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The Ontological Grounds of Reason: Psychologism, Logicism, and Hermeneutic Phenomenology

by

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A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy
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Abstract

The following dissertation explains the psychologism debate as it played out in the 19th and early 20th Centuries and then shows how Martin Heidegger radicalized the debate by undermining its key themes and assumptions.

First, I explain each side of the psychologism debate, starting with the psychologicists. I explore the philosophies of Jakob Friedrich Fries and John Stuart Mill in order to encapsulate the full spectrum of psychologism in the 19th Century, from Neo-Kantian to British Empiricist. The investigation will show a set of common themes within psychologism, such as the grounding of logic in the constitution of the human subject, a reliance on introspection, and the prioritization of epistemology over metaphysics.

I then turn to the logicists, focusing on Gottlob Frege and Edmund Husserl. I start by explaining two influential arguments against psychologism: that it treats logical objects as mental entities and that it devolves into relativism. I analyze how both Frege and Husserl developed alternate explanations for the foundations of logic, where Frege grounded logic in the relationships of objects in an ideal third realm and Husserl founded them on the relationships between the ideal objects of intentional experience. I end the section with a brief explanation of logicism's relationship to the themes highlighted in the prior part, namely that logicism founded logic on the object side of the subject-object dichotomy but agreed with the prioritization of epistemology.

The final part of the dissertation will be Heidegger's critique and radicalization of the psychologism debate and his own understanding of logic. It starts with his critique of Husserl, followed by a Heideggerian critique of Frege, and finally his critique of psychologism. I show that Heidegger undermined the debate by arguing that theoretical modes of engagement with the world were derivative of our more fundamental ontological structure, that the subject-object dichotomy is illegitimate, and that the psychologism debate relies on a flawed understanding of truth. Afterward, I explain Heidegger's philosophy and construct a Heideggerian understanding of logic based on his understanding of truth and the *logos*.

Introduction

The psychologism debate, based on whether the foundations of logic are the processes or constitution of the human mind, was important in the development of philosophy in the late 19th and early 20th Centuries. As it drew to a close, Martin Heidegger weighed in, critiquing both sides and coming to a radical new understanding of logic. He did so explicitly on several occasions in and around the publication of *Being and Time* and implicitly through his critiques of the philosophical tradition.

Despite this, not much has been written specifically about Heidegger's engagement with psychologism, or logic more broadly. Some papers will briefly address psychologism to contextualize other points (such as Mohanty 1988), but otherwise his references to psychologism have been, for the most part, neglected. There are also a few books and papers that defend Heidegger against the charges of irrationalism (such as Fay 1977 and Kaufer 2001). There has been some recent work in the area of Heidegger and logic, such as Greg Shirley's *Heidegger and Logic: The Place of* Logos *in* Being and Time (Shirley 2010) and Filippo Casati and Daniel O. Dahlstrom's essay collection *Heidegger on Logic* (2022). This dissertation will seek to begin to fill this hole in the literature. It will do so by first explaining psychologism and logicism's response to it. Then I will show Heidegger's responses to each of these positions and outline his alternative understanding of logic and its foundations.

In Part I, I explore the basic ideas and themes of psychologism. Since psychologism contains a diverse set of theories bound together by a few themes, I will explain the philosophies

of psychologistic thinkers from both Kantian and Empiricist backgrounds. Jakob Friedrich Fries will stand in for the Kantians and John Stuart Mill for the Empiricists. I will highlight themes that they all shared.

I start with Fries who, on Frederick Beiser and Peter Sperber's interpretation of his project, believed that the best way to continue Kant's critical project was to ground it in the analysis of experience. Fries thought that we could justify Kant's categories through empirical psychology. Furthermore, he argues that the mind constitutes our experience, via the categories, such that the laws of logic hold and regulate the truth or falsity of judgments. Importantly, the laws of logic are oriented towards phenomenal representations as constituted by the mind. As such, they are oriented towards mental entities and are reliant on the workings of the human mind.

I will then turn to Mill, whose understanding of psychology followed more directly from the British Empiricists. For Mill, logic is also, ultimately, oriented towards representations and grounded in the workings of the human mind. I will follow the work of David Godden to show that since logic is oriented towards mental representations, the objects of logic are mental entities. We also develop deductive laws due to the associations the mind draws and thus on the constitution of the mind.

In Chapter 3, I will look at the themes and assumptions that the psychologicists share. First, they agree that the foundation of logic is the empirical mind. Furthermore, the mind is accessible and best understood through introspection. Second, both Fries and Mill subscribe to representational psychologies, where we deal not with actual things, but with the representations of those things that are present in our minds. These two factors imply other key assumptions, such as the subject-object dichotomy and the prioritization of epistemology.

With psychologism explained, I move on to an overview of the logicist side of the debate in Part II. I start, in Chapter 4, with Gottlob Frege and Edmund Husserl's central critiques of psychologism: namely that it misunderstands logic to be dealing with mental entities rather than the content of thought and that it inevitably leads to relativism.

I then move to Frege and Husserl's attempts to ground logic without falling into the same problems as psychologism, in Chapter 5. Starting with Frege, I explain, following the interpretations of Michael Dummett and Tyler Burge, that he seeks to focus on the contents of ideas by externalizing thoughts and placing them in a third, non-spatio-temporal realm that we access through our intellectual faculties. Frege understands logic as the laws that define the truth relation, which is a property of these external thoughts. I explain why he believes this and its implications. The chapter will end by relating Frege's philosophy back to the themes of psychologism, showing that he dismisses psychology as irrelevant to logic, and instead founds logic in the beings that populate his third realm. I show that while rejecting psychologism, he still maintains some of its assumptions, such as the subject-object dichotomy and theoretical reason.

In Chapter 6, we see that Husserl takes the grounding of logic in a radically different direction than Frege. I outline Husserl's conception of logic, where it is the relationship between ideal entities within our experience. This requires an explanation of Husserl's phenomenology, the intentional structure of experience, ideal entities themselves, and the nature of truth. I conclude Chapter 6 by showing that, while he hints at moving beyond the subject-object dichotomy, he is still stuck within its paradigm. Furthermore, he prioritizes theoretical experience, much like everyone discussed above.

The discussion of Husserl will lead into Part III, where I will show how one of Husserl's students, Heidegger, moves through phenomenology in order to radicalize the psychologism debate and redefine the foundations of logic.

Part III starts with a chapter on Heidegger's critique of Husserl's phenomenology. I discuss their disagreements about the purpose and method of phenomenology and then critique how Husserl prioritizes theoretical knowledge and epistemological philosophy over other forms of experience. Then, I will show how Heidegger argues that Husserl's concepts of intentionality, ideal entities, and logic more broadly, all rely on the ontological structure of Dasein.

While Heidegger did not explicitly deal with Frege in his mature writings, I construct a Heideggerian critique of Frege in Chapter 8. It starts with a critique of Frege's third realm. I show that Frege was still operating within the Cartesian paradigm of subject and objects and thus apply Heidegger's critique of that paradigm to Frege. Furthermore, I argue that Frege's conception of truth is derivative of more fundamental levels of truth, and ultimately on the structure of disclosedness as such. Despite these flaws, I argue that Frege has some insights that Heidegger would agree with, though he failed to capitalize on them. I show how both Frege and Heidegger agree that thoughts could not be internal entities and that speech is the locus of logic. Finally, I contrast how they fleshed out these insights.

I finish Heidegger's critique of the psychologism debate by looking at Heidegger's explicit responses to psychologism in his lectures and writings around the publication of *Being and Time*. I explain his two critiques, that psychologism makes a category error when trying to explain logic through psychology and that psychologism is trying to found logic on a science that itself relies on faulty assumptions about the nature of human existence. Just like Husserl and Frege, though, psychologism has some insights that are worth investigating. I lay out how

Heidegger thinks that psychologism is right to do away with the distinction between real and ideal entities. I explain why Heidegger claims that psychologism went wrong by simply embracing one side of the dichotomy and instead that we should reject it altogether. This section ends with an overview of Heidegger's responses to the themes of the psychologism debate.

The dissertation concludes with a chapter on how Heidegger understands logic now that the psychologism debate has been undermined. It starts with an overview of the ontological structure of Dasein, which will set the stage for explaining Heidegger's conception of truth. Since logic is bound up in speech for Heidegger, I discuss the nature of speech and, in particular, speech that discloses. I will explain how traditional logic is founded on the structure of our disclosive speech and, more fundamentally, on the structure of Dasein such that the world is disclosed to it. I then discuss how Heidegger's ontological investigations precede the psychologism debate, because the debate is based on flawed assumptions and deals with only one particular way of engaging with the world. The chapter ends with a brief overview of how Heidegger radicalizes the concept of logic, specifically in how logic needs to be understood as dependent on how beings show themselves to us and on our ontological structure. This reverses the traditional relationship between logic and metaphysics, and in how logic needs to be understood as temporal and situated in our specific contexts.

Part I

Psychologism

Chapter 1: The Psychologism of Jakob Friedrich Fries

Psychologistic theories about logic assert that logic is ultimately reliant on or founded in human psychology (Pelletier et. al. 2008, 4). They include a diverse set of theories ranging from early interpretations of Kant, 19th century Neo-Kantianism, John Stuart Mill's empiricism, and 20th century naturalism (Pelletier et.al. 2008, 6). The science of psychology has transformed and branched into subdisciplines over the course of the last two hundred years, further complicating any unitary description of psychologism. Nevertheless, psychologistic theories share many common themes and beliefs. In the following chapters I will outline the basic themes common among the theories of logic that fall into the tent of 19th century psychologism. These positions will, in turn, be attacked by logicism, as seen in Part II.

To explain the range of psychologism, I take Jakob Friedrich Fries as a representative of Kantian psychologism and John Stuart Mill as a representative of empiricist psychologism. For each of them, I explain how they are psychologistic by showing how they understand the mind as an entity understood through empirical psychology, explaining what they understand logic to be, and finally arguing that logic, for these philosophers, must be understood as in part constituted by or dependent on the human mind.

After establishing how the two theories of logic are psychologistic, I look for common themes. I argue that both forms of psychologism have a representational structure, rely on the nature of the mind to establish the axioms of logic, and use introspection to understand the mind. This leads to a discussion of the implications of these themes, which are that psychologism is

built on the subject-object dichotomy and prioritizes epistemology over other forms of knowledge.

1.1 The Neo-Kantian Beginnings

Psychologism, as a loosely defined school of thought, was founded by Fries in the early 19th century (Beiser 2014, 80). According to Beiser, Fries followed and defended Kant's critical philosophy, remaining "loyal to its original form, defending some of Kant's most controversial ideas, namely, the existence of the thing-in-itself, the noumenal-phenomenal dualism...the metaphysical deduction, and the table of categories" (2014, 23), and claimed that his work was continuing "further on the path of Kant" (Fries 2018, Preface). He defended Kant against the attacks of "speculative philosophy" by giving critical philosophy an empirical ground (Beiser 2014, 30). He did this by interpreting Kant psychologically, meaning that he took Kant's "epistemology as an empirical theory of mental activities" (Beiser 2014, 24) and emphasized the role of the (empirical) inner sense when investigating the mind (or understanding) and its functions, claiming that the starting point for reason is "scattered individual perceptions" (Fries 1798, 210), which one needs to "collect and organize to form basic laws" (Fries 1798, 210). Since one's access to logic comes from and is grounded in the faculties of the mind, he committed himself to deriving logic from the composition of the mind, which is materially determined, meaning that knowledge of it originates in sense intuition (Fries 2018, SS 224). As a materially determined entity, the best way to access it is the empirical sciences and, in the case of the mind, the relevant empirical science was psychology.

For Fries, the main tool of psychology is introspection (Fries 2018, SS 23). Like most of his contemporaries, he believed that we have access to the mind through reflection on the processes of the mind as we experience them. Then we can catalogue what was seen in this inner perception (Fries 2018, SS 43). In other words, by paying attention to what was going on in our own minds, we can come to understand the way that the mind is composed and only then can we ground the laws of logic.

In this chapter, I will briefly sketch the situation that Fries found himself in, which motivated his defense of Kant and his commitment to a psychological interpretation and empirical grounding of critical philosophy (1.2). Then I will explain his rationale for understanding the laws of logic as grounded on the composition of the mind (1.3) and why he believed the composition of the mind was materially determined (1.4). This will also highlight two of the guiding principles of psychologism: the foundation of logic in the human mind and the commitment to the mind being accessible by the empirical sciences. I will then work through why inner perception is the primary tool Fries saw for determining the composition of the mind and show that it is also a theme of 19th century psychologism (1.5).

1.2 The Need for an Empirical Foundation to Kant

Fries saw himself as a Kantian working to give critical philosophy a firm foundation during the heyday of the speculative idealism of Fichte, Hegel, and Schelling (Beiser 2014, 23). He believed that Fichte, Hegel, Schelling, and their followers were taking critical philosophy in too speculative a direction. Rather than founding their transcendental philosophy on a careful analysis of what was available in the experience of the mind and using the analysis to come to

understand the principles of the mind, they "begin with their intuitions about the principles themselves" (Beiser 2014, 33). In other words, Fries thought that they started with first principles which they had no justification for and then built their speculative systems out of those unjustified first principles, saying that they have "a silent precondition of the ground, that the universal highest of the high basic laws are also evident in our knowledge; a depiction which absolutely fails the essence of our reason" (Fries 1803, SS 1). Furthermore, since the first principles came from their intuitions, and intuition is an activity of the mind, he felt that they were relying on the nature of the mind to draw their first principles without first coming to an understanding of the mind (and the faculty of the intuition) to justify it (Beiser 2014, 33). Without understanding the nature of the mind, Fichte cannot justify his first principles and instead simply assumes that the intuition (as a faculty of the mind) acts in such a way as to give first principles, which can later be used to prove that intuition is a legitimate way to come to first principles.

