercise. But it seems understandable that one would mingle ordinary empirical knowledge into their deductions and thought experiments (variations) thus producing mixed or “impure” results that don the title “a priori”. The subtle difference between the a priori intuition of the modal character of the claim and the a posteriori truth value of the claim seems to invite this error.

8.4 (c) The Role of Conceivability.

The role of conceivability and the objection it warrants were discussed in chapter four (*sec. 6*). Let me briefly reiterate what was said there. The doubts surrounding the value of conceivability point to the apparent discrepancies between conceivability and possibility. It has been suggested that one can conceive of things that are impossible, e.g., the existence or non-existence of God, the falsity of a mathematical theorem, or the non-identity of natural kind identities. Thus, conceivability is not always a guide to the possible. There are also cases where something that was previously thought to be inconceivable and hence, impossible, turns out to be actual. The belief that space must obey Euclid’s axioms seems to be

an example of this of kind inconceivability. Thus, inconceivability is not always a guide to impossibility.

As stated in chapter four, Husserl's theory provides a conceivability criterion for possibilities that distinguishes the legitimate from illegitimate entailments. On the Husserlian account, only conceivability in the form of adequate intuitability entails possibility. Thus, the apparent conceiving of a genuine impossibility is at best a merely partial intuitive presentation of the supposed state of affairs, or at worst, a mere empty thought of the same. In this vein, Husserl's account also suggests a number of ways to handle natural kinds in terms of intuitiveness. For example, the assumption that we can conceive of water not being H₂O has produced a burgeoning literature and the development of a 2-dimensional semantics for natural kind terms. The problem, as noted by Kripke, is that this is an identity claim and is either necessarily true or necessarily false. Therefore, if water is H₂O, then the fact that we can imagine it otherwise is of little value.

The most obvious Husserlian solution is to make the same case as was made against the claim that one can conceive Goldbach's Conjecture to be true as well as conceive it to be false. The supposed conceiving of water without hydrogen, a Husserlian could argue, rests on non-intuitive presentation of water, hydrogen, oxygen, and the chemical bonds that bind them. If water genuinely is identical to the chemical compound H₂O, then this identity, and the inseparability of Hydrogen from water, has its corresponding adequate intuitive illustration, and no adequate presentation of water that excludes hydrogen is possible. The suggestion that I can

imagine water lacking hydrogen is just a matter of partially imagining the situation. Were every part and property of water wholly present to one, then their inseparability from each other or the whole they comprise would be accessible through variation.

In the case of inconceivability entailing impossibility it is much harder to formulate an objection since it is hard to find something that is true, known to be true, and at the same time inconceivable. For example, if space is curved and this is known, the existence of this knowledge proves the conceivability of the fact. For one cannot know what they cannot even conceive in the first place.

One may continue to object that since many truths thought impossible and inconceivable have turned out to be true, the value of the tie between conceivability and possibility is suspicious. The Husserlian account has at least two ways to explain this phenomenon. Persons who lack the requisite imaginative powers and intuitive experiences may find themselves incapable of imagining and thus *intuitively* conceiving certain classes of facts. Thus, persons blind since birth may lack the ability to imaginatively illustrate colors. This possibility, however, does not affect the tie between inconceivability and impossibility, for that tie is an ideal one. Even though such persons may find colors inconceivable, it does not follow that they are in principle inconceivable to some possible intelligence. It also need not be the case that one suffers from some disability. If their attempts to separate or combine properties through variation fail, this can simply be due to the inadequacy of their imaginative presentations. There is probably no human being that can intuitively

present curved space-time to themselves, or 10-dimensional spaces. There are however, mediate means, each step of which may pass the test of intuitiveness, for proving their existence. The case of transfinite numbers given above is an example of this. Formal and deductive techniques allow the establishment of possibilities and impossibilities, despite the fact that no person can intuitively present them. Every simple arithmetical truth and falsehood concerning large numbers verifies this point. For not many can intuitively illustrate the impossibility of 327 and 539 totaling 755. The lesson to be drawn is that, according to Husserl's account, in many cases one can neither adequately conceive the possibility or the impossibility of a supposed state of affairs. This, however, does not rule out the possibility that through deduction and technique, one or the other can be established.

