Larry Davidson

# Overcoming Psychologism: Husserl and the Transcendental Reform of Psychology

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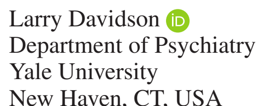
Larry Davidson 
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*For John Strauss*
*Who could not have been a better mentor,*
*or friend. And who encouraged me,*
*for 30 years, to write this book.*

We would also state expressly that it would of course be pointless to treat the positive science of *intentional psychology* and *transcendental phenomenology separately*. Obviously, the work of actual execution must devolve upon the latter, whereas psychology … will take over the results. Yet it is important to note that, just as the psyche and the whole Objective world do not lose their existence and existential sense when considered transcendentally (since they are merely rendered originarily understandable, by the uncovering of their concrete all-sidedness), so positive psychology does not lose its rightful content but rather, freed of naïve positivity, becomes a discipline within universal transcendental philosophy itself. From this point of view, we may say that, among the sciences that have been raised above the level of naïve positivity, intentional psychology is intrinsically the first

from the Cartesian Meditations (Husserl, 1977a, p. 147).

# Acknowledgments

This book is dedicated to John Strauss, who has served as my mentor and good friend for the last 30 years and at whose insistence this book was finally completed. Much of this work was drafted in the late 1980s as my doctoral thesis at Duquesne University; work that colleagues and I have then published piecemeal through a series of largely theoretical articles (Davidson, 1988a, 2017; Davidson and Cosgrove, 1991, 2002; Davidson and Solomon, 2010), sketching out the framework on which I here hope to add flesh and bones. I thank Amadeo Giorgi and John Scanlon for their guidance and support during that early time in my career. I then met John Strauss upon arriving at Yale and spent the next three decades under his tutelage trying to describe and understand the "things themselves" of clinical psychological interest.

While John eschews the abstruse, dense, hyphen-filled, and off-putting terminology of phenomenological philosophy, he was born to be a phenomenologically oriented psychiatrist. So, while I learned to think and write as a Husserlian at Duquesne, it was through John's role modeling and warm generosity that I have now spent three decades learning how to actually *do* clinical psychology in a phenomenologically grounded way. I thank him for paving, and showing me, the way to respect, work with, learn from, befriend, love, and find ways to support persons with serious mental illnesses as persons first and foremost. Even though it does not become explicit until the last chapter, that lesson is at the heart of this book.

I also would like to thank my wife, Maryanne, for encouraging me to take the sabbatical that enabled me to finally finish this prolonged labor of love, and for her steadfast belief in me and whatever I try to do. And I thank the faculty and staff of the Yale Program for Recovery and Community Health (you know who you are) for making the sabbatical possible and for working closely with me for 20 years as I have tried to flesh out further the implications of transcendental phenomenology for psychological research and practice. Like John, most of them are natural phenomenologists who have no desire or need to learn about Husserl, but for whom human dignity is considered sacred and to be honored, regardless of the circumstances in which one finds oneself. I have learned much from working with each of you, and have been enormously proud of, and gratified by, your many successes. The work of

promoting recovery is not easy, but it provides its own rewards; working closely with each of you on this meandering path has been one such reward.

Finally, I thank the many people in recovery who have patiently and persistently taught me about the fundamental humanity of persons struggling with mental illnesses and other life circumstances. In addition to Husserl, they have been my main teachers as I have striven to understand their efforts to preserve their fundamental humanity in the face of dehumanizing circumstances and inhumane treatments. I offer this book in the hope that it will contribute, in some small way, to the transformation of mental health care to a respectful and dignified, strength-based and healing, human enterprise.

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# Introduction

When given the opportunity in 1931 to write a new Preface to accompany the soon to be published English translation of the first volume of his Ideen series, Edmund Husserl chose, as one of the few topics he would address directly, the relationship between phenomenology and psychology. Those who have had only a cursory exposure to Husserl's works might be somewhat surprised by this choice, considering that this publication was to appear 30 years after he had completed the first edition of the Logical Investigations (1970b). That work had taken up the psycholog*ism* prevalent in the logic and epistemology of the day and had gone to great lengths to demonstrate how philosophy cannot be grounded in psychology. Since it was phenomenology that replaced psychology as the ground discipline for epistemology and logic following the refutation offered in the Logical Investigations, many within the phenomenological tradition have subsequently assumed that phenomenology and psychology were to be mutually exclusive. Phenomenology, as a philosophical discipline, was to be decidedly nonpsychological in orientation and method. For psychologism to be radically overcome in philosophy, the new science of phenomenology must have nothing to do with psychology.

Thus, while Husserl's early roots in Brentano's descriptive psychology of consciousness are well known, it has been the received wisdom that Husserl became increasingly indifferent to matters of psychology once he succeeded in liberating phenomenology from its psychological background. Psychologists and philosophers alike, ranging from Titchner (cf. Giorgi, 1981) to Spiegelberg (1967a, 1972), considered Husserl's version of phenomenological philosophy to hold little, if any, significance for the practice of psychology. They concluded that Husserl left the concrete and mundane concerns of psychology behind in his quest for a transcendental, philosophical science.

Why, then, would Husserl address the question of the nature of the relationship between phenomenology and psychology in the publication that was to introduce phenomenology as a transcendental, philosophical science to the English-speaking world? Why would he speak about psychology to an audience that he very much wanted to win over to his program of a nonpsychological discipline? Why waste

valuable space dealing with what must seem, at least philosophically, to be a tangential issue?

Among the more serious students of Husserl, however, the inclusion of this topic in the Preface to Ideas I comes as no surprise. Those who read Husserl's own texts know that the issue of psychology remained one of his persistent concerns well beyond the period of the Logical Investigations. Farber, for example, commented that: "The relationship between phenomenology and psychology … remained one of [Husserl's] major themes throughout his scholarly life" (1966, pp. 90–91). Other commentators similarly have noted that this relationship continued to be a preoccupation of Husserl's, even as he worked to develop phenomenology as a transcendental, nonpsychological discipline; a preoccupation located more accurately at the center, rather than on the periphery, of his project (cf., e.g., Biemel, 1970; de Boer, 1978; Kockelmans, 1967a; Paci, 1972). Apparently, Husserl did not simply leave the question of psychology behind.

It is important to note, in addition, that Husserl's concern with psychology was not limited to the task of exclusion begun in the Logical Investigations. In other words, Husserl was not only concerned with demonstrating how phenomenology was *not* psychological. Rather, he remained concerned with the question of psychology in its own right. He continued to question the role and nature of the psychology now that it was relieved of its more philosophical duties. As Mohanty has pointed out, Husserl's "anti-psychologism did not hinder the continued growth of his concern with psychology as a science" (1984, p. 14). The fact that psychology is inadequate for the task of grounding epistemology and logic is no reason to adopt an attitude of indifference to the properly psychological tasks and aims of psychology itself. In fact, it might be that it is only when psychology is relieved of those tasks for which it is *not* suited that it will be best able to pursue those tasks for which it is suited. As Farber, once again, asserted: "Husserl's opposition to psychologism by no means implied an opposition to psychology" (1940, p. 17). So, while it is clear that Husserl worked hard to establish phenomenological philosophy as a nonpsychological discipline, he also appears to have remained interested at the same time in the development of psychology as its own, separate and distinct, science.