While he believed that the German Idealists who followed Kant ended up going too far afield, Fries acknowledged and agreed with many of their criticisms of Kant's critical philosophy, particularly the ones related to the faculties of the mind. The criticism Fries agreed with were that "Kant had not provided a sufficient systematic unity to his discussion of the faculties" (Beiser 2014, 30), maintaining that Kant never explained the ways the faculties interrelated, relied on one another, and interacted with each other. This can be seen in Kant's defining sensibility and understanding as the faculties of the mind from which cognition arises (Kant 1998, A50/B74), and that, alongside the faculty of reason (Kraus 2020, 15), all cognition is performed through faculties derived from these three. The three faculties cannot be broken down any further. Furthermore, these faculties are not derived from a unitary principle or single source,

but instead from experience, where Kant looks at how human experience works and figures out the properties of the faculties from there. For example, with respect to sensibility, I know that I have sense intuitions from my empirical experience because I experience myself relating immediately to objects, such as when I see things, which must mean that I have a capacity for sensing things, namely sensibility (Kant 1998, A19/B33). For the understanding, we see that we can "trace all actions of the understanding back to judgments" (Kant 1998, A69/B94) or see that acts of understanding, in our experiences, occur through acts of judgment, and thus "the understanding in general can be presented as a faculty for judging" (Kant 1998, A69/B94). Thus, Kant starts with something found in experience and then moves from there to claims about the nature of the faculty.

Unfortunately, Kant failed to justify the selection of the faculties of the mind. He "only picked [the faculties of the mind] up where he found them with no explanation of why there are just these and not others" (Beiser 2014, 30). He saw that we relate immediately and sensibly to objects and then he found the faculty of sensibility from that and noticed that we relate to objects through thought, and that led to the faculty of understanding (Kant 1998, A69/B94). This seemingly arbitrary selection is seen not only within his development of the different powers of the mind, but throughout the critiques. For example, it is often remarked that the table of judgments is taken from Aristotle rather than being independently derived (Greenberg 1994, 383).

Finally, Kant was criticized for having "failed to explain how [the faculties] interrelate to one another as powers of a single mind" (Beiser 2014, 30), and that, beyond not showing how they work together, failing to show how these faculties are part of a greater, unified entity: the mind. This led Fichte to search for a first principle from which dictates the form and content of

the rest of the principles in the system (Fichte 1889, 24). He claimed that while Kant "hinted at our proposition as absolute fundamental principle of all knowledge…he has never definitely established it" (Fichte 1889, 73).

Fries mostly grants and agrees with these arguments against Kant's critical philosophy, but disagrees with where the other speculative idealists take the implications of the critiques. He believes that instead of following speculative idealism's project of reconciling the contradictions found in Kant through a broader understanding of the dialectical progression of spirit (Gillespie 1984, 33), the proper response was, rather than defend Kant wholesale, to carry out an empirical study of the mind in order to have a more thorough and complete analysis of the faculties of the mind. Once the faculties of the mind are accounted for (empirically), the study of the conditions of the possibility of the mind is possible. In other words, for Fries, according to Peter Sperber, transcendental arguments needed a starting point in empirical psychology (2017, 688). Without careful empirical analysis, the starting point for transcendental philosophy would be off, and the system of transcendental philosophy would be flawed. Since Fries believed that the faculties described in Kant's philosophy were the faculties of the mind, that they are faculties and not differentiated powers of a unitary reason, and that the transcendental move to justify Kant's metaphysics was mostly legitimate, though in need of some correction (Sperber 2017, 677), he felt that a psychological study of the activities of the mind, in order to lay the groundwork for transcendental principles, was a continuation of Kant's work. Fries claimed that to move philosophy forward one "will only have to continue further on the path that Kant started with speculation" (Fries 2018, Preface).

All this comes together in the need to give Kant an empirical grounding, and from there, to give logic an empirical grounding. This grounding, though, at least for Fries, is better

understood as a study of the starting point of critical philosophy, rather than the metaphysical justification for it (Beiser 2014, 192). A careful, empirical study of the mind grounds critical philosophy by giving an epistemically valid starting point from which one can move from empirical experience to philosophical reason, without justifying why (metaphysically) the claim is true (Sperber 2017, 686). In other words, while he accepts the general Kantian framework that experience is shaped by and mediated through the categories of the understanding and that these categories make up the foundations for the judgments of reason (Melnick 2001, 623), he rejects the way that Kant came to understand the faculties of the mind and develop the categories. Instead, he argues that one must carefully study the "material consciousness" (Fries 2018, SS 268) through the use of inner perception or inner sense (Fries 2018, SS271). Material consciousness, for Fries, is the manifold of experience where one's intuitions are empirically fulfilled and which has already been constructed by the categories of the mind (Fries 2018, SS 278). In this way "empirical psychology is the basis for transcendental philosophy not in the logical or formal sense that it provides the first principles for the deduction of its elements, but only in the empirical or material sense that it supplies it with its materials" (Beiser 2014, 36). This attempt to ground Kant's critical project, according to David E. Leary, led Fries to claim that "he alone was the true follower of Kant since he alone had developed the critical basis rather than the speculative implications of Kant's philosophy" (1982, 217).

We can see the need for a systematic study of the empirical starting point in Fries's discussion of the transcendental unity of apperception in his *System der Philosophie als Evidente Wissenschaft*. He discusses the transcendental unity of apperception, which Kant describes as the "conscious *a priori* of the thoroughgoing identity of [oneself] with regard to all representations that can ever belong to [one's] cognition" (Kant 1998, A116). Apperception is the taking of an

experience or representation to be one's own, or the assertion that there is an inherent "I-think" within one's thoughts and that the I is necessary to experience (Castaneda 1990, 151). Since this taking to be one's own is continuous, and one takes each experience to be one's own and each experience to be a part of the same "one's own" as other experiences, it is a "unity of all the manifold of [one's] representations" (Kant 1998, A116). This unity is "the synthetic unity of the manifold in all possible intuition" (Kant 1998, A117). The I-ness posited is not itself a representation, but rather part of intuiting itself; I-ness of the act must "accompany all [one's] representations" (Kant 1998, B132). If the apperception did not accompany some representations, then "they would not throughout belong to me" (Kant 1998, B132). To have an intuition is to have an "I" that possesses the intuition as its own. In other words, the intuition is given as mine to the subject because it is given as "an 'I's' consciousness that it is the common subject of a given manifold of intuition" (Messina 2014, 14). It is mine because it is given within the unity of all of my experience as experienced by the same subject.

Fries interpreted this to mean that transcendental apperception was a feeling, where feelings, for Fries, are the (empirical) sensations of inner life (see Fries 2018, SS3; Fries 2018, SS31; and Fries 2018, SS304). Feelings stand within the purview of the mind and are part of inner experience, and thus, are psychological. This means that "the transcendental apperception is directly materially determined as a feeling, that I am" (Fries 2018, SS 224). In other words, while it may be transcendentally necessary for there to be intuitions, one is able to tell that those intuitions are the sorts of things that require transcendental apperception through the feeling of Inness, or through a psychological event that is materially determined and that occurs in empirical experience. Thus, in order to come to the conclusion that apperception is necessary to representations, or any other type of intuition, some experience must first "become empirically

and materially determined through inner intuition" (Fries 2018, SS 224). One must come to an understanding of a mental operation or state in order to understand the conditions for its possibility, and the way one does this is by analyzing one's own mind with inner sense, or, in other words, through introspection. Only then, when the empirical and materially determined mind is thoroughly analyzed and inventoried can the transcendental moves be reliably made.

In order to respond to Kant's failure to justify his choices of the faculties of the mind,

Fries argued that it was necessary to interpret Kant psychologically, because the solutions of his
contemporaries could not better account for the faculties by relying on ungrounded first

principles. A psychological interpretation takes Kant's analysis of the faculties to be an analysis
of cognitive states and activities, or of the way the mind appears to work empirically and then
finds the conditions for the possibility of these (real) cognitive faculties. Fries then took Kant's
failings to be due to his haphazard psychological analysis, and the solution to be in a thorough,
empirical study of the mind. Once one came to an understanding of the mind, the transcendental
moves could be made and the categories (and by extension, logic) could be justified.

1.3 The Empirically Determined Composition of the Mind

A psychological interpretation of Kant, which Fries believed could save critical philosophy from both its lack of systematicity and its rampant dogmatism, necessitated, according to Fries, that the mind be empirically determined. Understanding the mind psychologically was not only the key to saving Kant's critical philosophy from the attacks of the later speculative idealists, but also to ground a more thorough understanding of human nature. While the need to protect Kantianism and provide accurate and useful material for transcendental

philosophy fell away in much of later psychologism (starting with Fries's younger contemporary Friedrich Beneke (Beiser 2014, 144)), psychologicists in the 19th century considered the mind's empirical determinations, and our ability to study it introspectively, to be foundational.

As previously seen, Fries maintained that while the composition of the mind may have transcendental necessity, in order to come to the correct transcendental conclusions or to properly understand the conditions of the possibility of reason, one must first come to an empirical understanding of the mind through one's inner perception. The reason is that the ways that one makes judgments, both transcendental and general, necessarily occur through the various tools and faculties of the mind. When one regards a statement as true, one is judging through the mental faculty of judgment (See Fries 2018, SS 117 and Fries 2018, SS 118); when one follows a logical path to some conclusion, one is doing so in the mind. When someone evaluates whether a law of logic is valid, one relies on intuitions, which are a presentation within the mind (See Fries 2018, SS 35 and Fries 2018, SS 294). Therefore, logic is necessarily psychologistic in the sense of relying on the particular powers of the mind.

Fries follows Kant in understanding intuitions as the immediate way that one relates to an object (See Kant 1998, A19 and Fries 2018, SS 73). Fries claims that intuition is a "direct idea [Vorstellung] of an object, wherein the object is presented as given" (Fries 2018, SS 35) and breaks intuition into two categories: sense-intuition and imaginations [Einbildungen] (Fries 2018, SS 35). Sense-intuitions are representations of "a given object as currently being presented" (Fries 2018, SS 35). They are non-reflective, direct representations of objects given in experience as present in immediate experience, while imaginations are direct representations when "the given object is introduced without its presence" (Fries 2018, SS 35), or where one has a non-reflective representation of the object as if it is not currently available beyond that of the

spontaneity of the mind, where spontaneity is understood as "the capability of a self-activity of cognition" (Fries 2018, SS 68). In other words, while sense-intuitions are given as present, real, and bound by the laws that govern sensation, imagination is given such that it does not appear real to me, and instead of being bound by the laws of sensation, it responds to the self-activity of the mind. For example, if I see a tree with sense-intuition, I understand it as a material object that I can engage with only following the laws of the external world. On the other hand, if I imagine a tree through sense-intuition, I understand that it is not materially present and I engage with it through the free activity of the mind, changing the color of its leaves or shape of its branches through imaginative thought.

Fries also divides intuitions into inner and outer intuitions (Fries 2018, SS 36 and Fries 2018, SS 39). Inner intuition is a "self-intuition [*Selbstanschauung*] or intuition of my varying inner activities" (Fries 2018, SS 39), which is understood in the form of time (Fries 2018, SS 35). On the other hand, outer intuitions are intuitions given in space (Fries 2018, SS 305). This division is compatible with the prior one. One can both have inner imaginings and outer imaginings, or inner sense-intuitions and outer sense-intuitions. One can see a tree (have an outer sense-intuition of a tree), imagine a tree (have an outer imagination of a tree), be aware of myself as irritated (have an inner sense-intuition) or imagine myself irritated (have an inner imagination).

Intuitions, furthermore, are clearly activities of the mind. As direct presentations of objects or feelings in front of the mind (Fries 2018, SS 35). They are direct ways of representation and part of one's mental life.

¹ Following in Kant's footsteps (Kant 1998, A33/B49).

² Once again, following Kant (Kant 1998, A27/B42).

Furthermore, judgment, too, is an activity of the mind and logic follows from it. Fries claims that "the logical form of judgment pushes out from the act" (Fries 2018, SS 288). Logical judgments are cognitions about an object (Fries 2018, SS 112), directed toward the affirmation or denial of the predicate to the subject (Fries 2018, SS 131). As cognitions, logical judgments are representations in the mind. Thus, one's ability to make judgments is constrained by the way that the mind is constituted.

The fact that intuition and judgment are activities of the mind and that the evaluation of logic relies on them means that the starting point for any study of transcendental reason, the foundations of traditional logic, and anything else that extrapolates out from the mind needs to begin with a thorough understanding of human nature, which can be understood empirically.

This dynamic can be seen in Fries's discussion of mathematics in the *System der Philosophie als Evidente Wissenschaft*, where he claims that the principles of mathematics "have no deduction and that each principle is good only if it is directly evident, if they are only appeals to intuition" (Fries 2018, SS 299). In other words, he is claiming that the axiomatic principles that get mathematics off the ground, 1) cannot be deduced, and 2) appear as self-evident. This self-evidence is discovered or validated in one's intuition, and intuition is an activity of the mind, as the "direct ideas of an object" (Fries 2018, SS 35) brought about by the various activities of the mind, such as perceiving or imagining. The activity yields an "individual intuition" (Fries 1807a, SS 2). In other words, what is brought about and presented in intuition is shaped by the categories of the understanding and the activities of the mind. Thus, it exists as part of human psychology and is the way that it is through the composition of the human mind. This means that whether someone sees a mathematical axiom as valid depends on how that person's mind is made up. The composition of the mind determines whether the axioms of mathematics are self-

evident, and since this self-evidence is the basis for one's granting them and getting mathematics off the ground, the possibility of mathematics is contingent on the composition of the human mind.

Fries does not quite go so far as to say that mathematics itself is a function of the human mind, and that the axioms and first principles that it is based on are valid because they are selfevident in the human mind. Rather, the claim seems to be that in mathematics, which is a "science of pure intuition" (Fries 2018, SS 229), the only evidence comes from the workings of the mind. In other words, as Erdman Gorg explains, the claims of mathematics are constructed in intuition and can only be known and justified through intuition (2013, 58), which is an activity of the mind. While there may be a transcendental necessity that makes mathematics work the way it does, the way one accesses mathematics has already been constructed to the categories of the mind. If there is a necessity to mathematics outside of the way that the human mind constructs experience, it is inaccessible to us and we cannot say anything intelligible about it. Rather, all our mathematical theories are theories derived from the way our minds construct experience. This means that mathematics, as done by humans, is a function of the human mind, or that it is grounded on and derived from human psychology. This is not simply because humans use their minds to do mathematics and thus mathematics must be formulated in a way that is conceivable by the human mind while being true independent of the human mind, but rather that the composition of the mind is partly constitutive of the truths of mathematics themselves.