8.5 (d) *The Connection of Mind to Necessity.*

There is a well known argument to the effect that rational intuition requires acquaintance to an abstract object, acquaintance depends on some sort of causal relation but abstract objects are acausal. Therefore, rational intuition is not possible. Realists usually respond in one of three ways, either arguing that acquaintance is not necessary for the possibility of knowledge (e.g., Katz 1998) or that causation is not necessary for acquaintance, or that abstract objects are not acausal. (Maddy, Stein)

Obviously Husserl cannot take the first route without retracting his entire theory of knowledge as fulfillment. If the second turns out to be true then his theory is not obviously in jeopardy. However, I think something can be said on Husserl's

behalf for the third option. Though Husserl's account does not countenance the role of causation explicitly, a number of observations can be made that point toward its compatibility with various causal requirements.

Since, on Husserl's account, individual objects, individual property instances, and individual thinkers all play a role in the production of modal insight, there is plenty of room for those objects, acts, and thinkers to have causal effects upon each other.¹⁴⁷

Thus, were individuals not capable of effecting a change in a thinker they might never be the objects of knowledge. Consequently, it seems likely that the mental acts and act qualities that make modal knowledge possible are just as likely to result from a causal process as any other.

The mental acts constitutive of knowledge, according to Husserl, also have an intrinsic teleology. They aim, and they have what John Searle likes to call conditions of satisfaction. Judgments, for example, can correctly or incorrectly represent reality. Desires can fail to be satisfied. Intended actions can fail to come to fruition. Thoughts can succeed or fail to hit their target, realize their intention, and in the Husserlian case of knowledge, find their fulfillment.

As described in chapter four, the mode and manner of fulfillment for each category of object is prescribed by the vary nature of the objects belonging to that category. It is because of what each object is that it can be thought of the way it is

¹⁴⁷ Husserl explicitly maintains that individual mental acts, objects, property instances, and thinkers, occupy the one spatio-temporal world, and of necessity enjoy causal relations. See e.g. PP Sect. 13 and EJ Sect 65.

thought of and can be known in the precise way that it is known. Were the object to have a different nature it would not be intuited the way it is. Trivially, to find out how a person feels requires entirely different sorts of intuitive presentations than finding out whether their actions are immoral. The same goes for universals. According to Husserl, their formal character deems that they are intuited through an encounter with their instances or imaginary objects similar to their instances. This means that character and quality of the perception of an individual depends on the nature and the nature of the properties of that individual.

There is an important point to be drawn from these observations. Universals have a causal connection to our mental acts via fulfillment that satisfies the “because” locution. It is *because* of what emotions are (i.e., their nature), that they are intuited and fulfilled in the manner necessary to them. It is *because* a certain object is material that it is essentially perceived one-sidedly, i.e., through profiles. Simply put, it is no accident that colors are seen and not heard and sounds heard but not seen. The point I want to draw is that universals fulfill a fundamental explanatory role, and in fact a causal role, namely, the role Aristotle termed Formal Cause.

In sum, within the Husserlian account, there is room for supplementation by formal, teleological, and efficient causation. It is worth adding that there may even be room for material causation given Husserl’s belief that human beings are individual psycho-physical unities that exemplify the combined essences of

consciousness, nature, and spirit.¹⁴⁸ Husserl's account then, is compatible with, and may even require a number of causal roles for universals in the achievement of modal knowledge.

8.5 Conclusion.

The Husserlian theory as presented here provides the needed supplement to contemporary rationalism. It succeeds in providing the phenomenology of rational intuition and thereby quells the charge of mystery that surrounds the notion of rational intuition. I have shown that it succeeds in answering questions (1) and (2) while avoiding the charge of psychologism. I have also shown that it has the resources to deal with the analytic concerns over the possibility of error, the defeasibility of empirical and a priori claims, the role of conceivability in modal knowledge, and the relation of mind to necessity. The Husserlian scheme provides the badly needed framework for debate and progress in epistemology and especially for contemporary rationalism which is doomed to quick dismissal without taking up the nature of rational intuition and the possibility of modal knowledge.

¹⁴⁸ See Smith, D. W. 1995 for a discussion of Husserl's ontology of persons as mutually combining these three categories.