Were this all there were to the story—were it simply the case that phenomenology and psychology were to be separate and distinct sciences—there would be no need for an extended treatise on the relationship between the two. The fact that in the years between 1925 and 1927, Husserl delivered a series of lectures on the topic of "phenomenological psychology," however, should lead us to wonder about the nature of the relationship that would exist between these separate, but apparently related, disciplines. How could phenomenological philosophy, which was explicitly established as a nonpsychological discipline, be applied to psychology? And how could a psychology that was replaced by phenomenology be conducted phenomenologically? The fact that Husserl lectured on the topic of "phenomenological psychology" 25 years after the publication of the Logical Investigations should add weight to the suggestion that he considered there to be a relation between phenomenology and psychology more than, or other than, that of mutual exclusion. It should also suggest to us that perhaps Husserl held the development of phenomenology to

hold more than a little significance for the practice of psychology. What would be the nature of this relationship, and what would be its significance for an empirical science of psychology?

It is to these two questions to which the entirety of this work is devoted. Based on the conviction that Husserl considered there to be a productive relation between phenomenology and psychology other than that of mutual exclusion, and the anticipation that this relationship holds profound and far-reaching implications for a phenomenological reform of psychology based upon it, the following work explores Husserl's understanding of the nature of this relationship as it evolved throughout his career. We shall find that, while Husserl did want to differentiate philosophical phenomenology as a transcendental and universal science *from* psychology (in order to overcome psychologism), he also maintained that the development of transcendental phenomenology held tremendous significance for a "radical reform" of psychological practice and understanding. It is with the nature of this reform that we will be especially concerned in the following, as we examine Husserl's ideas for the development of what we shall call a transcendentally or phenomenologically grounded psychology.

The task of clarification that lies ahead is by no means straightforward, as suggested by a glance at the aforementioned Preface to the English edition of Ideas I. In it, Husserl writes:

> The understanding, or at any rate the sure grasp, of the distinction between transcendental phenomenology and "descriptive," or as it is often called nowadays, "phenomenological" psychology, is a problem that as a rule brings great difficulties with it, which indeed are grounded in the very nature of the case. It has led to misunderstandings, to which even thinkers who subscribe to the phenomenological line of thought are subject. Some attempt to clarify the situation should prove useful (1931, p. 7).

It was precisely this question with which Husserl was concerned over three decades after publication of Logical Investigations. It is, as he writes, a problem that "as a rule brings great difficulties with it." After repeated efforts of his own—spanning decades and several texts—Husserl still felt the need in 1931 to speak to and attempt to clarify the nature of this relationship. The extent of the proliferation of the misunderstandings to which he felt the need to address himself is attested to by Farber's comment that it is this issue of the relationship between phenomenology and psychology that has become "that controversy for which Husserl has been most famous" (1940, p. 2). Given the breadth and depth of Husserl's contributions to philosophy, this is a distinction of some note.

What is to account for this problematic state of affairs? What, we may well wonder, are the "great difficulties" that are "grounded in the very nature of the case"? Why is it that even those "who suscribe to the phenomenological line of thought"—that is, Husserl's own students, including Martin Heidegger—have not been able to get a sure grasp on the nature of this relationship? One begins to develop an appreciation for the complexity involved when one realizes that Husserl has proposed to accomplish simultaneously two conflicting, perhaps even contradictory, tasks in developing both a transcendental phenomenology and a phenomenological psychology. On the one hand, for phenomenological philosophy to be a transcendental

science, it must be nonpsychological. As Husserl wrote in the Logical Investigations (2nd edition), phenomenology must be “infinitely removed” from the psychological (1970b, p. 253). On the other hand, for there to be a “phenomenological psychology” it must be possible for psychology to utilize phenomenology; it must be possible for psychology to become, in essence, a phenomenological discipline. In fact, Husserl later wrote that phenomenology was indeed to signify “a fundamental refashioning of psychology” as well as of philosophy once it adopted the phenomenological method (1977a, p. 144).

Given this context, the questions raised above as to the possible nature of the relationship between phenomenology and psychology become increasingly problematic. How can phenomenology simultaneously distance itself “infinitely” from psychology and yet become a method for psychology? While phenomenology is not itself to be psychology, its development is at the same time to lead to a “fundamental refashioning” of psychology. Our task is to come to an understanding of the relation between these two disciplines that allows phenomenology to be distinct from, yet also related to, psychology in a fundamental way. In 1931, Husserl clearly felt that this had yet to be achieved.

As we shall see, Husserl’s 1931 attempt also did not prove to be sufficiently clear. The misunderstandings that had already begun to proliferate at that time continued to do so. Several other attempts were also made to clarify the situation further. Merleau-Ponty, for example, took up this topic in a series of lectures he delivered at the Sorbonne early in the 1960s. Feeling that Husserl’s mature position on this matter remained in question, he tried, in his “Phenomenology and the Sciences of Man” (1964), to bring both historical and systematic coherence to Husserl’s problematic legacy. There was also the appearance of the 1963 German text by Drue, entitled Edmund Husserls System der phenomenologischen Psychologie, and the 1967(a) English text by Kocklemans, Edmund Husserl’s Phenomenological Psychology: A Historico-Critical Study. This is not the place to justify adding these authors’ interpretations of Husserl’s thought to the list of *mis*-understandings. We will have occasion to return to a criticism of their positions at a later point in this text. For now, we merely point out that another 30 years after the publication of Husserl’s Preface to Ideas I there was still a widely acknowledged sense that adequate clarity had yet to be achieved.

The fact that this has still—now an additional 60 years later—yet to be achieved will become evident as we proceed. Once we have reached our final conclusions as to the nature of this relationship, we will be able to see, conclusively, that it is for the most part, only misunderstandings that have continued to proliferate. As is often the case in phenomenology, it will only be in the fruits of our labors that we will be able to find their justification.

We will agree with Merleau-Ponty, Drue, and Kockelmans, however, on one important aspect of our challenge. That is, we too will find it necessary to examine Husserl’s thought, both historically and systematically. As Paci has written: “In Husserl the relation of phenomenology and psychology has always been difficult and dramatic. We may say that the two have always been flowing and in a state of crises” (1972, p. 181). When working to clarify the thought of a man whose

"thinking never stood still" (de Boer, 1978, p. xix), an historical approach is a necessity. Our end goal in conducting such a history, however, is a coherent account that can then be *applied* in the human sciences. Our interests are not purely scholarly; we are not only interested in providing a systematic analysis of Husserl's philosophical development. Our watchword shall not be merely "back to Husserl himself." Rather, in clarifying Husserl's understanding of psychology in its relations to phenomenology, we shall hope to shed light on the things themselves of psychological interest. While an historical approach is our necessary vehicle, our destination is a sure grasp on Husserl's mature position in all of its concrete implications. The usefulness of our clarification shall be measured by its applicability to a phenomenologically grounded psychological research and practice.