Fries shows how the mind is constitutive of mathematics by explaining the smallest, most fundamental units of mathematics, numbers, in terms of the forms of intuition. He describes numbers indirectly presented in three separate continuous series. From these series we can separate and delimit points, or numbers (Fires 2018, SS 301). One series moves from smaller

quantities to larger ones (Fries 2018, SS 302). On this series, one pulls out one of the points and calls it three, then pulls out a previous point and calls it two and a further point equidistant away and calls it four. Then one can call the point equidistant from three and four three and a half. Quantity here, of course, is one of the sets of the Kantian categories of the understanding, containing unity, plurality, and totality (Kant 1998, A80/B106). It is one of the tools available to the understanding (which is a faculty of the mind that brings unity to the manifold of intuitions (Fries 2018, SS 44)) to construct one's experience, once again following Kant (1998, A93/B126). The second series that one can find numbers in is a time series (Fries 2018, SS 302), where time is a continuous series of present points between the past and the future (Fries 2018, 303). Since Fries follows Kant, time is also the form of inner intuition. From this series, too, one can separate discrete points of the continuity to develop numbers. Finally, numbers can be indirectly presented in space (Fries 2018, SS 302), which is the form of outer intuition, where series are seen in the three dimensions presented in space (Fries 2018, SS 302).

Quantity is one of the ways that we come to numbers, which get mathematics off the ground, and is one of the sets of categories that the understanding uses to construct one's experience.³ How does this process point towards psychologism? How does it show that mathematics is empirically determined and a function of human psychology? Why does this understanding of mathematics require a thorough understanding of empirical human nature?

For Fries, quantity breaks down into a moment of pure intuition, a moment of unity within intuition, and a moment of an intuition of an object (Fries 2018, SS 292). He called it "the concept of the objective synthetic unity of the given manifold" (Fries 2018, SS 291). As stated

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³ See Kant's table of categories: Kant 1998, A80/B106

earlier, he also thinks of these moments as categories of the understanding. These claims, together, mean that these moments grouped together under quantity are ways that the understanding constructs experience such that we can make sense of objects and the world. It is a moment of an intuition of an object when I experience it directly, as constructed by the categories, in empirical experience. Part of my experience of my coffee cup on my desk is the fact that there is one of them. Part of my experience of the pens strewn about is that there are several of them there and that I am focused on one out of many similar things. Furthermore, it is a moment of unity within intuition because it ties like things together; the pens are recognized as a unitary type of thing such that there are several of them and they help me make sense of the clutter on my desk. The categorization of things such that they show up as a quantity, that there are several of this sort of thing (pens) and only one of some other sort of thing (coffee mugs) takes place within the mind. It is also a pure intuition, insofar as the quantities are sorted and counted within the composition of the mind. I do not run into a thing called "several" or the concept "one" out in the world of objects; instead, I instantiate those concepts in my understanding in order to more fully grasp what is going on. The intuitions of quantity are internal to me and then applied to the objects of intuition, and through said objects, I come to have access to the internal workings that sort things in terms of quantity.

The sorting of different experiences into quantities is something that occurs in my mind prior to my phenomenal experience of various appearances, following Kant (Gomes 2014, 12). Since Fries has a predominantly psychological reading of Kant, he regards the act of sorting and constructing through the category of quantity as a power of the mind. Thus, mathematics is derived from an appearance that can only exist due to the composition of the mind, namely the

mind being composed such that it constructs experience according to the category of quantity and that we have access to series of lesser to greater quantities in our experience.

But how does one come to know that there are the categories of quantity? Knowledge of these categories comes from reflection on one's experience. Reflection on the appearances that come up in experience shows that objects are given to the experiencing consciousness as amounts, or in certain quantities. When I look at my desk, I see that there is a single coffee mug (coffee mug with a quantity of one) and several pens scattered about (pens given with a larger quantity). Within conscious experience, I do not stop and think "here's a pen, here's another, here's another...there are several pens", rather several-ness is given with the pens. But, this several-ness is not part of the appearance of the pens themselves. There is no substance of several-ness inherent to the appearance of the pen. Thus, the several-ness, the quantity of the pens, is external to the pens; it is something that must come into the appearance separate from the things that possess it. This means, for Fries, that quantity must be a concept applied by the mind in the construction of the appearances that are given to the experiencing consciousness, or the "objective synthetic unity of the given manifold" (Fries 2018, SS 291). So, for Fries, one starts with reflections on empirical experience, on the appearances given to the experiencing mind. Then one finds the necessary activities of the mind that are not themselves apparent in conscious experience that construct the experience.

While this tacks fairly closely to the Kantian project of finding the necessary conditions for the possibility of experience, it also attempts to solve the problems of Kant's table of categories by showing how one gets to them through empirical psychology (Sperber 2017, 681). One derives the table from reflection on the empirical determinations found in experience and the unity of the categories shows up in the way that each of them is present in experience.

Furthermore, Fries claims that the categorization of noumenal experience in the construction of appearances (and phenomenal experience) is an activity of the human mind and is thus psychological (Sperber 2017, 681), and any psychological law, like all laws of the empirical sciences, starts with "experience and proceeds by means of induction and speculation to general concepts, rules, and classifications, at best up to constitutive principles" (Pulte 2006, 108). While not themselves given in empirical experience, psychological laws are derived from evidence found empirically. Since categorization is an act of the mind, discovered through empirical study, claims about the necessity of the categories are no longer claims about intelligible experience in general, but rather about the activities of the human mind such that humans have the experiences that they have. The claim, for Fries, is about how the human mind must necessarily be arranged (Beiser 2014, 34). The categories are a necessary fact of human nature that can be discovered only through an empirical investigation of human cognition (Beiser 2014, 34).

The process by which knowledge of the laws and construction of the mind are discovered, for Fries, is the following: one has a set of experiences and then one introspectively reflects on those experiences. I have a series of experiences of my desk with several pens strewn about and then I reflect on the nature of that series of experiences. In my introspection, I analyze what appearances I get and how those appearances are constructed such that they form the coherent experience given to my consciousness. I get the appearance of several pens and see that, within the experience is the concept of "several." Seeing that "several" isn't inherent to the objects that there are several appearances of, I can conclude that it is a concept that was applied in the construction of the appearances. I then can draw conclusions about the way the mind works from the analysis of what is given in experience and the way that the experience is

constructed. I now know that the mind is the sort of thing that can construct the appearances of an unknown, noumenal scene such that there are individual objects (there are several, singular pens that exist on a separate thing called a desk) and similar objects can come together as a quantity of objects (my mind constructs the experience so that there are several pens, not an individual pen, another individual pen; they are given as some quantity: as several, a scattering, a few, etc.). So, through an empirical analysis I can come to conclusions about the nature of the human mind and how it functions.

While not all psychologicists use transcendental reasoning to come to conclusions about the nature of the mind, not all believe that the mind is an active participant in the construction of experienced reality, and many prefer to model how they move from given experience to the laws of the mind after the empirical science. The derivation of the laws of the mind from given experience is a constant theme. All forms of psychologism are committed to the mind being a thing that acts according to a certain set of laws and is uncovered empirically, which is understood historically through introspection. For Fries, the mind constructs the appearances in experience through the various categories (such as plurality or totality), and the construction according to those categories can be thought of as the laws that the mind follows, or as psychological laws. We come to know those laws, that the mind has to act in a certain way, namely, constructing experience through and in accordance with the categories, by reflecting on our own experience and our inner life.

The actual way that one goes about coming to the laws of the mind varies from psychologistic thinker to psychologistic thinker. While Fries relies on Kantian transcendental

⁴ Such as Mill, who will be discussed in the following chapter.

reasoning, Mill models his psychology on British empiricism. While their logical moves are drastically different, they both still start at the same place, reflection on experience, and move to universal claims about the nature of the mind, or come to understand psychological laws.

1.4 Logic as Dependent on the Laws of the Mind

Now that we've seen that the laws of the mind are discovered through empirical reflection and analysis for the psychologists, and that, for Fries, the transcendental laws that construct and regulate experience are also psychological laws, how, then, does he move from this position to the view that the laws of logic are discoverable by psychological investigations, and second, determined by the makeup of the mind?

For Fries, general logic is the set of laws used in evaluating concepts, making judgments about sentences, and coming to ideas and concepts indirectly, rather than directly in intuition (Fries 2018, SS 117). In other words, Fries maintained that there is a logical way of thinking, where "the distinct logical trains of thought are however the logical or discursive types of presentation through universal judgments and voluntariness" (Fries 2018, SS 44). This means that logic is a way of moving from one representation (mediated discursively through propositions) to another representation in a way that the truth of the judgment is maintained.

These concepts and sentences are themselves mental entities, so the laws of logic are, at the very least, directed at mental entities, or are laws about mental entities. These laws then, while *a priori* themselves, are still those that we use to judge aspects of our consciousness (Fries 2018, SS 112-114). Furthermore, they are known apodictically as axioms (Fries 2018, SS 122), meaning that their validity is self-apparent to the mind. To be given the law and to understand it

is to know its truth. There is no deeper justification for the laws of logic than how they are given with an apodictic modality and general quantity (Fries 2018, SS 122). They are themselves taken as true and used to regulate all other judgments. For Fries, there are four of these self-apparent principles: the law of the excluded third term or excluded middle (Fries 2018, SS 113), identity (Fries 2018, SS 114), the principle of non-contradiction (Fries 2018, SS 115), and that "What is true of the general superordinate is also true of the subordinate thing" (Fries 2018, SS 116). All other logical laws can be derived from these apodictically known laws (Fries 2018, SS 118).

The apodictic assurance occurs within one's experience, and is thus empirically determined. The knowledge of the truth of the thing is self-apparent, meaning that it shows up in experience as true, full stop. Its truth is part of the empirical experience. This can be seen in Section 117 of his *System*, where Fries describes the mental act with which we discover each of the four founding principles of logic: the voluntary comparison of representations (for the law of excluded middle), representations of individual objects throughout different, indirect forms of presentation (for identity and the law of noncontradiction), and through how one experiences partially presented ideas or objects (for the truth of a proposition carrying over from a superordinate to a subordinate object). Empirical experience is best understood through the introspection of empirical psychology. Furthermore, as an aspect of conscious experience, the apodictic assurances of general logic are, like every other aspect of conscious experience, constructed by the mind through the categories of the mind, according to Fries. This means that one's access to the laws of logic is determined by the psychological makeup of the mind. The reason that we are able to understand the laws of logic as valid, as the rules that regulate valid thought that one ought to follow in order to make true claims about concepts and to correctly move from one idea to the next, is that our minds are made up in such a way that those very

logical laws are apodictically given to us. Our minds construct experience such that the laws of logic are self-apparent, and then we regulate our thinking in order to follow those self-apparent laws, which, again, we know only due to the way that our minds construct experience. This means that our use of the laws of logic, regardless of why they are valid, are dependent on the laws of the mind. Fries takes a soft psychologistic position, maintaining that our access to logic is dependent on human psychology and therefore that psychology is the way that one comes to know the laws of logic by giving any analysis of logic its starting point: "empirical psychology is the basis of transcendental philosophy...only in the empirical or material sense that it supplies it with its materials" (Beiser 2014, 36).

This means that the possibility of the study of logic is first and foremost determined psychologically. We are able to study logic because our psychological composition gives us apodictic assurances of the validity of logic. The nature of the mind dictates our access to logic. Logic is also the basis of all other sciences (Fries 2018, SS 26), meaning that all other sciences rely on and make use of the laws of logic, though the laws can be applied in specialized ways depending on the object of the science (Fries 2018, SS 26). Thus, the nature of the mind, by extension, dictates our knowledge of the other sciences.

Note too that Fries wanted to give philosophy a firm scientific footing, or find it an empirical foundation (Beiser 2014, 29). Since logic is the basis of the other sciences, or the way in which one comes to universal knowledge in the sciences and in philosophy, finding an empirical ground to logic will give philosophy a firm, empirical basis.

So, what is the relationship between the mind, which is studied by psychology, and logic, other than that logic deals with psychological entities? First off, the laws of logic are the laws of thought that come from apodictic experience, or in Fries's words: "Logic is the formal

philosophy or the science of the universal and necessary laws of thought" (Fries 2018, SS 26). The laws are the rules that our minds follow and employ and it is through them that we are able to think about objects as entities that "can be determined as something to be thought at all" (Fries 2018, SS 26). The objects of experience are conceptually mediated and the concepts that do the mediating are logically determined and must follow the laws of logic, as laws of thought. Thus, the laws of logic are a condition for the possibility of experiencing objects as things to be thought. But we can also reflect on these rules directly, or make them the objects of experience. Through reflection, one can engage with the laws of logic as given objects (Fries 2018, SS 26). This then means that the laws of the form of thinking can be the objects of empirical reflection. They thus can be the object of psychological study.

As mentioned above, a key feature of the laws of logic is their apodictic nature. Not only are they taken as clearly true when becoming the object of thought, they also are necessarily the case (Fries 2018, SS 26). They are one of the conditions of the possibility of scientific and philosophical thought; without them philosophy and the sciences would be impossible. Fries gets to these conditions of the possibility of philosophy and the sciences in the same way he gets to the conditions for the possibility of experience in general: start with an empirical analysis of the experience of doing science or philosophy, and then use that empirical evidence to come up with universal, transcendental laws. So, we look at how we do philosophy, the experience of moving from one concept to the next following rules and stating those rules as justifications. For example, I know that Socrates is mortal because in my experience it follows naturally from Socrates being a man and all men being mortal.

The process here is similar to the one we saw with grounding mathematics. We derive our knowledge of numbers from the fact that we experience quantity, space, and time in the form

of a series from lesser to greater. We get these series from the way our minds construct the world of experience. Similarly, we derive the laws of logic from experience. Our minds construct our experience in such a way that the laws are apodictic and the following of the laws results in conviction of the truth. The laws that capture what is going on, or the laws of logic as we understand them, then end up being the consequences of the arrangement of experience according to the categories of the mind. Thus, the laws of logic are a consequence of the makeup of the mind.