Bibliography / Work Cited

- Ayer, A. J. (Alfred Jules). 1952. *Language, truth, and logic*, New York: Dover Publications
- Bealer, George. 2002. "Modal Epistemology and the Rationalist Renaissance" in *Conceivability and Possibility*. Tamar Szabo Gendler and John Hawthorne (ed.), Oxford: Clarendon Press. pp.71-126.
- 2000. "A Theory of the A Priori," *Pacific Philosophical Quarterly* 81, pp. 1-30.
- 1999 "A Theory of the A Priori" in *Philosophical Perspectives*, 13, *Epistemology*, Tomberlin, James E (ed.), Cambridge: Blackwell. pp.29-56.
- 1998. "A Theory of Concepts and Concept Possession," *Philosophical Issues* 9, pp. 241-301.
- 1987. "Philosophical Limits of Scientific Essentialism," *Philosophical Perspectives* 1, pp. 289-365.
- Benacerraf, P. 1973. "Mathematical Truth," *Journal of Philosophy* 70, pp. 661-679.
- Bonjour, Laurance. 1998. *In Defense of Pure Reason*, Cambridge: Cambridge University Press.
- 1995. "Toward a Moderate Rationalism", in *Philosophical Topics* Vol. 23, No.1, pp. 47-77.
- Burge, Tyler. 1998 "Computer Proof, Apriori Knowledge, and Other Minds" in *Philosophical Perspectives*, 12, *Language, Mind, and Ontology*, 1998, Tomberlin, James E. (ed.), Cambridge: Blackwell.

- Cassam, Quassim. 2000. "Rationalism, Empiricism, and the A Priori" in *New Essays on the A Priori*, Paul Boghossian and Christopher Peacocke (ed.), Oxford: Clarendon Press. pp. 43-64.
- Casullo, Albert. 1977. "Kripke on the A Priori and the Necessary," *Analysis* 37, pp. 152-159.
- 1992. "A Priori Knowledge," in *A Companion to Epistemology*, edited by Sosa and Dancy. Cambridge: Blackwell Ltd.
- 1992. "A Priori /A Posteriori," in *A Companion to Epistemology*, edited by Sosa and Dancy. Cambridge: Blackwell Ltd.
- 2000. "Modal Epistemology: Fortune or Virtue?" *The Southern Journal of Philosophy* Vol. XXXVIII, *Supplement*, pp. 17-25.
- 2000. "The Coherence of Empiricism," *Pacific Philosophical Quarterly* 81, pp. 31-48
- Chalmers, David J. 2002. "Does Conceivability Entail Possibility" in *Conceivability and Possibility*. Tamar Szabo Gendler and John Hawthorne (ed.), Oxford: Clarendon Press.
- 1996. *The Conscious Mind : in Search of a Fundamental Theory*, New York : Oxford University Press.
- Van Cleve, James. 1983 "Conceiveability and the Cartesian Argument for Dualism" *Pacific Philosophical Quarterly* (64), pp. 35-45.
- Descartes, Rene. 1985. *The Philosophical Writings of Descartes*. Trans. By John Cottingham, Robert Stoothoff, and Dugald Murdoch. Cambridge: Cambridge University Press.

- Einstein, Albert. 1961. *Relativity: The Special and the General Theory*. Trans. Robert W. Lawson, New York: Crown Trade Paperbacks.
- Follesdal, Dagfinn. 1991. "The Justification of Logic and Mathematics in Husserl's Phenomenology" in *Phenomenology and the Formal Sciences*. Dordrecht: Kluwer Academic Publishers. pp. 25-34.
- Goldman, Alvin and Pust, Joel. 1998. "Philosophical Theory and Intuitional Evidence," in *Rethinking Intuition*, Michael DePaul and William Ramsey (ed.), Oxford: Rowman and Littlefield
- Gurwitsch, Aron (1949) "Gelb-Goldstein's Concept of "Concrete" and "Categorical" Attitude and the Phenomenology of Ideation." *Philosophy-and-Phenomenological-Research*. 10 pp. 172-196.
- Harmon, Gilbert. 1994. "Doubts About Conceptual Analysis" in *Philosophy in Mind: The Place of Philosophy in the Study of Mind*. Michaelis Michael and John O'Leary-Hawthorne (ed.), Dordrecht : Boston : Kluwer Academic Publishers. pp.43-48.
- Hume, David. 1966. *Enquiry Concerning Human Understanding*. In *18th Century Philosophy*. Lewis White Beck (ed.), New York: The Free Press.
- 1962. *Treatise on Human Nature*. (=THN) New York: Collier Books.
- Husserl, Edmund. 1970. *Philosophie der Arithmetik. Psychologische and Logische Untersuchungen*. (=PA) Husserliana Vol. XII, The Hague: Nijhoff.
- 1970a. *Logical Investigations*. (=LI) Trans. Of the 2nd edition by J.N.Findlay. London: Routledge and Kegan Paul.