We will find that in the case of Husserl, these two approaches are far from contradictory. As de Boer described, in Husserl's case a true sense of his systematic coherence can only be discovered through an appreciation of the "unity of development" he demonstrated historically. de Boer writes:

> Husserl's philosophical work does exhibit a distinct unity, even if it is only a unity of development. In his philosophy there is a definite major theme that is ever more consistently unfolded, and consequently the final phase of his thinking can be regarded as the culmination of all previous intentions (1978, p. xx).

We shall arrive at the conclusion of our historical journey at a final phase in which all of *our* previous intentions shall culminate, as well. The major theme, whose unfolding provides our path in de Boer's judgment (as well as in our own), is the persistently problematic relationship between phenomenology and psychology. Husserl's final phase comes with the fulfillment of his intentions of developing both a transcendental phenomenology and a phenomenologically grounded psychology. The unity of development exhibited may be characterized by his struggle to find a universal philosophy grounded in a reflective analysis of experience. What makes this struggle so difficult is what Husserl referred to as the "temptation" of psychologism (1970a, p. 263); the temptation to consider any reflective analysis of consciousness to be psychological in nature. With psychology providing an inadequate grounding for the universal philosophy he hoped to develop, Husserl was left with the task of developing a nonpsychological science of consciousness that would, at the same time, ground a psychology of consciousness.

We will show that in the final phase of his thought, Husserl found a way to satisfy both of these demands by avoiding psychologism in both philosophy *and* psychology. We will find, in fact, that it was only Husserl's radical overcoming of psychologism in psychology that enabled him both to establish transcendental phenomenology as a nonpsychological philosophy and to reform psychology as an empirical science upon this newly won epistemological ground.

In this way, we will take as our guide for this project the first line of the passage from the Cartesian Meditations (1977a), which serves as the epigraph for this text. We might say that the remainder of this text is nothing more than an extended meditation on this single passage in its entirety, a kind of Midrash on this section of the Husserlian scripture. The first line is of particular significance in determining the

strategy for our approach. In it, Husserl writes, "it would of course be pointless to treat the positive science of intentional psychology and transcendental phenomenology separately" (1977a, p. 147). We will take his advice in this matter. As phenomenology initially arose as a replacement for psychology out of Husserl's refutation of psychologism, and as the promise which transcendental phenomenology holds for a radical reform of psychology is inseparably wrapped up in this same development, we will examine the possibility of a phenomenologically grounded psychology in the context of Husserl's overcoming of psychologism. We will treat psychology in its relation to transcendental phenomenology, that is, rather than as separate from it. We will find that it is in this domain in particular in which prior attempts at clarification of Husserl's thought have fallen short. Others have failed to appreciate the importance of treating psychology in its relation to transcendental phenomenology, and thus have missed the transformation of psychology that occurs when it is grounded transcendentally. A central reason for this failure, we will argue, is that it only becomes possible to ground psychology in phenomenology *after* the transcendental domain has been firmly established, in what Husserl terms a "return" to positivity (1970a, p. 260). Rather than stopping short of the transcendental reduction in order to remain focused on the psychological as a worldly domain—as, e.g., in Kockelman's (1967a) interpretation—Husserl is seen finally to conclude that a phenomenologically grounded psychology only becomes possible when the psychic becomes viewed as one constituted domain of transcendental intersubjectivity. The ramifications of doing so are spelled out in concrete detail in our concluding chapter.

You, the reader, however, should not take our explicit concern with transcendental subjectivity and phenomenology as a sign that there will be nothing of psychological value in what is offered here. Perhaps contrary to appearances (particularly in the first few chapters), this text is primarily intended for psychologists who view phenomenology as offering something of value to their work. It arose out of the very concrete and mundane concerns associated with the actual doing of psychology. In this sense, this work hopes to continue the job begun 50 years ago in 1970 in Amadeo Giorgi's book Psychology as a Human Science: A Phenomenologically-Based Approach, a book that has, in part, made this undertaking possible. In his book, Giorgi addressed directly the question of what promise phenomenology held for the actual work of the psychologist. He envisioned a refashioning of psychology from the ground up, which would be based on its being grounded in phenomenology. Rather than applying a phenomenological corrective to existing psychological practices, as many have attempted within the mainstream, this text endeavors to join and further Giorgi's project of calling for the development of a phenomenologically based psychology as a human science. We depart from Giorgi's earlier work, as we depart from the majority of previous efforts at clarification, in our appreciation of the role of the transcendental in the fundamental refashioning of psychological practice and understanding. It will be a major thrust of this work that the transcendental is not reserved solely for the philosopher; that it is of crucial interest to the psychologist, as well. It is for this reason that we so painstakingly take the first three chapters to establish the centrality of the concept of the transcendental reduction and the access it provides to transcendental intersubjectivity. For readers who are

already familiar with the terrain of the transcendental, these chapters may be skipped, picking up the argument for the value of the transcendental for psychology in Chap. 4. I also should note that we have made this case in a few prior publications in more schematic form (e.g., Davidson, 1988a, 2017; Davidson and Cosgrove, 1991, 2002; Davidson and Solomon, 2010), but there has been little uptake in the field based on these initial attempts at staking out the implications of the transcendental terrain for psychology.

Unfortunately once more, no justification can be provided for this position beforehand. The fruits of our labors will also provide, within themselves, their own plea for reform, as the transcendental domain has to be firmly established as that from which we may then return in taking up our properly psychological interests. The value that this discussion holds for psychologists in their own thinking and practice will thus have to become evident as we proceed. With this in mind, we turn to the tasks of exploration, exegesis, and application.

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# Chapter 1
# Phenomenology as Descriptive Psychology

*Phenomenology is descriptive psychology from the* Logical Investigations*. 1st edition (Husserl, 1970b, p. 262n)*

Farber has suggested that Husserl's works can be grouped, chronologically, into three broadly defined periods: a psychologistic period, a simple descriptive phenomenological period, and a transcendental phenomenological period (1940, p. 11). The psychologistic period consists of Husserl's earliest writings through the Philosophy of Arithmetic, while the simple descriptive phenomenological period consists of the first edition of the Logical Investigations and the transcendental period subsumes all of the work following the Logical Investigations and Husserl's "breakthrough" to the transcendental of 1907–1908. Farber's heuristic is helpful for our own purposes here, except that we will be mainly interested in the last two of these three periods: those which Farber refers to as the "two major periods" of Husserl's thought, and which he designates as "pre-transcendental" and "transcendental" periods (1940, p. 11). We will, likewise, divide our treatment of Husserl into these two phases of development.

This first chapter is concerned with the pre-transcendental position of the first edition of the Logical Investigations and Husserl's understanding of the relation between phenomenology and psychology before he made the transcendental turn. The first period of Husserl's work, his psychologistic phase, will only come into play as the background for the refutation of psychologism offered in the Logical Investigations, which serves as our real point of departure. In order to understand fully the significance and role of this refutation in Husserl's overall project, we must understand its origin: what is Husserl refuting here, and why? Our perspective on his earliest work is thus somewhat that of an over the shoulder glance; we are concerned with psychologism as that which we must leave behind. Since the Logical Investigations is the site for the overcoming of this earlier psychologism and the institution of phenomenology as the replacement discipline for psychology, it is natural for us to begin there.