Beiser makes the claim that Fries is not psychologistic in this sense because the laws of logic are objective and are "formal laws about being itself" (Beiser 2014, 81) and "true of all possible things" (Beiser 2014, 81). In other words, the laws of logic pertain to the objects of experience and all possible objects of experience. They are about beings themselves and being in general. While this may be true, for Fries, as we have seen, objects are phenomenal objects, for both the inner and outer senses (Fries 2018, SS 304 and Fries 1807b, SS 164). The objects that logic applies to are the objects as constituted by the human mind, and thus are dependent on human psychology and all the possible things that they are true of are all possible things as constituted by the human mind. Thus, the fact that these laws relate to things and are formal laws about being, as Beiser claims, does not preclude them from being psychologistic, because the being of those things is psychologically determined.

1.5 Inner Sense as the Primary Tool of Psychology

We've now seen that for Fries the mind is empirically determined, or that knowledge of the mind comes through empirical analysis, and that the laws of logic, at least how we understand them, are dependent on the mind. As has been alluded to, the psychologicists of the nineteenth century believed that the best way to describe how the mind comes to knowledge in the science of psychology is through introspection, through investigating the goings on of their minds through an inner perception or inner sense. While this method has since fallen out of favor in psychology in modern times, it was central to conclusions drawn by the early psychologicists, like Fries and Mill. In this section, I will walk through Fries's explanation of what inner sense (sometimes called inner perception) is and his justification for using it as the starting point for the study of human psychology.

Fries maintained that psychology needed to be based on experience, and in particular on the results of an inner sense or inner perception. He claimed that "through the survey of inner experience by inner perception I will become myself in concepts and judgments of continuous formal determination of material consciousness" (Fries 2018, SS 278). So, what is this inner perception? It is the perception of things that are presented as interior to the mind. Whereas in (outer) perception what is given as sense knowledge is what is outside of us, objects in the world as constructed through the categories of the mind, inner perception is what is given to us when the object of our attention is a mental entity that is constructed through the categories and presented to us in experience (Fries 2018, SS 23). When I reflect on an experience, I bring it to mind as a mental entity to investigate. This bringing to mind is mediated by the categories as they construct experience, like all other experiences. Then I can think about and investigate the reflection (Fries 2018, SS60). If I were to investigate how the human mind responds to some

external stimulus such as physical pain, I would reflect on an experience of pain and observe how my mind reacted to it. This would consist of me calling to mind the experience (either from memory or by focusing on what is occurring internally during the experience), which would mean that the object of my perception is the internal workings of my mind. If I were to reflect on how I learn addition, I would look to the experience of learning and using numbers and investigate the internal workings of my mind while I do so, or the way that the internal workings are presented. Then I can work backwards from the empirical presentation of the workings of my mind to the laws that govern my mind and the necessary makeup of the mind that is implied by the workings that I observed introspectively. Inner sense or perception is the central tool for doing psychology, and thus getting to the foundations of logic, because it is the form of access that we have to our own minds. It is the way that we can get the experience needed to be able to develop the laws of the mind.

Why must our mode of access to studying the laws of the mind be introspection or inner sense? Why can we not study the mind through other methods, such as watching the stimulus responses of others, in the way that much of modern psychology does? The first reason Fries does not use examinations of others is historical. Psychology labs that did this did not arise until the latter half of the century (Kusch 1995, 123-125), whereas the use of introspection to do psychology has a long tradition in philosophy. In some ways, then, a more modern approach, where one relies on the use of observations of the external world, was not adopted by Fries and the early psychologicists due to their living, for the most part, prior to this innovation, which only began in earnest in the mid to late 19th century (Khaleefa 1999, 6). On top of that, the two figures we will focus most on, Fries and Mill, have different justifications for using introspection rather than external perception, and these justifications lead them to derive the laws of the mind

in different ways. Thus, it is important to see why they relied on introspection and what implications there are for these justifications.

A reason that Fries thought the inner and outer senses were of different kinds is that the mind, which is observed with the inner sense, follows a different set of rules than what is observed through outer sense. The appearances of outer sense and perception are subject to the laws of nature, or causation (Fries 1807a, SS 4). We get appearances constructed through the category of causation such that they appear to have cause, and the events of outer perception are effects that necessarily follow from their causes. When one billiard ball strikes another, the second must move. There is no free choice of the billiard ball or chance that it will not; rather, the effect follows directly from the cause. All the things in outer perception, all appearances that we see, are subject to these causal laws, these laws of nature.

On the other hand, the mind, and what is observed through inner sense, is free. The mind is not subject to causal laws, but instead can act spontaneously. This means that the mind as observed by inner sense is not determined by previous states and outside actors, but rather is self-determined and independent (Fries 1807a, SS 4).

The consequence of outer and inner sense following a different set of rules is that one cannot look to the outer sense in order to develop the rules of the inner sense. I cannot look to the physics of external objects in order to determine the workings of the mind. I cannot look to the laws that govern outer appearances to come to the laws that determine inner appearances.

Instead, I have to look at the place where the internal rules apply, my own mind. Through introspection, I can look at the empirical data of what goes on in the region that the laws of the mind apply to, the region where there is freedom within the context of the transcendental parameters that set the bounds of the mind, in order to come to the laws of the mind.

One way to thread the needle here is by using external evidence of how other people acted and their reflections. From there, I can observe beings who presumably have freedom as they navigate the world and respond to stimuli within it. I am not observing their internal states, but rather their external reactions, which can then be used as empirical data to make claims about their internal states, and then the laws that regulate their minds and behavior. Unfortunately, drawing lawlike conclusions from the external evidence cannot be expected to shed light on the inner workings of my own mind. When I use external evidence to determine the characteristics of the mind, I am using external evidence to make laws, and the nature of the laws that come from external observation is causal. To use external stimulus response to do psychology would be treating my subjects as if they are not constituted as free beings. This is either a correct judgment, and the subjects are not like me, and thus provide no evidence to the workings of my mind, or they are like me, and they themselves are not the types of beings whose mental faculties can be determined through external study.

The difference in kind between external and internal things and the laws that govern them has a pair of implications. The first is that one cannot do psychology based on evidence found in the external sense. To do so would be to treat human beings as causally bound creatures rather than as free beings. The second implication is that the laws of the mind are transcendental laws rather than causal laws. They cannot be causal because that would undermine the freedom that is essential to human beings. They instead need to be laws that set up the parameters that are necessary for free thought to occur and set up the bounds of free thought. They are about the way that the mind shapes experience and about the way the mind must be constituted such that we have our experiences and such that we are constituted as free beings.

Chapter 2: John Stuart Mill and the Introduction of British Empiricism

While later psychologicists, following Fries in the German tradition, moved further and further away from his Kantian roots, Fries represents the Kantian side of psychologism well.

Mill's thought, on the other hand, is much more in line with the tradition of British Empiricism.

While there are many important differences between the two traditions and Mill's beliefs about the constitution of the mind and how one comes to know it are different from Fries's, he shared many of the central themes of psychologism with Fries, such as his commitment to the laws of logic being dependent on the constitution of the mind, the mind being empirically determined, and the use of introspection to develop the laws of the mind.

While, at first glance, Mill seems to belong to the tradition of psychologism, and he is traditionally taken to be one of its central figures, some people think that this attribution is incorrect (see Skorupski 1998 for an example). In this chapter, I will show why Mill, in fact, does belong in the tradition of psychologism, and in doing so show how he subscribes to the general themes of psychologism, while also bringing in new forms of thinking along the lines of those themes. To do so, I will show that Mill belongs to the tradition through his use and reliance on the three themes of psychologism put forward so far (2.1: the empirically determined mind, 2.2: the relationship between the mind and logic, 2.3: the role of introspection). This will provide the necessary evidence for his inclusion in the tradition. It will also show some of the differences in thinking between Mill and Fries. I will highlight how, despite these differences, they still maintain the same central pillars of psychologism. This will then lead to a discussion of

psychologism as it encapsulates the two sides of its membership (psychological interpretations of Kant and empiricists) and which further influences the philosophical tradition (Chapter 3).

2.1 Mill and the Empirical Mind

While Fries left himself some wiggle room around whether the mind was empirically determined or merely only empirically accessible, Mill maintained that the mind was in fact empirically determined. The laws of psychology, for Mill, were natural laws, and thus the mind, followed a set of empirically determinable, scientific laws (Mill 1974b, 846), rather than just having transcendental boundaries. Thus, the mind (as something describable by the sciences) is a thing that follows a set of causal laws (Godden 2005, 121), which can be found through observation (Mill 1974a, 380).

As mentioned above, when it comes to the nature of the human mind, Mill is still firmly a British empiricist (Godden 2014, 45). He thus maintains that the mind is the locus of experience and the contents of the mind come from experience, either through previous mental states or bodily states (Hollis 1972, 336). Furthermore, one's mind is empirically available as a succession of mental states that follow from one to the next according to the laws of association (Godden 2005, 121). One comes to knowledge about one's own mind, then, through reflecting on these mental states and one comes to knowledge about psychological laws by analyzing them and deriving natural laws from these analyses.

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⁵ While maintaining that the laws of psychology are natural laws, he admits that it lacks the precision of more mature natural sciences because we lack all the necessary information to make exact determinations.

Psychology, then, is the natural science of this understanding of the mind. Since the mind is thought of primarily through the lens of current experience or immediate mental states, it intuitively follows that psychology would be studying "the uniformities of succession, the laws, whether ultimate or derivative, according to which one mental state succeeds another, is caused by, or at the very least, is caused to follow, another" (Mill 1974b, 852). In other words, psychology studies the mental states that one is in and how one gets from one mental state to the next. Furthermore, these mental states cannot be distinguished from the mind itself (Mill 1979, 211). In other words, the laws governing mental states are the laws that govern the mind. The laws of the mind describe the causal connections between mental states. The immediate causes are all "either by other states of mind, or by states of the body" (Mill 1974b, 849). Psychology, in studying the mind and how we move from one mental state to the other, includes how states of the body change the states of the mind. These states of the body, though, are understood through one's mental states. If I am in pain, I realize this through impressions that are available to my mind, or if my attention is pulled from my computer to the far side of my apartment by a noise, it is pulled away because the sense impression, which I got through my ears, became represented in a mental state. So, while psychology takes into account how physical states affect mental states, the medium through which they affect mental states is the mind. Physical states become sensory impressions that are represented in the mind.

For Mill, the laws of the mind are the set of natural laws that determine how one moves from one mental state to another, and these mental states are composed of impressions and sensations (Mill 1974a, 25). These basic units of sensation are not only the basic units for internal experience of the mind, but also of all experience, including of external objects, insofar as they are how one experiences the objects, but are distinct forms of the objects themselves

(Mill 1974a, 63). So, how does Mill move from individual experiences of sensations to the universal laws of nature? What does this move from individual states formed by sensation to scientific laws look like when applied to the states of the mind?

Mill moves from individual sets of sensations to universal laws through abstraction (Mill 1974a, 226). This is when one finds the similar parts of different sets of experiences, or (in the case of Mill) the similar sets of impressions or progressions from one set of sensations to another, categorizes them together and uses them to describe and make predictions about any experience, or set of sensations, that share the common part. If I want to determine universal laws about gravity, I would notice that things, when not supported, tend to fall towards the ground, or I would have a set of sensations of my coffee cup resting on my desk, and if I bumped it, the sensations would change to a representation of it falling towards, then striking, the ground. This is also true of the sensations around my books and phone. From this, I notice that what all these experiences have in common is that, no matter the shape, use, or weight of the object, it falls towards the ground. I pull out the relevant, similar factor (falling towards the ground) and draw away from the differences. I then generalize from this experience that things, when not supported, fall towards the ground. As I go about my life, I notice this is true of even more things than just the random objects of my desk, and become more and more sure of my generalization. For Mill, the more occurrences that match my generalization that I see, and the scarcity of occurrences that do not, give me further certainty to my claims, until they are understood to be universally true laws, or even necessarily true axioms (Mill 1974a, 238). If I wanted to learn more about gravity, I could then devise experiments where I control more and more of the differences between objects (I control the shape of the objects, the height they fall from, and so

on) to determine specifics about falling things, such as the acceleration due to gravity. Eventually I end up with scientific laws that I believe apply to all instances of falling objects.

The laws determined by abstraction are considered to be universal, but not because they are *a priori* necessary. Indeed, Mill finds most instances of supposed *a priori* necessity to be a factor of education or lack of imagination (Mill 1974a, 128), and he thinks that they lack any novel content (Skoruppski 1998, 35). Rather, they are taken for granted because they are continually confirmed in my experience. These laws are inductive laws about how past experience will be similar to future experience (Mill 1974a, 163).

Psychology, as a natural science, abstracts from experience to develop laws in this way. The laws of psychology "can only be discovered experimentally" (Godden 2005, 121), meaning they are not only discovered through experience, but through a set of experiences designed and controlled to isolate and discover the laws of psychology, or experiments. Thus, what goes on in the mind, and how one moves from one mental state to another, regardless of the mode of thought or the quality of reasoning, is that one follows the natural laws of the mind, as described inductively through scientific abstraction.

2.2 The Relationship between the Mind and the Laws of Logic

Before we can show how logic, for Mill, relates to the mind and its psychological laws, we need to understand what logic meant for him. First, logic is "a science of proof" (Mill 1974a, 9), or of the "portion of our knowledge which consists of inferences from truths previously known; whether those antecedent data be general propositions, or particular observations and perceptions" (Mill 1974a, 9). Logic is, then, the science of how we move from something we

know already to be true, be it a proposition, perception, or observation, to some new fact that we consider true.

For Mill, all inferences, including both inductive and deductive, fall into the category of logic (Godden 2017, 176-177). In this chapter, for the sake of consistency with Fries and with other logicists, I will mainly discuss deductive logic, and only stray into the nature of induction insofar as it is relevant to deduction. Deduction, for Mill, is limited mostly to syllogisms, which move from generalities to particulars (Mill 1974a, 183). Deductive logic involves inferences that extend the general knowledge that I currently have (usually in the form of propositions) to new particulars. If I were to follow the classic example of a syllogism: all men are mortal, Socrates is a man, therefore Socrates is mortal, I would be moving from the generality (and major term) that all men are mortal, and finding that Socrates (minor term) is a particular within the class that is mortal (men) and reasoning from the general description of men (as mortal) to a particular fact about Socrates (he is mortal).