- 1973 *Experience and Judgment. Investigation in a Genealogy of Logic.* (=EJ)
Trans. By J.S. Churchill and K. Ameriks. London: Routledge and Kegan Paul.
- 1973 *The Idea of Phenomenology* (=IP). Trans. By William Alston, The Hague: Nijhoff.
- 1977. *Phenomenological Psychology. Lectures, Summer Semester 1925.* (=PP)
Trans. By J. Scanlon. The Hague: Nijhoff.
- 1981 "Philosophy as a Rigorous Science" (=PRS) in *Husserl Shorter Works.*
Peter McCormick and Frederick Elliston (ed.), Notre Dame: University of Notre Dame Press.
- 1982. *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy. First Book: General Introduction to a Pure Phenomenology.*
(=ID) Trans. F. Kersten. The Hague: Nijhoff.
- Kant, Immanuel. 1993. *The Philosophy of Kant.* Carl Friedrich(ed.), New York: Random House.
- Katz Jerrold. 1998. *Realistic Rationalism.* Cambridge, MA: The MIT Press.
- Kitcher, Philip. 1980. "A Priori Knowledge" *The Philosophical Review*, LXXVI pp.3-23.
- Kornblith, Hilary. 2000. "The Impurity of Reason," *Pacific Philosophical Quarterly* 81, pp. 67-89.
- Kripke, Saul. 1980. *Naming and Necessity.* Cambridge, MA: Harvard University Press.

- Leibniz, Gottfried Wilhelm. 1989. *Philosophical Essays*. Translated by Roger Ariew & Daniel Garber, Indianapolis: Hackett Publishing Company.
- 1996. *New Essays On Human Understanding*. Translated & edited by Peter Remnant and Jonathan Bennett, New York: Cambridge University Press.
- Levin, David Michael. 1968. "Induction and Husserl's Theory of Eidetic Variation", *Philosophy and Phenomenological Research* Vol. XXIX, No. 1 pp. 1-15.
- Locke, John. 1975. *An Essay Concerning Human Understanding*. (=Essay) Peter H. Nidditch (ed.), Oxford: Clarendon Press.
- Miscevic, Nenad. 2000. "Intuition as a Second Window," in *The Southern Journal of Philosophy* Vol. XXXVIII, Supplement pp.87-112.
- Mohanty, J. N. 1997. *Phenomenology: Between Essentialism and Transcendental Philosophy*. Evanston, Illinois: Northwestern University Press.
- 1991. "The Justification of Logic and Mathematics in Husserl's Phenomenology" in *Phenomenology and the Formal Sciences*. Thomas Seebohm (ed.), Boston: Kluwer Academic Publishers.
- 1989. *Transcendental Phenomenology: An Analytic Account*. Oxford: Blackwell.
- Peacocke, Christopher. 2000. "Explaining the A Priori: The Programme of Moderate Rationalism" in *New Essays on the A Priori*, Paul Boghossian and Christopher Peacocke (ed.), Oxford: Clarendon Press.
- Plantinga, Alvin. 1993. *Warrant and Proper Function*, New York: Oxford University Press.
- Putnam, Hillary. 1962. "It taint Necessarily So," *Journal of Philosophy* 59, pp.658-671.

Rey, Georges. 1997. "A Naturalistic A Priori", *Philosophical-Studies* 92(1-2): pp.25-43.

Russell, Bertrand. 1959. *The Problems of Philosophy*, New York: Galaxy.

-----1936. "The Limits of Empiricism", in *The Collected Papers of Bertrand Russell* Vol. 10, London: George Allen & Unwin (Publishers) Ltd, 1983.

----1915. *Our Knowledge of the External World as a Field for Scientific Method in Philosophy*. Chicago: The Open court publishing company.