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It should be noted, beforehand, that the lengthy and detailed refutation that Husserl offers under the title of "Prolegomena to Pure Logic" (1970b) occupies the entirety of the first volume of the German edition. It will not be necessary for us to recount his argument in all of its various articulations. Rather, we shall attempt to synthesize Husserl's dispersed treatment of the various issues involved in light of our present interest. We wish to distill from this first volume the train of thought that succeeds in overthrowing psychology as the foundational discipline for logic and puts in its place the newly fashioned science of "phenomenology." After this has been accomplished, we may then ask about the relationship between phenomenology and psychology that survives this displacement. In other words, we can then turn to the question of how this new science is related to the old.

## Psychologism Critiqued

The Logical Investigations takes as its point of departure the problematic nature of the earlier Philosophy of Arithmetic. Husserl speaks to this directly near the close of his Foreword to the first edition, situating his own thought within its historical context and, at the same time, expressing his dissatisfaction with this established psychologistic philosophy. He will attempt, in this text, to go beyond the uncritical positions of his teachers and of his own previous work:

> I began work on the prevailing assumption that psychology was the science from which logic in general, and the logic of the deductive sciences, had to hope for philosophical clarification. For this reason psychological researches occupy a very large place in the first volume of my Philosophy of Arithmetic. There were, however, connections in which such a psychological foundation never came to satisfy me. Where one was concerned with questions as to the origin of mathematical presentations, or with the elaboration of those practical methods which are indeed psychologically determined, psychological analyses seemed to me to promote clearness and instruction. But once one had passed from the psychological connections of thinking, to the logical unity of the thought-content (the unity of theory), no true continuity and unity could be established. I became more and more disquieted by doubts of principle, as to how to reconcile the objectivity of mathematics, and of all science in general, with a psychological foundation of logic. In this manner my whole method, which I had taken over from the convictions of the reigning logic, that sought to illuminate the given science through psychological analyses, became shaken, and I felt myself more and more pushed towards general critical reflections on the essence of logic, and on the relationship, in particular, between the objectivity of knowing and the objectivity of the content known (1970b, p. 42).

The received wisdom of the tradition, which Husserl had himself embodied in his Philosophy of Arithmetic, was that psychology was to provide the philosophical foundation for logic; the validity of logical law was to be grounded in psychological analyses of the subjectivity of knowing (as a human act). Whether or not partially due to Frege's critique of his initial work (cf. with respect to this debate Føllesdal, 1982 and Mohanty, 1974, 1982), Husserl soon thereafter found this position to be inadequate, especially with respect to the apparent discontinuity between the

psychological connections of thinking and logical connections among that which is thought (i.e., the thought-content). The critical reflections towards which he felt pushed are what follow as the body of the first volume of the Logical Investigations. They are characterized by Husserl as a "Prolegomena to Pure Logic," since they prepare the way for his attempt to found logic on a non-psychologistic basis. First, he must clear the way for the laying of new foundations by razing the ruins of the old system; he provides a prolegomena by way of exorcising the ghosts of his own past.

The focus for these reflections, as we saw above, will be the relationship between the "the subjectivity of knowing and the objectivity of the content known." The reigning conviction at the time was that the objectivity of the content known could be grounded adequately in the science of the subjectivity of knowing. Husserl explains how this position came about in the following way. Logic, he informs us, arose out of the "practical motives connected with the business of science" as a kind of "technology" of scientific thought (1970b, pp. 74, 79). Such a technology is considered to be a "normative" science in the sense that it:

> seeks to search into what pertains to genuine, valid science as such, what constitutes the Idea of Science, so as to be able to use the latter to measure the empirically given sciences as to their agreement with their Idea, the degree to which they approach it, and where they offend against it (1970b, p. 71).

Logic, in other words, is considered to be the science of "thinking as it should be," if it is to be scientific (1970b, p. 92), if it is to meet the demands for rational-scientific discourse. The laws of logic tell us how we must think if our thought is to be valid scientifically. They tell us what constitutes "good" scientific discourse. Such a normative discipline, however, requires a theoretical discipline as its ground. In order to legislate how one should think, one must already be able to distinguish between good and bad thought, and that is no longer the task of a normative discipline. For instance:

> To be able to pass the normative judgment, 'A soldier must be brave', I must have some conception of a 'good' soldier, and this concept cannot be founded on an arbitrary nominal definition, but on a general valuation, which permits us to value soldiers as good or bad according to these or those properties (1970b, p. 84).

In this way:

> Every normative proposition of, e.g., the form 'An A should be B' implies the theoretical proposition 'Only an A which is B has the properties C', in which 'C' serves to indicate the constitutive content of the standard-setting predicate 'good' … The new proposition is purely theoretical: it contains no trace of the thought of normativity … In other words, every normative discipline demands that we know certain non-normative truths: these it takes from certain theoretical sciences (1970b, pp. 87–88).

According to the psychologistic thinkers, including the Husserl of the Philosophy of Arithmetic, the theoretical science that provided these non-normative truths for logic was psychology. Their thinking in this regard is nicely summed up in Husserl's statement that, in their view, "Thinking as it should be, is merely a special case of thinking as it is" (1970b, p. 92). If we want to know what determines whether or not

a thought is a "good" one (in the sense of logically correct), we must consult the theoretical researches of the psychology of thinking, which as a theoretical science of thinking as it is, can provide us with a sound basis for such a valuation. We appeal to psychology in order to determine the properties essential to thinking as it should be (i.e., good thinking) because one of the domains of psychology is thinking as a human act. Obviously, it will be this analysis of thinking as a human act that will provide us with a theoretical foundation upon which to distinguish between good and bad thinking. Husserl elaborates:

> However, one may define logic as a technology … we find invariably that mental activities or products are the objects of practical regulation. And just as, in general, the artificial working over a material presupposes the knowledge of its properties, so this will be the case here too, where we are especially concerned with psychological material. The scientific investigation of the rules according to which this stuff should be worked over, naturally leads back to the scientific investigation of these properties. Psychology therefore provides the theoretical basis for constructing a logical technology, and, more particularly, the psychology of cognition (1970b, p. 91).

That which one is concerned to regulate normatively, scientific thinking, is most evidently an act of human subjectivity (or the subjectivity of knowing). It only makes sense that one should seek a ground for one's normative regulation in the science of human subjectivity (or more particularly, in the science of the subjectivity of knowing). As a result, logic is based on psychology. According to the psychologistic thinkers, logic is, in fact, understood to be a "part," a "branch," or a "specific discipline" of psychology (1970b, pp. 90–91). If psychology subsumes the natural(-causal) laws for all thinking, then logic pertains to the natural(-causal) laws for correct thinking or thinking which proceeds according to its own essence. That is, logic becomes the study of the natural laws of psychic life that determine "logical behavior." Thinking as it should be is thinking *as* determined by the natural laws of thought, thinking which is a "pure" expression of these laws. In this way, logical laws are understood to be natural-psychological laws; they pertain to the subjective acts of knowing, judging, etc., which belong to the domain of the psychologist. They differ from other natural-psychological laws only in so far as they pertain to, and only in so far as they *bring about*, correct thinking as opposed to incorrect or faulty thinking. Other natural-psychological laws may be evoked in order to explain fallacious thinking, but any incident of logically sound thinking will be understood as a manifestation of the efficacy of the laws of logic *qua* their determinative power as natural laws of thinking. Logic is merely a specific discipline within the empirical science of human subjectivity.