Deductive logic, though, is founded on induction in two key ways. First, all propositions that can be true or false, ultimately, come from experience and are justified inductively. While I may infer a true conclusion deductively, I know that the major term is true and that the minor term falls within the major inductively. In the above example, "the mortality of [Socrates]⁶ is not an inference from the mortality of all men, [as a necessarily true statement], but from the experience that proves the mortality of all men; and is a correct inference from experience, if the general truth is so too" (Mill 1974a, 572). In other words, there is no inference from generalities to particulars without inductions about aligning them together in such a way that the syllogism

⁶ Mill uses Lord Palmerston instead of Socrates

can get off the ground. Analytic truths, it seems, should be a counterexample to Mill's claim, because they are true or false not based on experience in the world, but by the meanings of the terms themselves. According to Charles Landesman, this means that Mill claims that analytic truths are not truth claims at all, but rather "they express linguistic conventions" (1983, 470). When I say "All bachelors are unmarried, therefore no bachelors have wives," I am not making a claim about the world that can be true or false but rather making claims about how we use the word "bachelor." In analytic claims, we are only making claims about how we use words. I use the word "unmarried" in such a way that it envelops "not having a wife" and claims based on this usage are not about the world which can then be represented in a true or false manner, but only insofar as they are in "conformity or discomfort to the ordinary usage of language" (Mill 1974a, 144).

The second way that deductive logic relies on induction is that logical necessity is itself an induction. Mill claims that "the foundation of all sciences, even deductive or demonstrative sciences, is induction" (Mill 1974a, 224). What we conceive of inferences and axioms to be necessary is only because they are affirmed in our experiences (Richards 1980, 25). Furthermore, moves from the general to the particular through syllogisms are a form of inferences from particulars to other particulars, Mill claims that "the real inference is always from particulars to particulars, from the observed inference to the unobserved one" (Mill 1974a, 213), but in deductive logic "we conform to a formula which we have adopted for our guidance in such operations, and which is a record of the criteria by which we thought we had ascertained that we might distinguish when the inference could, and when it could not, be drawn" (Mill 1974a, 213). In other words, when making logical inferences we are in fact moving from particular to particular (psychologically, by the laws of association) and we have found a form that makes

those inferences more reliable. We know the form makes the inferences more reliable because it (historically) has proven itself out time and time again. We then make use of this form to make our own inferences more reliable, adopting our first particular into a general form (the major term) and a particular within it (the minor term) in order to come to a reliably drawn conclusion. In this instance, though, both the form of the inference and the fact that the particular belongs to the generality in the first place, are, at their base, inductive.

To further clarify how logic is based on induction because of the constitution of the mind, Mill breaks logic down along the lines of a second distinction which is often overlooked, that of an art on the one hand and a science on the other (Mill 1974a, 4). The art of logic, according to Godden, "provides rules of evidence that serve to guide our thoughts; it is in accordance with these rules that we ought to reason" (Godden 2005, 119-120). The art of logic or reason then is the set of rules that we follow to go from prior knowledge to new information while maintaining truth. The science of logic is the analysis of the mental processes that occur in the art of logic (Godden 2005, 120). The art of logic, for Mill, is dependent on the science of logic (Godden 2005, 120), because "[a] right understanding of the mental processes itself, of the conditions it depends on, and the steps of which it consists, is the only basis on which a system of rules, fitted for the direction of the process, can possibly be founded" (Mill 1974a, 4). Since the art of reasoning is the art of a set of mental processes that fulfill a certain function (maintain truth from old information to new information), they must be founded on the laws that govern how those mental processes work. I know that Socrates is a man and that all men are mortal. I consider them true propositions. The art of logic is to be able to move from those two propositions to the third, that Socrates is mortal. The science of logic is the analysis of what goes on in my mind when I am able to move from the first two true propositions to the third.

For Mill, the art of logic is dependent on the science of logic (Godden 2005, 120). In other words, in order to understand how to reason well and why some progressions from proposition to proposition and mental state to mental state are truth-preserving and others are not, we need to understand how the mind moves from proposition to proposition in a truth-preserving fashion. This is not merely an epistemic claim, though. Rather, the fact that these movements preserve truth is itself dependent on the workings of the human mind (Godden 2005, 121). So, understanding why the art of logic successfully preserves truth depends on understanding human psychology, and the fact that the art of logic successfully preserves truths depends on the actual workings of the human mind.

These claims place Mill thoroughly in the psychologistic camp. I will now look at how Mill justifies his claim that the art is founded on the science. Then I will show how this psychologistic way of thinking is essential to his framework in two ways. First, I will show how his understanding of deduction as based on induction relies on his understanding of human psychology and then how this makes contingent human psychology the foundation of logic. Second, I will look at how Mill understands logic and inference in general, and show how human psychology is central to it.

Tying logic to psychology is not just incidental to Mill's philosophy, something that he thought but which can be easily extracted and explained away. Instead, founding logic on human psychology is fundamental to, and inextricable from, his philosophy of logic. We can see this in two ways, first in his justification for using induction as the grounds of all inference and second, through the project of understanding logic in general being framed with respect to the human mind. First, as seen above, logic is ultimately grounded on induction from one particular case to another particular case. What is called deductive logic is the use of syllogisms to make our

inferences more reliable. The syllogisms are themselves considered so reliable because of constant empirical and inductive confirmation of their reliability.

Why does Mill derive deductive logic from induction? What is the basis for saying that all inferences are, at their base, inductive? The answer seems to be that it is simply how the mind works. Humans process information and move from one set of understandings to another via these case-by-case inductions (Mill 1974a, 288). That is what we have to work with, as humans, if we want to make inferences. Through experience we then find reliable patterns (either those found in the sciences that remain thought of primarily as inductions or those that fall into syllogistic forms that are then thought of as deductive inferences) and instantiate them in our reasoning. Some of those patterns become so reliable that we are unable to conceive of the world as acting in any different way. We believe these patterns to be necessarily true. We only conceive them as necessary, though, because of the overwhelming reliability of the inductive inferences that found them (Mill 1974a, 238). We associate the premises and conclusions with overwhelming success and thus we take the necessity for granted, even though it is, in actuality, based on consistent inductive inference (Mill 1979, 71).

The counterargument here is that, while we ourselves, as beings with human psychology, can only get to the laws of logic via case-by-case inductions because of the nature of our minds, that does not itself mean that the laws of inference themselves are based on case-to-case inductions. While we may only have access to the laws of logic through our inductions, this does not mean that they themselves are inductive; rather, they could be necessary laws whose discovery is through human experience. On its face, there appears to be some merit to this claim, where what is going on in logic is a search for truth, and the valid-making property of an inference is that it moves toward truth. This movement towards truth happens to correspond with

certain mental processes but is not reliant on them. Mill's logic is not psychologistic, then, because it is not the fact that inferences follow the right set of psychological laws that they are valid, but rather that they move us toward true conclusions, or expand our understanding from known cases to new cases. If we get to the deductive laws through our inductive processes, but they are valid laws because they expand us towards truth due to some form of necessity around them, that would mean that they themselves are necessary and not grounded on induction through human psychology. Instead, we simply come to know these necessary truths inductively due to the limits of our own minds.

John Skorupski makes a similar argument when he claims that for Mill the laws of logic are laws of thought because they "are principles in terms of which we cannot but think" (1998, 47) but only because they are prior laws of existence (1998, 47). In other words, the laws of logic bind our thinking because they are already true and, thus, they are not dependent on our minds. My thoughts follow the laws of logic in a similar way to how my coffee mug follows the law of gravity.

This line of argumentation fails because it sets up the laws of logic as things to be discovered in observation rather than as tools of discovery. In other words, for this to be true, Mill would need to treat the laws of inference as true things about the world that people then discover through various empirical methods and various uses of induction. Unfortunately, Mill simply does not formulate logic in this way. He never claims that deductions are necessary laws that we find inductively. Instead, he claims that deductions are special cases of induction (Mill 1974a, 213) and that there are no necessarily true laws (Mill 1974a, 224). They both come from the constant success of inductions such that we (psychologically) lack the capability to think otherwise.

Furthermore, this line of reasoning changes the very essence of the laws of inference, transforming the topic into something other than what Mill addresses. If Mill were non-psychologistic, then the laws of logic must stand on their own apart from human psychology or the human mind. For Mill, though, if that were the case, we would no longer be talking about logic, but something else entirely, because Mill frames logic as a process of the human mind.

Many of the basic principles of syllogisms are based on human psychology, as Godden points out. He claims that "the very foundations of logical truths cannot be explained independently of psychology" (Godden 2005, 138). This can be seen in Mill's description of the law of noncontradiction, where we generalize the law from experience, particularly from the experience of mental states, where two states, belief and disbelief, exclude one another (Mill 1974a, 277). In other words, we get the law of noncontradiction because we have the experience of belief excluding the experience of disbelief, and vice versa, because an aspect of the experience of belief is that it is incompatible with disbelief. This is an empirically found fact about the mental states of belief and disbelief (Godden 2005, 138). We then abstract from that fact and come up with the law of noncontradiction. This is a seemingly universal experience that is confirmed almost constantly in the experiences, representations, and mental states that we inhabit. Thus, it becomes taken for granted as necessarily true.

Similarly, the law of excluded middle comes from the observation of our mental states, where positive mental states or modes of consciousness exclude the possibility of negative ones (Godden 2005, 139). This is a constant fact of our mental makeup, which is then constantly confirmed empirically as we continually experience it and it is taken to be foundational. In other words, a certain set of psychological facts determines the axioms of logic (Godden 2005, 139).

Additionally, since Mill's psychology is representational, such that what the mind sees and works with is a set of sensations presented to it, the objects of the mind and the subject matter of logic, or the object that logic is supposed to get to and preserve the truth about, are "not objects per se, but phenomena" (Godden 2005, 139). Even Skorupski acknowledges this, saying "phenomena are all we know" (1998, 47). They are representations of the (real and external) objects presented to the mind via sensation. This means that the laws of the objects that are derived from experience are actually derived from the representations that we have, rather than from the experience of the objects themselves. Thus, "nature and laws of existence cannot be explained independently of psychological and perceptual facts about human beings, neither can the principles of logic which derive therefrom" (Godden 2005, 139). In other words, the objects or contents of the judgment play a role in the laws of logic, and thus logic is not just about how concepts relate to each other, but how concepts and judgments interact with the actual content of experience. The contents, though, are representations which themselves are dependent on human psychology and biology. They depend on what sense organs we have and how we are able to present and receive representations.

This leads to the second reason why human psychology is central to Mill's logic. Mill simply defines the laws of logic as the processes that one follows in order to extend one true claim to another to make further true claims (Mill 1974a, 12). These are processes of the mind that do a specific thing: extend one's knowledge from a known case to an unknown case (Mill 1974a, 183). Framed in this way, it becomes obvious why human psychology is the foundation of logic, because the laws of logic are the laws that govern how the mind moves from known to unknown cases. They are laws by which the mind relates its representations of the external world to other representations that it will have in the future in a way that truth will be preserved.

Logic, thus, relies on two things: the human mind and the maintenance of truth from representation to representation. The reliance on the mind has been shown; it is a process of the mind and thus relies on the human mind (and thus, human psychology). The second requirement is that truth be maintained from one representation or proposition to the next. This means that the process for logic also relies on how one relates to the representations and propositions and that relationship (one of truth-bearing) is retained as the process occurs. The representation or proposition must still correlate to the state of the world, or mind, in the new representation or proposition as the old. Logic, or the laws of inference, are the laws of a mental process that preserves the relationship between a representation and the reality it represents from one representation to the next. Logic is a way of making sure that the next representation relates to the world in a certain way. Thus, it relies both on how the mind works (because it is a mental process) and how the world works, because the correlation has to be maintained. It is a universal law of the mind insofar as it applies to all instances of inferences that preserve truth through the processes of logic, but it does not apply to every time one moves from one mental state to the next.

For Mill, logic is not the set of laws that govern the relationship between truths and propositions, but rather the laws of how our minds move from one proposition to the next such that truths are maintained. It is about our movements that maintain truth, not the maintenance of propositional truths outside of the thinking of the human mind. Thus, logic is dependent on the human mind and founded in human psychology. If the human mind worked differently, if it didn't move from one case to another case through particular-to-particular inductions, or if human experience were such that syllogisms did not preserve truth so reliably that they became custom and were seen as self-apparent, then logic would be different. In the first case, its

foundation would be so altered and the new way of moving from true proposition to true proposition would be what is logical. In the second, the syllogism in question would no longer hold; it would no longer be an obvious way to move to a new proposition, and some other syllogism (or set of syllogisms) would (presumably) take its place.

Thus, we have seen that for Mill, logic and the mind are inextricably tied together. It is not only that logic occurs in the mind, that logical thinking occurs through a mental process, but that the substance of logic is the mental process. It is not just a mental process because it takes place in the mind, but rather it is how the mind extends truth from one case, proposition, or representation to the next. Logic is grounded in human psychology because the laws of inference are the human mental processes. The art of logic relies on the science of logic; the making of good inferences relies on the mental processes that make said inferences.

2.3 The Role of Introspection in Mill's Psychology

As seen above, Mill's psychology follows the British Empiricist tradition in being representational and governed by the laws of association. He comes to his conclusions, once again following the British Empiricists, through the use of introspection (Boring 1953, 169-170). He reflects on his own mind and what is going on in it and uses that as the empirical evidence for his claims. This was because, according to Kurt Danziger, Mill maintained that "direct evidence of consciousness seemed to provide a firm ground of empirical observation, the devaluation of which led to the perils of either metaphysical speculation...or phrenological speculation" (1980, 243).