Ryle, Gilbert. 1971a. "Phenomenology" in *Collected Papers, Vol. I Critical Essays*, New York: Barnes & Nobel, Inc. pp. 167-178.

-----1971b "Phenomenology versus 'The Concept of Mind'" in *Collected Papers, Vol. I Critical Essays*, New York: Barnes & Nobel, Inc. pp. 179-196.

Scanlon, John. 1997. "Eidetic Method" in *Encyclopedia of Phenomenology*. Dordrecht: Kluwer Academic Publishers.

Schlick, Moritz. 1949. "Is There a Factual A Priori?" in *Readings in Philosophical Analysis*. Trans. W. Sellars, H. Feigl & Wilfred Sellars (ed.), NY: Appleton-Century-Crofts. pp. 277-285.

Schutz, Alfred. 1984. "Type and Eidos in Husserl's Late Philosophy," *Philosophy and Phenomenological Research* Vol. XX, No. 2 pp. 147-165.

Simmons, Peter. 1995. "Meaning and Language" in *The Cambridge Companion to Husserl*. Barry Smith and David Woodruff Smith (ed.), Cambridge: Cambridge University Press. pp. 106-137.

- Smith, Barry. 1996. "In Defense of Extreme (Fallibilistic) Apriorism" in *Journal of Libertarian Studies*, 12, pp. 179-192.
- Smith, David. Forthcoming. "Mathematical Form in the World" *Philosophia Mathematica*. Richard Tieszen (ed.).
- 1995. "Mind and Body" in *The Cambridge Companion to Husserl*. Barry Smith and David Woodruff Smith (ed.), Cambridge: Cambridge University Press. pp. 323-393.
- 1989. *The Circle of Acquaintance: Perception, Consciousness, and Empathy*. Dordrecht/Boston: Reidel.
- Sokolowski, Robert. 1981. "Husserl's Concept of Categorial Intuition" *Phenomenology and the Human Sciences*, Supplement to *Philosophical Topics* 12, pp. 127-41.
- 1974. *Husserlian Meditations: How Words Present things*. Evanston: Northwestern University Press.
- Sosa Ernest. 2000. "Modal and Other A Priori Epistemology: How Can We Know What is Possible and What Impossible?" in *The Southern journal of Philosophy*, Vol. XXXVIII, Supplement.
- 1998. "Minimal Intuition," in *Rethinking Intuition*, Michael DePaul and Willaim Ramsey (ed.), Oxford: Rowman and Littlefield Publishers Inc.
- 1996. "Rational Intuition: Bealer on its Nature and Epistemic Status." *Philosophical Studies* 81, pp.151-162.
- Stevens, Richard-Cobb. 1992. "Husserl on Eidetic Intuition and Historical Interpretation", *American Catholic Philosophical Quarterly*, Vol. LXVI, No.2 pp.261-75.

- Suarez Francis. 1947. "On the Various Kinds of Distinctions (*Disputations Metaphysicae. Disputation VII, de variis distinctionum generibus*)" Trans. By Cyril Vollert, S.J., S.T.D. Milwaukee: Marquette University Press.
- Van-Inwagen, Peter. 1998. "Modal Epistemology", in *Philosophical Studies* Vol. 92, pp. 65-84.
- Willard, Dallas. 1995. "Knowledge" in *The Cambridge Companion to Husserl*. Barry Smith and David Woodruff Smith, Cambridge: Cambridge University Press. pp. 138-167.
- 1984. *Logic and the Objectivity of Knowledge*. Athens, Ohio: University of Ohio Press.
- Yablo, Stephen. 2000. "Textbook Kripkeanism & The Open Texture of Concepts," *Pacific Philosophical Quarterly* 81, pp. 98-122.
- (1993). "Is Conceivability a Guide to Possibility?", *Philosophy and Phenomenological Research* Vol. LIII, No. 1, pp.1-44.
- Zaner, Richard. 1973a. "Examples and Possibles: A Criticism of Husserl's Theory of Free-Phantasy Variation," *Research in Phenomenology* 3, pp.29-43.
- 1973b. "The Art of Free Phantasy in Rigorous Phenomenological Science," in *Phenomenology: Continuation and Criticism. Essays in Memory of Dorion Cairns*. The Hague: Nijhoff.