What first renders this position suspect to Husserl is that the nature of logical laws is fundamentally different from the nature of natural laws. An empirical science, such as the psychology of cognition, can only lead to a knowledge of "merely contingent laws," whereas logic, in Husserl's view, "does not however ask after contingent, but after necessary laws—not how we think, but how we ought to think" (1970b, p. 92). Empirical sciences are necessarily sciences of the real or the factual; their laws are laws of contingency, of what happens to be the case. Logic is not a science of the real in this way; its laws are laws of what must be the case necessarily.

They are not laws of what merely happens to constitute logical discourse, but of what is necessary to logical discourse. "The rules of logic must therefore be taken, not from the contingent, but from the necessary use of reason" (1970b, p. 92), not from how we happen to think factually, but from how we must think—logically.

In a related way, empirical sciences also can only lead to knowledge in an empirical fashion, that is, "by induction from the singular facts of experience" (1970b, p. 99). Induction can only lead to knowledge of probability; empirical sciences furnish only probable laws. In this view, logical laws must, then, "without exception, rank as mere probabilities" (1970b, p. 99). But "nothing, however, seems plainer" to Husserl's thinking "than that the laws of 'pure logic' all have a priori validity" (1970b, p. 99). Empirical science cannot provide *a priori* validity: "no natural laws can be known a priori" (1970b, p. 99). Psychology does not seem to be able to provide logical laws with their characteristic necessity, nor with their characteristic intuitive certainty. It only produces probable and contingent generalities. There seems to be a fundamental discontinuity between the laws of natural science and the laws of logic, creating a problem that Husserl summarizes in the following:

> Logical laws are laws for validations, proofs. What are validations but peculiar human trains of thought, in which, in normal circumstances, the finally emergent judgments seem endowed with a necessarily consequential character. This character is itself a mental one, a peculiar mode of mindedness and no more. And, obviously, none of these mental phenomena is isolated, but is a single thread in the tangled web of mental phenomena, of mental disposition and organic process, called human life. How could anything beyond empirical generalities result in such circumstances? Where has psychology yielded more? We reply: Psychology certainly does not yield more, and cannot for this reason yield the apodictically evident, and so meta-empirical and absolutely exact laws which form the core of all logic (1970b, pp. 100–101).

How are we to understand this problematic state of affairs? While it seems clear that logic should be based on psychology as the science of mental phenomena, it is also clear—at least to Husserl—that such a psychology is inadequate for establishing the necessity and universality requisite to logical truth. While it seems that logical laws are laws for mental processes, the science of these mental processes is not able to provide us with what we know to be the laws of logic in their essential form. As noted at the outset for Husserl, it becomes clear that the problem is to be located in the relationship between the subjectivity of knowing and objectivity of the content known. That is, a psychology of mental acts (the subjectivity of knowing) that would seem to constitute the subject matter of the logician cannot adequately address the necessary unity of the thought-content of these acts (the objectivity of the content known). Evidently, it would behoove us to join Husserl in reflecting upon the nature of this relationship further.

Psychologistic thinkers have attempted to justify the lawful connectedness among the thought-content of mental acts by appealing to the lawfulness of these acts, which themselves are products. It is thought that it is the lawfulness of mental processes that brings about the lawfulness of the contents of these processes. For example, the principle of contradiction can be grounded in a presumed inability on the part of human beings to entertain two contradictory propositions in the same

unified train of thought. In this sense, two contradictory propositions cannot both be true, for the mind is determined by the natural-psychological laws of cognition to be unable to entertain them simultaneously in the same train of thought. The mind *qua* thinking thing proceeds logically *by nature*; that is the way it is constructed. Just as an object falling freely may not fall, according to the laws of gravity, as if it were in a vacuum, but will inevitably be effected by extraneous factors, such as wind currents, etc., so, too, a mind will not operate according to the laws of logic, as if it were in its pure state. It will inevitably be affected by extraneous influences, which lead it astray from its own essence. Logical laws pertain to how the mind would think, were these "alien mental influences" successfully eradicated, were the mind in its pure state. Husserl phrases it this way:

> The laws of thought count as natural laws characterizing the peculiarity of our mind qua thinking, and the essence of the conformity, as definitory of correct thinking, lies in the pure operation of these laws, their non-disturbance by alien mental influences (such as custom, inclination, tradition) (1970b, p. 101).

In this way, the lawfulness that defines correct thought is presumed to stem directly from the lawfulness that *determines* correct thinking.

Husserl, however, as he mentioned in his Foreword, has become skeptical of such a solution. We have already seen that the natural-causal laws of a psychology of cognition seem to be of a fundamentally different nature than the universal and necessary laws of logic. Guided by this problem, Husserl asks: "Does the assessment of thoughts by logical laws amount to a proof of their causal origin in these same laws as laws of nature?" (1970b, p. 102). That is, *can* the "laws of thought count as natural laws characterizing the peculiarity of our mind *qua* thinking"? *Do* logical laws describe the way our mind works essentially, in its purity? Is logic justified by an appeal to natural-causal explanation as the science of the laws of cognition, in an analogous way to the way in which physiology is the science of respiration or circulation?

Husserl's entire refutation of psychologism can be read as his attempt to answer a resounding and convincing "No" to this question. What follows for the remainder of this chapter are the ways in which he justifies this negative conclusion. We review these responses in detail, and in the variety of forms they take, because they not only are important in establishing a non-psychologistic approach to philosophy but also are important—as we plan to show in what follows—in establishing a non-psychologistic approach to psychology as well.

In response to his own question, Husserl initially replies that "certain ready confusions" must have occurred in order to allow this position to develop as it has. The first confusion that he cites, and which is the most basic to his critique, is the confusion *between* what he has already differentiated for us as the subjectivity of knowing and the objectivity of the content known. Psychologism has been predicated upon confusion between the acts of knowing and their content. Writes Husserl: "Logical laws have first been confused with judgments. In the sense of acts of judgment, in which we may know them: the laws, as 'contents of judgment' have been confused with the judgments themselves" (1970b, p. 102). The subjectivity of knowing may

indeed be an appropriate topic for a psychology of cognition; acts of judgment are in fact "real events, having causes and effects" (1970b, p. 102) and are thus amenable to a natural-causal science, conducted empirically and resulting in probabilities. The contents of these acts, their objects, are of an entirely different nature and require, therefore, an entirely different treatment.