We can see this procedure in many of his claims about the mind. For instance, when discussing the possibility of necessary truths in geometry he states:

The points, lines, circles, and squares which any one has in his mind, are (I apprehend) simply copies of the points, lines, circles, and squares which he has known in his experience. Our idea of a point, I apprehend to be simply our idea of the *minimum visible*, the smallest portion of surface which we can see. A line, as defined by geometers, is wholly inconceivable. We can reason about a line as if it had no breadth; because we have a power, which is the foundation of all the control we exercise over the operations of our minds, the power, when a perception is present to our senses, or a conception to our intellects, of *attending* to a part only of the perception or conception, instead of the whole. But we cannot *conceive* a line without breadth, we can form no mental picture of such a line: all the lines which we have in our minds are lines processing breadth. If any one doubts this, we may refer him to his own experience. (Mill 1974a, 225)

There is a lot going on here that is of interest. There are claims not only about mathematics, but the nature of the mind, the mind's ability to abstract, and the fact that his justificatory framework is to look (introspectively) at one's own internal experience. I will now work through these claims.

First, representation. Ideas are conceivable insofar as they can be represented in my mind, as long as I can form a mental image of them. What makes the geometer's line (a line with no breadth) inconceivable? That I cannot form a representation of it in my mind. I think in terms of these mental images that are representations built from sensation, and cannot bring my mind to bear on or imagine a line with no breadth.

While I cannot conceive of a line without breadth, for Mill, I can still reason about one. How can this be? It seems to be through an act of abstraction. We can reason about a line as if it had no breadth by abstracting away the parts of the line that are relevant to the current case of reasoning and working with them, while bracketing the elements of the representation of a line that are not relevant to the particular case of reasoning. When performing geometric proofs about a line, I treat the representation (that has breadth) as if it has no breadth. Why? Because the breadth does not factor into the geometric proofs. I thus abstract away from it and use only the relevant elements. This implies that, for Mill, what is conceivable is what one can represent in one's mind, and reasoning is not limited to mental images. In other words, representation, both in imagination and perception, defines conceivability. Conceivability is what can be represented, what can be seen or imagined. It is limited by the power of the mind insofar as the bounds of conceivability are the bounds of what we can represent. What one can represent is bound by how minds work, or by human psychology. Mill's evidence for the inconceivability of the line without breadth is that one cannot form a mental image of it. The other side of it is that if one could, if the mind had the power to do so, then it would be conceivable. Thus, inconceivability is a function of humanity's psychological makeup.

Nevertheless, humans have the power "of attending to a part only of that perception or conception, instead of the whole" (Mill 1974a, 225). This means that one can abstract away from the breadth in the image to reason about the line as if it did not have breadth. One can reason about what cannot be represented. One does not do this by not representing it, but by bracketing the parts that are not being considered and are not relevant to the topic at hand. When I reason about something inconceivable, I am not imagining the unimaginable or conceiving of the exact thing I am reasoning about; instead, I am reasoning about a part of a conceivable whole that is,

when isolated and on its own, not conceivable. We are, once again, able to do so because of the "powers of the mind." This is an extraction of relevant elements from conceivable representations, in order to make inductions about things with like elements, not a claim getting to something true about breadthless lines that exist in reality. In other words, the truths learned about lines through abstraction are inductive truths that are only ever applied to other conceivable lines, not truths about actual breadthless lines. How does one argue with someone who disagrees with this claim? Tell them to look at their own internal experience and see that the claim is correct. Mill's evidentiary claims are thus built on introspection.

The evidence for both sides of this claim, that lines are only conceivable with breadth and that one can reason about breadthless lines through abstraction, come from introspection. How do I know that a line without breadth is inconceivable? I look at my own mental representations and see that I cannot conceive it. This is an induction from individual experiences of being unable to conceive of a breadthless line, of analyzing my own representations as I only have them about lines with breadth, and ascribing lawlike status to the claim because it is invariably supported by my experience. Thus, there is a second move here when abstracting to make a law. The first is abstracting away from the whole to isolate a relevant feature, and away from irrelevant features (towards length and away from breadth). The second is matching observations of many different instances that share the same abstracted features until there is some regularity that is observed and named as a law.

Unlike Fries, the reason Mill relies on introspection seems to be that introspection is the tool that was available to him in his investigations. Psychology is the science of the mind, and we have access to our minds via introspection. While this seemed to be his position, there does not appear to be anything contradictory about his theory of human psychology and the use of

non-introspective methods. While Fries is committed to the concept of human freedom and he believed that the mind is a different sort of thing than other matter, Mill is a naturalist about the human mind. Human psychology can be reduced to natural laws (which are learned through abstraction) but there does not seem to be any reason that those laws could only be discovered introspectively.

Chapter 3: Themes of Psychologism

There are a number of general themes that show up on both the Kantian and empiricist ends of the psychologistic spectrum. In the following chapter, I will draw attention to the three main themes that play a central role in the logicists' critique of psychologism and the Heideggerian undermining of the debate as a whole. The first is that (for psychologism) logic relies on the mind; logic is founded on the structure and faculties of the human mind. The second is the role of introspection for empirical observation of the mind. The third theme of psychologism that will play a prominent role in the following work is its assumption and use of a representational understanding of human consciousness. I will then show two implications of these themes: the prioritization of epistemology and the assumption of the subject-object dichotomy.

3.1 Logic's Reliance on the Mind, Understood Psychologically

The first general theme of psychologism is the role that mind plays in the foundations of logic, where psychology is understood as the empirical science of the mind. As was seen above, in both Fries and Mill, logic guides us in making judgments about the objects of experience, but these objects are phenomenal in nature. The truth judgments and syllogistic reasoning that lead to further truth judgments are based on and about objects that are already constituted in some way by the mind. The constitution of the object or the faculties that allow for and lead to

representation before the mind determines the ways that the objects are present in the mind and thus the nature of the judgments about them.

Furthermore, the laws of logic are determined by one's analysis of the happenings of one's own mind, through empirical psychology. In Mill, this takes the form of the evaluation of one's own mental states as the grounds for the laws of noncontradiction and the excluded middle. For Fries, the four foundational laws of psychology are known apodictically due to how they show up in experience, as constituted already by our own minds.

For the psychologicist, the study of logic is founded on the study of the mind. The way that the early psychologicists studied the mind was through introspection. They reflected on their mental states and drew conclusions from those reflections. Thus, the primary tool for psychology is this reflection on the mind, which makes a few key assumptions. First that this reflection on the mind can elicit evidence to be used in the natural science of psychology assumes that what is seen in introspection accurately represents the mechanics of the mind or that the faculties of the mind are transparent (or transparent enough to draw reasonable inferences) to reflection. Second, since they are justifications for natural sciences, they make claims about reality (or at least reality as constructed and experienced by the mind). They assume that the mental states seen in introspection have the same reality as external nature. If it lacked the reality of external nature (though requiring different methods and ways of access) it could not serve as the data for claims about the reality of the mind as a natural science; it would be of a different category and either psychology would not stand as a natural science or the results of introspection could not be the foundational evidence for it. Finally, as will be seen later, it assumes a subject-object distinction.

3.2 The Representational Structure of the Mind

Fries's psychologism, as seen previously, relies on a representational framework where one relies on an inner intuition to perceive the workings of the mind. One can introspect in a systematic manner, and in doing so develop a scientific, empirically grounded understanding of the goings-on of the mind. From there, one can reason transcendentally to the conditions that make the activities of the mind possible. This, according to Fries, gives Kant's transcendental philosophy a solid, empirical grounding without abandoning the critical project.

In this framework, there is a noumenal realm that stands beyond human experience, and the noumena get filtered through the categories of the mind and become the representations of experience. Furthermore, both outer and inner perceptions are representational (Oota 2019, 99). This means that there is an ontologically distinct realm outside of the mind that exerts itself on the mind, leading to these mediated representations.

This dualistic framework shows itself first in Fries's reliance on introspection to make judgments about the mind and, particularly, how he distinguishes the inner sense and inner perception as a special sort of action that is distinct from an outer sense. One main distinction is that the inner sense is mediated through time while outer intuition is through space, or we have "outer sense, which supplies our intuition of things in external space, or inner sense, through which we obtain self-intuition in time" (Fries 2018, SS 35). While this has been mentioned before, the distinction here goes to show that the intuitions of each side of the dualistic framework are of different kinds, one in space, and one in time. Inner life is distinct from the outer world since it is experienced through time-intuitions while the outer is experienced in space.

Beyond the form of the intuition, the sense of inner and outer sense is also different. For Fries, outer sense either takes the form of pain and pleasure (or the vital sense) or comes from our various sense organs (Fries 2018, SS 37). The product of outer sensation is then pain, pleasure, or a manifold of sense data. On the other hand, inner perception, while reliant on the body (Fries 2018, SS 42), is "our receptivity to inner sensation" (Fries 2018, SS 39), which comes from self-consciousness and self-knowledge [selbsterkenntniss] (Fries 2018, SS 39). What is available to inner sense is inner activity, such as thoughts, moods, ideas, memories, and imaginations (Fries 2018, SS 39). They are understood as taking place inside one's mind, whereas the outer sense tells us what is going on (albeit in a mediated way) outside of our minds, through the vital sense and sense organ. What a thing is, how it is understood, and how it is sensed are demarcated by where it falls on the fault line between the interior and exterior of the mind.

Additionally, representation, as seen here, separates out what is being experienced from the world. When I look at my coffee cup, what I experience has been transformed into a separate entity to the coffee cup. I am experiencing a representation of my coffee cup, which, while (presumably) motivated to come before my mind by some object in the external world (presumably the actual cup), what I am experiencing and interacting with is not the coffee cup itself, but a representation of the coffee cup in my mind. When I see the coffee cup, what I am really experiencing is the representation of the coffee cup filtered through the categories, not the coffee cup itself. The world of my mind is a separate entity, filled with representations, images, and feelings that exist as separate entities from what provokes them.

Mill, too, relied on a representational understanding of the mind, which also pushed him toward seeing logic as reliant on psychology. According to Godden, Mill maintained that the

content of processes of logic, which were motivated by the truth of the representation, were the phenomena of the mind and reliant on the faculties and constitution of the mind (Godden 2005, 139), and logical judgments about objects were, in fact, judgments about these phenomena (Godden 2005, 139). By extension, then, due to the representational nature of the mind, Mill had to maintain that the laws of logic were reliant on human psychology.

In a similar way to Fries above, the contents of the mind and actual (non-mental) object are separated, where I don't actually interact with the coffee cup itself on my desk, but rather I have a representation of the cup in my mind that I make judgments about. I receive a series of sense impressions from my various sense organs which are then presented to my mind as a picture of the coffee mug. This image is brought about and constrained not only by the light reflecting off of my mug and into my mind via sense organs, but also by which sense organs I have, what information they relay, and how my mind is able to receive the sense data.

Furthermore, the laws of the mind, including, but not limited to, the laws that logic relies on, are focused on how one moves from representation to representation in the mind. They depict how I exist in relation to the external world through the ways the external world motivates the transition from one representation to another. So, when I turn from my mug to the stack of books, the representation shifts based on new sense data, but it is still a representation. Other shifts from representation to representation do not include intuitions based on sense data, but follow the laws of association, such as when one memory is followed immediately by a similar one.

3.3 Implications of these Themes

We also see here the prioritization of epistemology over metaphysical considerations, or we start with that we know a thing to be true and how we know it to be true and then work out why. This can be seen, initially, in Fries's discussion of the four principles that ground all deduction. He frames these principles first with the claim that "things are...presented through the subject in judgment" (Fries 2018, SS 112), or that one's first and primary relationship with an object, at least in terms of logic and reasoning, is through judgments about the thing; hence, the nature of the judgment, whether good or bad, apodictic or problematic, is the primary concern. He then states the first principles of logic (See Fries 2018, SS 113-116), before justifying them within a psychological framework, where the basis for the principles is found within undeniable activities of the mind (See Fries 2018, SS 117). The psychological or, more broadly, metaphysical justification of the principles is secondary to the apodictic certainty we have in the law. Furthermore, the reasoning that founds the law is already established and trusted by the time we look for the psychological grounds.

The prioritization of the epistemological can be seen in Fries's project as a whole, where he is looking for a psychological foundation for Kant's philosophy. Fries has already granted the validity of general and transcendental logic, and he feels free to use it when trying to uncover the structures of the mind and the grounds for logic. He engages in systematic investigations of the mind in order to make transcendental claims based on them, but these justifications come after the validity of transcendental claims is assumed. In other words, one establishes (or simply grants) that the logical principles work and that transcendental reason is valid, and then, using these tools to make good judgments, investigates why they work.

Furthermore, the prioritization of the epistemological is implied by Fries's representational structure. Since what I am dealing with, for Fries, is not the things in the world, but instead representations of things that exist before my mind, any judgment that I make is reliant, first and foremost, on the accuracy of that representation. If the representation is inaccurate, I have no reason to believe that the metaphysical or ontological judgment that I am making is accurate. The nature and reliability of the process of forming judgments becomes of the utmost importance for all other judgments are built on that process and furthermore, there is no way to access the world in a way that is not a mental representation. So, the processes of validating representations and the reliability or likelihood of truth-preservation in movements from representation to representation become more important than the representations themselves, because there is no way to verify the accuracy of the representation outside of these processes.

The three aforementioned themes of psychologism (logic's reliance on the mind, introspection, and a representational framework) also imply a subject-object dichotomy, or that the subject (the mind, ego, or self) is an independent substance from the object (the representation or thing being experienced) that exists as a self-contained unity apart from the objects that it experiences (de Jong 2020, 397). This can be seen in the representational framework, because in that framework, the represented object and the mind are separated so that there is a thing that is represented in the mind and then the mind as the thing that views the representations. When I look at my coffee mug, there is me, the one who looks, and then a representation of the coffee mug that is brought before my mind. The thing viewed, the coffee mug, is then ontologically independent from me and self-contained as the thing that I view, separate from my mind itself. Even when the object that is investigated is internal to the mind,

such as when I am reflecting, remembering, or imagining something, the division between the subject and object remains. When I remember what my coffee cup looks like, while the source of the representation is (directly, at least) internal when drawn from memory, it is still held in front of the viewing ego as an object that stands apart from and is presented to the mind. I treat it as a separate entity that I interact with via memory.

This setup can be seen in Fries's explanation of the first principles of pure and general logic (2018, SS 112), in his description of the material determination of apperception (2018, SS 224), and his description of the laws of sensuous experience (2018, SS 269). Together they show how he consistently uses the subject-object framework in his philosophy. With regard to the first principles of logic, he claims "a thing is called an object, insofar as it is thought. Things are therefore presented through the subject in judgments" (2018, SS 112). Here we see that the thing only exists phenomenally, or within the grasp of human cognition, as an object that is presented to a subject in judgments. We have the judging subject, the mind or the ego, and when it thinks a thing, or has a phenomenal representation before it, it does so through judgments made by the subject on the object.