While the actual act of judgment is a real event and can be situated within the natural-causal context of natural science as an effect of some real cause, what is known through this act, the judgment itself is neither real nor subjective. As the content of knowledge, as what is known, it is both objective and ideal. The judgment itself cannot be considered to be a real part of the flow of psychic life; it is not itself subjective in the way that the act of judging, through which it arises, is. Neither can it be considered to refer to any actual state of affairs; it does not refer to anything in the domain of the real. The laws which pertain to ideality and objectivity are of an intrinsically different nature than the natural laws of causal determination found in empirical psychology—laws which obviously refer to factual states of affairs, unfolding within the flow of psychic life, understood as one region of the real.

Husserl had established this difference earlier, but is coming, at this point, to a clearer understanding of the source of confusion. The ideal laws of logic are simply not, in any way, concerned with real events in the causal context of Nature (or psychic life as one region of Nature). Husserl makes use here of the Leibnizian distinction between "verities de raison" and "verities de fait," translated by Hume as relations of ideas and matters of fact (1970b, p. 193), in order to establish a "never-to-be-bridged gulf" (1970b, p. 104) between sciences of the real and sciences of the ideal. He argues that "ideal objects of thought" cannot be reduced merely to "individual, singular experiences, mere presentations and judgments concerning individual facts" (1970b, p. 193). In the first place, logic is just as much an ideal science as geometry, for instance. No one would attempt to argue that geometry makes claims about the real world or that which takes place within it. Logic similarly deals with ideal relations, relations obtaining between ideas or concepts rather than between matters of fact. Husserl repeatedly stresses this kinship between logic and other ideal sciences and their fundamental difference from sciences of the real, regarding this as a much overlooked but essential distinction:

> No logical law implies a 'matter of fact', not even the existence of presentations or judgments or other phenomena of knowledge. No logical law, properly understood, is a law for the facilities of mental life, and so not a law for presentations (as experiences), nor for judgments (experiences of judging), nor for our other mental experiences … [Logical laws] presuppose nothing mental, no facts of psychic life, whether in their establishment or their content. They do so no more than the laws of pure mathematics do so (1970b, pp. 104–105).
> No proposition whose roots lie in mere concepts, which merely states what those concepts contain, and what is given with them, makes an assertion about the real. One need only consider the genuine sense of the laws of logic to see that they do not do this. Even where they speak of judgments, they do not refer to what psychological laws seek to indicate by this word, i.e., judgments as real experiences, but they mean judgments in the sense of statement-meanings in specie, meanings which retain their identity whether serving to found actual acts of assertion or not, and without regard as to who asserts them. If logical laws are treated as laws of the real that, like natural laws, govern our real presentation and judgment, their whole sense is altered (1970b, p. 157).

The word judgment can, most evidently, have at least two very different meanings. The judgments with which logic is concerned are not the real events taking place in natural psychic life. Logic refers to real acts of judgment no more so than it refers to real relations among ideas of concepts. The judgments of logic are, as Husserl wrote in the last passage quoted above, "statement-meanings in specie," by which he means that they are the ideal *meanings* of judgments. The meaning, or truth value, of such a statement as 2 × 2 = 4 is not in the least affected by who says it, when it is said, how often, etc., or even if it is ever said at all. The meaning of such judgment transcends the actual subjective act of judgment. This is what we mean when we refer to it as objective and ideal. Regardless of whether it has been uttered one thousand times or never once uttered, the meaning of 2 × 2 = 4 remains the same; it retains its identity across all subjective conditions and is indifferent to these conditions. One would "not confuse the true judgment" (*qua* act) "with the *truth* of this judgment or with the true content of judgment" (1970b, p. 142). Husserl's establishment of a gulf between the ideal and the real, and its significance for the relation between logic and psychology, is perhaps nowhere better captured than in his remark that: "My act of judging that 2 × 2 = 4 is no doubt causally determined, but this is not true of the truth 2 × 2 = 4" (1970b, p. 142). We must subsequently distinguish between the laws that can and do explain the subjective acts of knowing through which such truths are known and the laws which pertain to what is known through these acts. Psychologism's first confusion results from it's overlooking this fundamental distinction:

> Psychologistic logicians ignore the fundamental, essential, never-to-be-bridged gulf between ideal and real laws, between normative and causal regulation, between logical and real necessity, between logical and real grounds. No conceivable gradation could mediate between the ideal and the real (1970b, p. 104).

We have yet to come to an adequate grasp, however, of how psychologistic logicians have attempted to establish this faulty mediation between the ideal and the real. How have they managed to transfer the causal determination of the act of judgment to the judgment itself? How have they justified their belief that the logical truth of 2 × 2 = 4 is based on the fact that I must (as causally determined by natural psychological laws) judge it to be so, and that I must judge it to be so because 2 × 2 does in fact equal 4 logically? Husserl argues that a second confusion is built upon this initial confusion of the ideal with the real that makes such apparent mediation possible. He continues:

> If, however, the law is confused with the judgment of knowledge of the law, the ideal with the real, the law appears as a governing power in our train of thought. With understandable ease a second confusion is added to the first; we confuse a law as a term in causation with a law as the rule of causation (1970b, p. 102).

Psychologism apparently also entails the belief that logical laws act themselves to determine subjective acts of judgment, rather than just to describe the necessary causal connections between these acts. This is a confusion between a law as descriptive of a causal connection, as descriptive of cause effect relations between entities in the world, and a law as being itself a term *in* a causal connection, as being itself

a cause in such a cause effect relation. Husserl notes that such a confusion has occurred in other fields as well, as when, for instance, we talk of the law of gravitation causing an apple to fall; "as if," he writes, "their rules of causal connection could themselves once more significantly function as causes, i.e., as terms in just such connections" (1970b, p. 102). In the case of logic, the law itself comes to be seen as a governing power in thought—as the cause that brings about logical thinking as its effect.

It was by way of this second confusion that psychologistic thinkers have been able to assert that logical laws "expressed how we must think in consequence of the nature of our mind," that they "characterized the human mind as a thinking mind in the pointed sense" (1970b, pp. 102–103). Once logical laws are taken to be themselves causes of behavior, one comes to view the mind as a kind of thinking machine, constructed according to these laws. Correct thought, thought which abides by these laws, is understood to be their effect; it is what is caus*ed* by the operation of these laws in their natural determinative capacity. What of thought that does *not* abide by the laws of logic? Thought that is incorrect, in terms of the tenets of logic, must be explained on the basis of other natural laws, but laws that do not pertain to thinking *per se*. That is, if logical thought is brought about by the laws of logic, then non-logical thought must be brought about by what we referred to previously as "alien mental influences." These, of course, would not be laws of thought, but laws which pertain to other behavior that interferes with thought in its pure form; laws, that is, that pertain to a straying from the norm, a departure or deviation from our mind's normal operation *qua* thinking thing. As Husserl explains:

> If at times we think otherwise then these laws require, we are not, properly speaking, 'thinking at all', we are not judging as the natural laws of thinking, or the nature of our mind qua thinking, requires, but as other laws determine (once more causally). We are following the disturbing leads of custom, passion, etc. (1970b, p. 103).

Thought that does not abide by the laws of logic could not have been brought about by the laws of logic and is not, properly speaking, therefore thought at all. It then must be explained on the basis of other laws than the laws of thought.

The implication of this position is that once logical laws are made causes of thinking, all logically *in*correct thought, no longer considered to be thought, must now be considered to be deviations from a state of normal functioning, in which the mind (*qua* thinking machine) runs smoothly, unhampered by external or extraneous influences. These (supposedly) "isolated deviations from the norm," Husserl adds, "may readily be put to the account of the troubling influences stemming from other psychological sources" (1970b, p. 103). These deviations must, that is, be explained as deviations due to other factors than those entailed in, or related to, thinking. They must be explained on the basis of other natural-psychological laws that would pertain, in the context of the normal functioning of the mind, to a psychologically defined pathology as opposed to psychologically defined normality.

In this view, when one does, for example, entertain contradictory judgments in the same unified train of thought, one is no longer simply considered to be wrong logically, to be mistaken, but one's thought must now be considered to be deviant

and must now be explained on the basis of another set of natural laws as a symptom of a psychological malfunction. One is not only incorrect, but one's mind is not working as it should, or more accurately, as it would was it to be operating normally. Since this behavior was not the effect of the laws of logic acting as causes, it must be the effect of other psychological laws that pertain to breakdowns in the system, wind currents that compromise the integrity of the vacuum. In essence, once the law of contradiction is posited as essential to thinking as a human act (and we have said that thought which does not abide by this law is not, properly speaking, thought at all), then all thought which falls outside of the domain of the logical must be explained in terms of other natural laws *as* a deviation from some natural state.

Psychologism can be understood to hinge on this concept of the natural or normal state in its constitutive capacity. For, certainly, individuals do judge incorrectly with respect to logical norms quite frequently in their daily personal, as well as vocational (even scientific), lives. If logical laws are thought to cause the correct thinking that is dispersed amidst the incorrect, then these frequent errors must be explained. The positing of logical laws as natural laws of cognition relies on this distinction between the normal and the deviant to ensure the desired homogeneity between the lawfulness of the contents of judgments and the lawfulness of the judgments themselves. After all, it was the lawfulness regulating the thought content which we were seeking to ground in the necessary nature of our mind *qua* thinking. Since the mind does not operate according to its own nature all of the time, or in every case, then these aberrations must be excluded as aberrations in order to justify such talk of normality. This poses a dilemma for psychologism, which Husserl is quick to point out.

We take as our point of entry the fact that the psychology upon which logic is assumed to be based is an empirical science which, as all empirical sciences, operates through induction from the facts of experience and produces probable generalities. This point was made earlier, but here its significance is quite different. Husserl asks if the establishment of the mind's nature *qua* thinking can be the result of such an empirical inquiry. How do we come to know that the mind is constructed or structured on the basis of the laws of logic, that when it operates "according to its nature," it operates logically, and that only logical thought is thought at all? With respect to the law of contradiction, as one example of a logical law grounded in this fashion, Husserl asks:

> What are the psychological inductions which justify its acceptance? May there not have been people, and may there not still be people who, deceived by fallacies, contrive at times to believe contradictories together? Has the occurrence of contradictions, even quite obvious ones, been scientifically investigated in the case of the insane? (1970b, p. 114).

That is, on what empirical-psychological basis can we assert the priority of logical over illogical thinking as essential to the nature of thought?

Husserl raises an interesting and challenging question. When one consults the facts of experience empirically, as a psychologist, one does not in fact find the logical lawfulness one would find were one to consult an introductory text in logic. One does not find a community of Mr. Spocks, nor does one find what we have referred to as "alien mental influences" clearly identified as such. Husserl asks the psychologist:

> Where are the descriptive and genetic analyses which entitle us to explain the phenomena of thought by two sorts of natural law, one exclusively determining such causal sequences as allow logical thought to emerge, whereas others help to determine alogical thought? (1970b, p. 102)

While the empiricist will attempt to "escape these objections by suitably qualifying his law, e.g., by saying that it only applies to normal individuals of the genus homo, having a normal mental constitution" (1970b, p. 114), we may well wonder whether such an attempt is successful. While the occurrence of contradictions may be most pronounced in the so-called "insane," it is by no means limited to them. When encountered in others, who are perhaps deceived by fallacies, are we not more likely to judge them to be wrong, if not simply mistaken, rather than abnormal? Indeed, is not the potential for error, or the possibility of deception, just as much a part of what we consider to *be* normal? For Husserl, who is explicitly concerned with the exact and universal status of logical law:

> It is sufficient to raise the insidious question of the exact definition of the concepts 'normal individual', and 'normal mental constitution' to see how imprecise and complex (and thus, inadequate) the content of the law, as now stated, has become (1970b, p. 114).

For those readers who may be less troubled by the imprecise and complex nature of this concept, however, we proceed further.

According to Husserl, a "genuine psychologism tends always to confuse the psychological origin of certain general judgments in experience, on account of some supposed 'naturalness', with a justification of the same judgments" (1970b, p. 117). The validity of the laws of logic is assumed in this view to be based on their supposed 'naturalness'. They are justified on account of their being discovered, inductively, to be operating in the normal mental constitution of normal individuals. Husserl concedes the point that "in the actual thought of normal persons, the actual denial of a law of thought does not usually occur," *but*, he continues:

> it can scarcely be said that it cannot thus occur, since great philosophers like Epicurus and Hegel have denied the law of contradiction. Perhaps genius and madness are in this respect allied, perhaps there are also lunatic rejecters of the laws of thought: these will certainly also have to count as men (1970b, p. 158).

On what basis have we established the naturalness of these laws and on what basis have we established our distinction between normal mental constitution and abnormal or pathological mental constitution? It seems that we have employed this distinction in order to justify our talk of the normal or natural state of our mind qua thinking, but that we have also based this distinction upon the presumed naturalness of this state. Husserl points out that we must still consider thinkers such as Epicurus and Hegel, and even "lunatics" and "madmen" as persons, even though their thinking does not abide by the laws of logic. How could we justify calling these persons abnormal or deviant, thereby excluding them from our empirical survey, other than by appealing to the laws of logic, whose validity we are attempting to establish *through* this empirical survey?

Pfänder, a contemporary of Husserl's, pauses parenthetically in his own exegesis of Husserl's refutation of psychologism to point out that:

> We have no right simply to declare insane those people who can consider mutually contradictory judgments as both true and have no right to ignore them in the psychological result. Perhaps this is justified merely if one presupposes the validity of the principle of contradiction in its independence of all psychology and makes it one criterion of mental illness (1967, p. 63).

In a purely empirical psychological inquiry the allegedly insane should count equally as persons (as should Epicurus and Hegel), and their thought should count equally as legitimate examples of thinking. The only way in which it has been possible to exclude them from such legitimate status has been through the use of the principle of contradiction. But this was the same principle whose validity we were attempting to establish though our empirical psychological analysis. Our reasoning has thus obviously been circular. In positing logical laws to be the natural psychological laws of cognition, we have committed a serious and dangerous error in our own thinking: we have, ourselves, acted illogically. We have confused normative laws, which pertain to one, clearly defined, domain of content with natural laws taken to be the source for an entire sphere of human behavior. Writes Husserl:

> No one can believe in a contradiction, no one can take something both to be and not to be—no one, that is, who is rational, to add an obvious qualification. The impossibility concerns anyone who wishes to judge rightly and no one else (1970b, p. 119).