The subject-object distinction is also present in Fries's understanding of apperception, as seen when he claims, "The transcendental apperception is directly materially determined as a feeling, that I am, i.e. as pure self-consciousness, aside from that it becomes empirically and materially determined through the sense in the empirical intuition of objects" (Fries 2018, SS 224), where we have an ego that is self-contained but becomes aware of itself as an object, or feeling that is brought before the ego, through the intuition of objects. These objects, though, are given in empirical intuition (in this case). What we get through various (internal and external)

senses is constructed into a thing that we understand as self-contained with an identity that exists continuously.

Finally, we see the subject-object distinction when he states that, "the highest law of sensuousness is: that all intuitions of given objects are only individual, accidental intuitions of a continuous manifold, which contain no condition of completeness in themselves" (Fries 2018, SS 269). He is claiming that we get sensuous intuitions in continuous manifolds that do not cut themselves into different objects, but we need the faculties of the mind to do so. This cutting up happens prior to experience. For the purpose of representation, this still shows that the ego sees a sensuous manifold (as constituted by the categories of the understanding). The ego, then, stands against the manifold of the object before it, seeing it and making judgments about it. The manifold presents an object that stands distinct from the subject that views and judges it.

This dichotomy can be seen in Mill as well. To show this, I will look at his discussions of the analysis of language and states of consciousness. When analyzing how we understand propositions to be true or false, Mill gives the example of asserting that "the sun exists" and then that "we find two distinct objects of conception: the sun is one object; existence is another" (Mill 1974a, 22). He continues that "The sun' does not convey all the meaning that is conveyed by 'the sun exists" (Mill 1974a, 22). The claim here is that existence is not wrapped up in the concept of the sun. The assertion is that there is one object, the concept of the sun, and a second object, the concept of existence, which mean different things to the person who is making the judgment or evaluating the sentence "the sun exists." They are independent entities that the ego is aware of and that are represented to the ego through the sentence and which the ego can judge

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⁷ It is worth noting here that in this context Mill uses the word Subject as the designation of the object that a sentence focuses on rather than the judge/ego, but uses the word object to denote the distinct concepts, beings, or representations that are represented in the sentence.

to be related or not related in the way specified by the sentence. The mind is aware of them as removed from it, about which it can make referential claims.

In a discussion of states of consciousness, Mill says "by a thought is to be understood what passes in the mind itself, and not any object external to the mind, which the person is commonly said to be thinking of" (Mill 1974a, 51). Here he draws a very clear distinction between what is going on in the mind and a given object itself. The thought is distinct from the object, and when someone thinks of a thing, that thing is not the object, but a mental representation of the object. The object is an external thing that is self-contained and wholly divorced from the evaluating, thinking, or remembering mind. Furthermore, he claims "a Sensation is to be carefully distinguished from the object which causes the sensation" (Mill 1974a, 52), where even in perception one does not get the object but a set of sensations that are distinct from it, but believed to be caused by it (Mill 1974a, 53), arranged in the mind.

Furthermore, since logic is constituted by the nature of the mind, the laws of logic are grounded on the subject's side of this dichotomy. When I reason about an object, the foundation for that reason, the axioms and laws of logic come from the constitution of my mind. For example, if the law of noncontradiction holds because the human mind is incapable of simultaneously believing something to be true and false, then the axiom of logic holds due to the nature of the mind, or the subject.

3.4 Concluding Remarks on Psychologism

By looking at two key figures who came to psychologistic positions through different traditions and understandings of the role and nature of the mind, a number of themes of psychologism materialized. First, logic's reliance on the mind is not simply because it takes place in the mind, but because the axioms and rules of logic themselves are reliant on the constitution of the human mind. They also cast the structure of the mind as fundamentally representational, where one has phenomenal access to representations of the external world via sensations. They both also shared introspection, or the use of an inner sense, as the primary tool for understanding the human mind.

These themes came together to imply that the study of epistemology should be prioritized because the truth of all other claims is ultimately dependent on the accuracy and reliability of these representations and conclusions drawn from them. Additionally, the subject-object dichotomy is built into the psychologistic framework, where the ego is understood as fundamentally separate from the objects it experiences and investigates. The laws of logic are then founded on or constituted by the nature of the subject side of this dichotomy. While Fries may think that we discover the laws of logic by observing objects, the laws of logic themselves are founded on the categories of the mind, or on how the mind constructs experience. Thus, it is the way that the subject is constituted that founds the laws of logic. The same can be seen for Mill, where the laws of logic are founded on how the human mind makes inferences. In both cases, the laws of logic are founded on the subject side of the dichotomy.

Part II

Logicisim

Chapter 4: Arguments Against Psychologism

Now that we have surveyed the two poles of psychologism, in the following section I will discuss arguments put forward by Gottlieb Frege and Edmund Husserl against it. While the two philosophers put forward many arguments against the position, I will primarily focus on two: the argument that psychologism implies that logical laws refer to psychological entities, which (according to Husserl and Frege) is not true (Section 4.1), and the charge of relativism leveled against psychologism (Section 4.2). I will focus on these two lines of reasoning because, while attacking psychologism, they highlight the structural assumptions about the nature of logic that psychologism and logicism share, as well as setting the stage for the diverging alternatives to psychologism that Frege and Husserl put forward. I will present the negative arguments of both Frege and Husserl together in this chapter because their arguments against psychologism overlap significantly (Kusch 1995, 60). In following two chapters I will break off into independent discussions of the philosophers (Frege in Chapter 5 and Husserl in Chapter 6).

For each of the arguments that I focus on, I will start by explaining the criticism, followed by a brief analysis of its effectiveness as a charge against psychologism. Doing so will show if the criticism itself accurately portrays a plausible and sophisticated form of psychologism rather than a weaker contemporary form of psychologism while missing the substance of the more sophisticated psychologistic positions.

4.1 Psychologism's Reference to Mental Entities

The first criticism of psychologism that I will address is the charge that psychologism requires the laws of logic to refer to mental entities (Kusch 1995, 34 and 46). The charge is made explicitly by Husserl in the *Logical Investigations*, and in Frege's *Basic Laws of Arithmetic*. The argument is that if the laws of logic were psychological laws, or were derived from and reliant on empirical psychology, then they would have to be laws about the human mind and the thoughts and judgments internal to the human mind. In other words, the laws of logic must be about mental entities. As Husserl puts it, psychologicists must claim that if the laws of logic are "normative transformations of such [psychological] fact, they must themselves be psychological in content, both by being laws for mental states, and also by presupposing or implying the existence of such states" (Husserl 2001a, 51), while Frege claims that if logic is based on psychology "then in the end truth is reduced to individuals taking something to be true" (Frege 1964, 18).

In other words, if logical laws are to be a subset of psychological laws, then the laws of logic are lawlike regularities about the working of the human mind and the relationships of internal, mental entities. This can be taken in either a weak or a strong sense, where the strong sense is that the laws of logic define how humans must (universally) think when trying to figure out the truth of the matter. When trying to think towards truth, we must follow the laws of logic because they are the laws of the mind, or they are how the mind works and must work when thinking towards truth. This is implausible, because, as Husserl notes: it would preclude the possibility of logical fallacies (Husserl 2001a, 71). Logical fallacies are failures in logical thinking. If the laws of logic are scientific, psychological laws around reasoning towards truth, they would hold every time, or else they would not be universal, scientific laws. If there are

instances when they do not hold, such as committing a fallacy, then they would not be scientific laws. Logical fallacies obviously occur. Thus, logical laws cannot be psychological laws, in the strong sense.

Of course, this strong sense is not the only way to understand psychologism. Indeed, it appears that neither of the psychologicists discussed above take on this strong version of psychologism. Instead, they claim that the laws of logic are founded on the laws of the mind. They take a position that is reminiscent of what Dale Jacquette calls "good psychologism," where they "interpret knowledge-seeking [and the laws of inference] as a partly psychological activity...that can be studied as a psychological phenomenon" (2003, 257). They are reliant on the laws of the mind, but are a level removed. The laws of logic are not themselves lawlike regularities that are always followed, but rather laws about the relationships of mental entities themselves, that, as mental entities, are subject to psychological laws. Recall how the objects of logic are for phenomenal entities (as constructed by the mind via categories) for Fries and mental representations formed from sensations for Mill. Both are internal to the mind and subject to psychological laws. Thus, they are a subset of psychological laws for both, but not the laws determining how the mind has to move from one thought to another. Rather, they are laws about how mind constitutes and relates mental entities to itself and each other.

This all comes down to the claim that if the laws of logic are a subset of the laws of psychology, then they are laws about the mind and mental entities. Husserl claims that this means that mental entities must be existent things and the laws of psychology (and thus, logic) must be about these existent things (Husserl 2001a, 51). Furthermore, psychological laws, as empirical laws, imply the existence of the things they are laws about (Husserl 2001a, 51). For a law of empirical science to be true, the entity that it is describing must be existent, as Husserl

claims "even the strict laws of the natural sciences are not without factual content. They do not only concern facts, but also imply their existence" (Husserl 2001a, 52). The laws of planetary motion only make sense and refer if there are planets. Not only that, there can be laws of planetary motion only if there are planets; otherwise, there would be no objects about which the laws were developed and which the laws describe. Likewise, the laws of mental entities require that there be mental entities.

Husserl maintained that logical laws do not, in fact, imply the existence of mental entities. Casting them as a subset of psychological laws fundamentally misunderstands what is going on in logic, on his account, for "no logical law implies a 'matter of fact', not even the existence of presentation or judgments or other phenomena of knowledge" (Husserl 2001a, 51). The laws of logic (and arithmetic) do not refer to facts or specific instances, but are formal, applying to generalities (Husserl 2001a, 54). When speaking about numbers (though it applies to other generalities), he claims "our pure proposition of number does not refer to things, but to numbers in their pure generality...and it applies not merely to individual, but to 'general' objects" (Husserl 2001a, 53-54). About other generalities, he says "for every truth A, its contradictory opposite is no truth. It is the case, for each pair of truths A, B, that their conjunctions and disjunctions are truths.... It is, however, absurd to treat laws which hold for truths as such, as laws for facts" (Husserl 2001a, 55). The laws of logic are not about mental entities such as the idea I have of the number one, the particular idea A, or the blackness of my coffee mug. Instead, the laws of logic are about concepts in general and the laws of arithmetic are about numbers in general. They are about *one* in general, not my current idea of one, the representation of one in my mind, or this current instance of there being one thing. When I say 1+2=3, I am not claiming that this mental entity (one) combined with another mental entity (two)

equals a third mental entity (three). I am claiming that a general object of "one", combined with the general object of "two" results in a third general object: "three". Similarly, when I claim that there cannot be both A and not-A, I am not claiming that there cannot be simultaneous mental entities A and not-A,8 or that there cannot be the idea of my mug being black and not black, but rather I am making the claim across the spectrum of things that could possibly qualify as A. The contradiction that cannot occur is not about the specific thing that happens to be in my mind, be it my mental representation of a coffee mug or the symbol A, but rather about the general class of objects that can possibly be denoted as A. The laws of logic are not referring to this mental entity but rather a generality that envelops all possible objects that can be denoted as A (Husserl 2001a, 110). In other words, as Amedeo Giorgi points out, to take empirical psychology as the grounds for logic involves a "confusion between justifying grounds and empirical causes" (1981, 79) because psychologism misses the distinction between the grounds of the norm in the generality of the concept rather than the specific instance of it. Furthermore, since it is a generality about all possible objects rather than about a specific object A or a specific idea represented by A, it does not imply the existence of any single object about which it refers (Husserl 2001a, 111).

As Kusch points out, Frege also objects to the internalization of logic to mental entities and laws about them because he thinks that this conflates something being true with something being taken for true (1995, 34). Frege claims that "being true [wahrsein] is different from being taken to be true [Fürwahrgehaltenwerden], whether by one or many or everybody, and in no case is to be reduced to it" (Frege 1964, 13). In other words, by making the laws of logic a subset of psychological laws, one limits the claims of truth to those held internally to the mind, to those

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⁸ Recall Mill's justification for the Law of Noncontradiction

about how mental entities relate to one another, whereas the laws of logic themselves are the laws of truth (Frege 1964, 13).

This, of course, is a strong claim. It requires Frege to show that the laws of logic are the laws of truth, that psychological laws are laws of taking-to-be-true [fürwahrhaltens], and that they are distinct from one another. First, why are the laws of logic the laws of truth? For Frege, this is because the laws of logic are not about one's relationship with ideas or the world, but about the content of the ideas; they are about concepts and their relations (Frege 1964, 16). The laws of logic are about the ways that concepts relate to one another or to themselves, not about the mental process of thinking about concepts or having ideas (Frege 1964, 15). Furthermore, he externalizes concepts, postulating them as independent of the human mind, which one is able to grasp (Dummett 1993, 22). In other words, the concepts exist independently of people and then people think the already existent concepts in order to have subjective ideas of the concepts. The concepts exist, according to Frege, in a third realm of concepts that we access through the faculties of our mind (See Frege 1984, 363-364 and Burge 1992, 645). More will be said on this in Chapter 5, but what is important for now is that Frege maintained a distinction between an idea and the content of the idea. When it comes to concepts, Anthony Kenny summarizes Frege's position, saying that one's "knowledge does not create what is known but grasps what is already there" (1995, 146). The laws of logic are about the truth with respect to concepts that are external to the mind and mental processes. Thus, the laws that govern concepts should guide thinking about concepts, if one is worried about truth. For example, the law of identity is a law of logic, according to which every object (or concept) is identical with itself. This law is about the objects

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⁹ While Frege relies on a platonic third realm, later philosophers use language as the already existent entity that people refer to (Dummett 1993, 25).

(or concepts) that are identical with themselves and is true because objects (and concepts) are identical with themselves.