Logical laws only apply to individuals who wish to judge logically, and then purely in a normative fashion. They do not determine human behavior to be rational: "no psychological law drives the judging subject under the yoke of logical laws" (1970b, p. 119). It is only impossible to deny the principle of contradiction if one wishes to be rational, since this principle does, in fact, constitute what we mean by rationality. It does not constitute what we mean by human or by natural. Were we to define normality strictly by adherence to the law of contradiction, no one would qualify as normal, since all of us are prone to error at times and none of us are immune to what we must continue to view in this context as alien mental influences—influences, however, whose presence is so pervasive and seemingly natural that one wonders in what sense they are considered to be alien. As Husserl remarks in a related context:

> One would surely not wish to conceive the 'normality' in question in such a way that no actual human being, and no possible human being living in our finite natural conditions, could be called 'normal' (1970b, p. 194).

Our psychologistic thinkers have apparently done just this. In equating the normative laws by which we evaluate scientific discourse with the natural laws of human behavior, they have been forced to consider all non-scientific discourse to be the product of abnormal forces.

A contemporary of Husserl's teacher, Brentano, had exposed a similar confusion between norms for objective content and laws of Nature prior to Husserl. De Boer relates that Exner had pointed to such a confusion in the last half of the nineteenth century in announcing that "a school of jurists flourishing in Italy is transforming criminology into psychiatry" (1978, p. 109). Such a transformation belies a fundamental confusion between abiding by the law (in the legal or logical sense) as a

motivated accomplishment of human activity, and obedience (or logical thinking) as constitutive of being human. It is to assume that behavior which transgresses artificial (i.e., human made) institutions must be explained on the basis of naturally constitutive forces. In Husserl's post-Logical Investigations language, logical discourse is constitut*ed*; it is something akin to a category mistake to presume that the laws of logic are constitutive, to consider them to be causal origins of behavior, rather than abstracted from a particular constituted domain of experience. One need only abide by the laws of logic if one is to carry on rational, scientific discourse; one need not be logical in order to be human.

It should be evident at this point that this aspect of Husserl's critique has far-reaching implications for many other disciplines as well as for related issues within psychology itself. As de Boër has written, Husserl's "struggle against naturalism in logic, which reduces all laws of thought to 'laws of nature governing thought', is significant for all other areas of human endeavor as an example" (1978, p. 217). We shall not tarry long in exploring these implications, but will provide one illustrative application, alluded to by Husserl himself, in order to show how this aspect of our critique can be used effectively in other areas of human endeavor.

Our critique of psychologism in logic is directly relevant to the case of psychosis treated in the literature of clinical psychology. We quoted Husserl previously as to the fact that the "occurrence of contradictions" has not been "scientifically investigated in the case of the insane" (1970b, p. 114). We have danced around this notion of the insane and their irrationality in the above argument, but it would perhaps be beneficial to pause briefly in order to make the point more explicitly. What understanding of insanity is presupposed by psychologism, and how did this position arise?

Non-adherence to the principle of contradiction does, in fact, prove to serve as one criterion of mental illness. As we shall see later, its presence as a symptom leads clinicians and researchers to look for a natural cause in such sources as a malfunction in the frontal lobe of the brain or in an imbalance in brain chemistry. On what basis do we judge that non-logical discourse must have a natural causal origin in a deficiency or dysfunction of the brain's physiology and than that logical discourse is the result, or the effect, of a *proper* working of the brain? Obviously, if a person's brain were not on the fritz, she or he would not be uttering such non-sense. An individual's non-adherence to the laws of logic must be understood as a symptom of an illness, as pathological, as it results from a deviation from the norm of natural thinking. Husserl's seemingly abstract analysis of psychologism in logic has very concrete implications. We shall investigate these further in our last chapter in the context of the promise which transcendental phenomenology holds for a "radical reform" of psychology.

At present, we are concerned with the confusion made evident in the case of psychosis, a confusion that can be phrased in more mundane terms as a confusion between a (constituted) product of human endeavor and a (constitutive) source of such an endeavor. Marx made an analogous point in terms of the relation between labor and capital. He showed how in a capitalist economic system the capital that is initially produced by the productive powers of labor comes to be posited as the

source for those same powers; that labor eventually comes to be seen as issuing "from the womb of capital itself" (cited in Deleuze and Guattari, 1983, p. 11). In reality, capital is dependent upon labor, deriving its very life from it; but, in the capitalist transformation, capital is taken to be its source. In the case of psychosis, the logical discourse, which, in reality, is a constituted achievement of human cognitive labor, comes to be posited as the natural causal determinative source for such labor. We contend that logical thinking issues from the mind itself *qua* its nature as a thinking thing, even though we have only come to our awareness of this nature, as determined by the laws of logic, through one specific and clearly delineated realm of human activity (namely scientific discourse). On this point, with reference to psychosis as defined in opposition to reason and rationality, the works of Foucault (1965) and Deleuze and Guattari (1983) are especially enlightening.

At this point we can now rejoin Husserl's critique and ask whether even a Mr. Spock's behavior is adequately explained on the basis of the natural laws that we are presuming constitute human nature. In other words, let us put aside any questions as to deviation from the norm or the distinction between the normal and pathological; let us merely ask after the positive example of someone who does judge according to the laws of logic. Husserl suggests that we "imagine an ideal person, in whom all thinking proceeds as logical laws require" (1970b, p. 103). We concede to the psychologistic thinkers that this individual must be a psychic being whose behavior is determined by natural psychological law; "naturally the fact that this occurs must have its explanatory ground in certain psychological laws, which govern the course of the mental experiences of this being" (1970b, p. 103). Now that we have established that this being's thought adheres to the laws of logic and that their behavior is determined by the natural laws of psychology, we can ask: "Would the natural laws and logical laws in this assumed situation be one and the same?" (1970b, p. 103). Given an ideal person who could only judge in a logically correct fashion, the question would still remain as to whether the laws of logic were operating in this case as laws of nature. Would the natural laws that determine this person's behavior in a psychological sense be the laws of logic? Husserl responds: "Obviously the answer is 'No'" (1970b, p. 103). He provides the following argument:

> The example of a computer makes the difference quite clear. The arrangement and connection of the figures which spring forth is regulated by natural laws which accord with the demands of the arithmetical propositions which fix their meanings. No one, however, who wants to give a physical explanation of the machine's procedures will appeal to arithmetical instead of mechanical laws (1970b, p. 103).

Simply stated, no one who wishes to give a physical explanation of the machine's procedures will appeal to logic because the machine was constructed according to the laws of mechanics. In this example it is easier to see that there can be no interface or mediation between the laws of logic, which pertain to the meaning of the computer's statements, and the laws of mechanics, which pertain to its physical construction. To attempt to ground the laws of logic in mechanical laws would be equivalent to attempting to explain the truth value of the computer's operations on the basis of the mechanical laws by which it was constructed. But these same