Second, why would psychologistic laws of logic be limited to taking-to-be-true? This is the flipside of the claim that logic is based on concepts that are external to the mind. When one grasps the concept, one has an idea of it, which is an internal and subjective mental entity (Frege 1980, 37). When one has an idea and believes it to be true, he is taking his idea to be true, or looking at a mental entity and believing that it matches up with the objective, external entity. This taking-to-be-true is a temporal mental event (Frege 1964). These mental events follow the laws of psychology because they are the events, states, and processes of the mind which are governed by the laws of psychology. Furthermore, takings-to-be-true are contingent things based on the various facts of the world and the constitution of the mind. The psychological laws that govern our takings-to-be-true are about the ways that one can grasp concepts and the truth of those concepts, not about the concepts and the truth of the concepts themselves.

Frege claims that in mental explanations, "what is given is not a reason for something's being true, but for our taking it to be true" (Frege 1964, 15). With respect to the law of identity, psychological laws are not about the objects and concepts that are identical with themselves, but about how one takes these objects and concepts to be identical with themselves. A psychological law about the identity of objects is that one takes it to be true that objects and concepts are identical to themselves. It is about a particular mind (or set of similarly constituted minds) having the mental event (or consistently having similar mental events) where one believes that objects and concepts are identical to themselves.

Finally, how are the laws of truth and laws of taking-to-be true different and why must they be different? The main difference here is that truth deals with concepts and objects that are

external to and separate from the mind. While we may have conceptions or ideas of these objects and concepts, the objects and concepts themselves are external and public (Frege 1964, 22). They are not mental entities, nor are they private and subjective. In contrast, taking something to be true is an internal, subjective, and private matter (Frege 1964, 17). It relies on one's mental constitution and how one's mind relates to concepts and objects. A taking-to-betrue is how one cognizes concepts and objects as true. It is a mental process. As such, taking-to-be-true is bound by the laws of psychology and is a contingent fact (Frege 1964, 23).

One reason that one knows that truth and taking-to-be-true are different is that the particular presentations of taking-to-be-true are also temporal entities, existing in the mind at one time while truths themselves, according to Frege, are timeless. When making a truth judgment about the same object, one would be referring not to the object, but to a representation, which only exists momentarily as a mental state. If I make the judgment, "my coffee mug is black" and then follow up with the judgment "my coffee mug is round," I am in a new psychological state (my judging has changed from blackness to roundness) experiencing a new representation. When I follow this up by saying "my coffee mug is both black and round," I am referring in a third psychological state and a third mental representation. I am not referring to the actual mug, but to the representation of the mug. Frege argues that due to the temporal nature of the mind and the constantly changing of my mental states, the object and the representation are not the same object, but rather CM₁₁, CM₁₂, CM₁₃, and so on. I am dealing with one mental representation followed by another. This means, according to Frege, that "psychological logicians lack all understanding of sameness" (Frege 1972, 372), because the difference in times undermines

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¹⁰ As seen above, Frege thought they were part of a third realm of thoughts, but his argument here does not necessarily rely on the third realm, just that they are external. Later philosophers will use language as the external element.

complete identity. Truth judgments require the objects of the judgment to subsist between judgments, but representations are momentary, always being replaced by the next representation in front of the mind (Frege 1972, 327).

A second reason that truths and taking-to-be-true must be different is that truths, for Frege, are timeless and eternal while taking-to-be-true is contingent and temporal (Frege 1964, 14). Truths are "the eternal boundary stones which our thoughts can overflow but never replace" (Kenny 1995, 145). If one wants one's taking-to-be-true to line up with what is actually true, one must abide by the laws of truth, for the laws of truth themselves are eternal. One's mind, and its constitution, is contingent and temporal. The laws of the mind are about things that are contingent and temporal about contingent and temporal processes that occur within and for a contingently existing thing. The laws of truth, on the other hand, are necessary and eternal. They must be separate from one another because something cannot both be contingent and necessary, for Frege, nor temporal and eternal.

Furthermore, since the laws of truth are necessary and eternal and the laws of taking-to-be-true are contingent and temporal, the laws of truth cannot be derived from the laws of taking-to-be-true. One cannot, for Frege, derive necessity from contingency nor eternal truths from what happens to be existent right now (Frege 1964, 15). There is no vehicle to get from how my mind happens to relate concepts and objects to one another and the laws about how I do so to how concepts and objects actually relate to one another.

There are two obvious objections to Frege's criticism that psychologism conflates the truth and taking-to-be-true. The first is that it misconstrues psychologism, because psychologism (or at least that of Fries and Mill) does not posit that logic is about mental entities, but rather that it is reliant on the constitution of the mind. Fries is not claiming that the laws of logic are

psychologistic because A is an idea internal to the mind, but rather because reasoning about A follows from the categories that construct experience as applied to the objects of experience, which are a function of the mind.

The logicist response is that, while it may be true that psychologism does not claim that logic is psychologistic because it is about thoughts, the objects of logic are still mental entities, for psychologicists. They still deal with mental representations and with the truth preservation of representations as they move from representation to representation. Those representations are mental, either constituted by the mind or internal versions of external things via the senses. Since they are about the movement from representation to representation, which is dependent on the mind, the psychologicists can focus on facts other than that the subject of logic is mental entities, such as the relevance of the constitution of the mind. Still, the subject matter of logic, for the psychologicists, is mental entities.

The second objection to the logicists' criticism is that, while this criticism looks plausible on first blush, it requires, and cannot hold without, a comprehensive and plausible theory of what general objects are if they are not mental entities. Without such a viable alternative, the objections fall flat. The psychologistic claims may run against one's intuitions about what the laws of logic should be, but without an alternative understanding of the objects of logic, there does not seem to be a better solution. The response to this objection, and the solution to the problem of general objects will take Frege and Husserl in drastically different directions, as will be explored in Chapters 5 (Frege) and 6 (Husserl).

4.2 Psychologism Leads to Relativism

The second critique that I will focus on is that, according to the logicists, psychologism implies relativism. If psychologism is correct, then the laws of logic are not universal, timeless, and true laws. Rather, they are contingent on one's mental makeup. Instead of being universally true, they are merely true for human beings. The laws of logic are not necessarily true, but rather are only true for humans, or those with human psychology. Since, for psychologicists, the law of noncontradiction comes from one's inability to experience something simultaneously as true and false, and one's experiences are that way due to his psychological makeup, then the laws of logic must be dependent on one's psychological makeup. One's psychological makeup is an empirical fact about the world, and thus is contingent. It cannot be necessary because it is based on a contingent fact. It cannot be timeless, because contingent facts apply to particular, determinate sets of circumstances. It cannot be universal, because not all things are subject to human psychology.

One could object that those, like Fries, whose psychologism takes a Kantian approach are not subject to this critique because, while they use psychology as their starting point, the categories of judgment, from which the laws of logic are derived (via experience) are claimed to be necessary. Fries tries to discover the categories and laws of logic from a study of empirical psychology, but their validity is itself necessary.

This, unfortunately, does not work. While the categories and laws of logic may be posited as necessarily true, they are grounded through the intuition and the construction that makes them appear necessarily true, which is a product of the human mind. In other words, the reliance on material consciousness and the fact that the construction is a function of the constitution of the mind makes the claims of logical necessity into 'this is true for all beings whose minds are such

that they construct intelligible experiences in this way', rather than that they are necessarily true because of the intelligible experience itself. Rather than being universally true, proved transcendentally from the possibility of intelligible experience, the laws and categories of logic are only true for those who share the same mental constitution.

Frege and Husserl object to all three of these implications. Frege rejects them by claiming that psychologism makes the laws of logic specific to the species whose psychology founds them. Since the laws of logic, for psychologicists, are based on human psychology, the laws of logic apply only to those with the right psychology (Frege 1964, 14). They are not universal, because they hold only for the beings on whose psychology they are based. They are not necessary, because they depend on the specific mental constitution of a species, that is not itself necessary. They are not timeless, because the human mind was developed in time, and thus, the human laws of logic would also be temporal.

Furthermore, this would imply that differently constituted rational species could have different laws of logic (Kusch 1995, 35). If different types of rational beings, such as hypothetical angels or aliens, or a counterfactual human species whose mind evolved differently, have different mental constitutions, then the laws of logic would be different for each of them. Thus, two differently constituted rational species would operate with different laws of truth, because the constitution that these laws depend on would be different. For example, we could meet a species whose mental constitution does not necessitate the law of noncontradiction, so their laws of truth would not have the law of noncontradiction. Thus, one of the axioms of logic for the human species (at least according to Frege), would not hold for this hypothetical species. For the psychologicists, there is nothing to be done here. Humans and their laws of truth are different because their relevant psychologies are different. Both human logic and this

hypothetical other logic are right, because they are relative to the psychology of the species.

Frege rejects this implication as clearly wrong. Instead of shrugging and moving on, he says that we would, rightfully, think of this species as insane, suffering from "a hitherto unknown type of madness" (Frege 1964, 14). It is impossible for something to be simultaneously both true and not true, and the possibility of a species rejecting that fact, for Frege, is a reason to reject the theory that gives such a denial equal validity to the affirmation of the law of noncontradiction.

Husserl argues along similar lines, that "psychologism in all its subvarieties and individual elaborations is in fact the same as relativism" (Husserl 2001a, 82). This assertion covers the spectrum from Mill to Fries, where empiricists treat "the pure laws of logic as empirical psychological laws" (Husserl 2001a, 83) and psychological neo-Kantians deduce "these laws...from certain 'original forms' or 'modes of functioning' of the (human) understanding" (Husserl 2001a, 83). In arguing this point, Husserl separates out two forms of relativism, individual relativism, which he dismisses as absurd and not held by any serious person (Husserl 2001a, 78), and specific relativism, particularly anthropologism (Husserl 2001a, 78). Anthropologism means that for anything to be true, it is "true for a given species of judging beings that, by their constitution and laws of thought, must count as true" (Husserl 2001a, 79). Husserl finds that psychologism falls under this category. In other words, psychologism asserts that the truth of a statement depends on the constitution of the judging beings. If I judge that 1+1=2 or that since Socrates is a man and all men are mortal, then Socrates is mortal, these are true due to my constitution, or how my mind works. On the flip side, since these statements are true due to my constitution, a being who does not share my constitution would not necessarily make the same judgments. Truth, for those differently constituted, would be different because they are constituted differently and that constitution is determinative of truth.

It is obvious how psychologism falls within anthropologism. Psychologism argues that logical laws function as a subset of psychological laws because the laws of logic are functions of the human mind and constitution in some way or another. The laws of logic depend on our psychological makeup, and since truth is determined through pure logic (Husserl 2001a, 89); they would make correct judgments of truth dependent on one's constitution. The type of being that one is defines what is true or not true for that being, how one moves from one truth to the next successfully, and what it is for a judgment to be true.

One could push back on this characterization as too hasty. As seen earlier, psychologicists like Fries and Mill grant that human psychology plays a role in constituting and grounding logic, but that it is not the only player involved. What is true also depends on the objects of consciousness or the representations of the mind. The way that the mind moves from one representation to the next in such a way that truth is preserved from across the representations is due not only to the nature of the mind, but also to the objects of the representations. They could say that they are not relativistic because of the give and take between the mind and the objects that it encounters. But this argument falls short in two ways: first the objects posited here—that the mind actually encounters—are already mediated by the laws of the mind, according to the psychologicists. These objects that the mind interacts with are representations presented before the mind, not the objects themselves. Thus, they are still dependent on the constitution of the mind. Second, even if the first objection does not hold for a particular psychologistic theory, it would still fall into anthropologism, because it is partly constituted by something that is variable across different types of being. The laws of truth would still be different, even if they were partly guided by the objects because they would still be constituted according to the being making the judgments. There would still be some difference,

or at least plausible potential difference, across species and the laws of logic would not hold universally.

Husserl rejects relativism of any kind when it comes to the nature of logic and, according to John Aach, insists that "truth is distinct from truth for any individual or group" (1990, 317). Since psychologism falls into the camp of anthropologism, as shown above, he rejects it. This leads to the obvious question: Why is relativism so clearly wrong for Husserl? He dismisses individual relativism with just a paragraph in the Logical Investigations and then seeks to disprove psychologism by tying it to species relativism, of which he says "this doctrine is absurd" (Husserl 2001a, 79). He seeks to prove this by a series of arguments that show that species relativism has implications that are so clearly false that anyone seriously involved in the debate will be forced to reject them and then extend that rejection and dismiss anthropologism as absurd as well. These arguments also apply to individual relativism, though he does not do so explicitly, having already moved on from it.

Husserl's first argument is that anthropologism cannot be true because it would imply that the same concept or statement could simultaneously be true and false depending on the species of the judge. This cannot be, he argues, "[T]he same content of judgment cannot, however, be both true and false: this follows from the mere sense of 'true' and 'false'" (Husserl 2001a, 79). There seem to be two moves here: first that truth and falsity are about the content of a judgment, not the subject's relationship to or thoughts about a judgment. The content itself is true or false, regardless of the broader superstructure of the constitution of the being making the judgment, meaning that "what is true is absolutely, intrinsically true: truth is one and the same, whether men or non-men, angels or gods apprehend and judge it" (Husserl 2001, 79). The laws of logic are derived from the content of logic, for Husserl, as will be shown in Chapter 6, so any

being with access to the content should have the same logical laws. He claims that "logical laws speak of truth in this ideal unity set over against the real multiplicity of races, individuals and experiences, and it is of this ideal unity that we all speak when we are not confused by relativism" (Husserl 2001a, 79), where the ideal unity is the content of a logical judgment. The second move is that he claims that this follows from the sense of the concepts of true and false. When we engage with the idea of "truth," we intuit it as universal. Husserl argues that if I say "it is true that the square of the hypotenuse is equal to the sum of the squares of the other two sides of a triangle," the meaning of "true," in this case, is that it is universally the case that Pythagoras's theorem holds. I do not mean that, for humans and similarly constituted species, Pythagoras's theorem holds. If the psychologicists claim that Pythagoras's theorem is based on the human constitution and applies only to humans and those similarly constituted, then they mean something different by "truth" than he does. 11

The next argument Husserl levies against relativism is that it confuses what it means for something to be true. He claims that for truth to be relative to a species, one must either be using truth in the same way as Husserl, as necessary based on an ideal unity, where one would be acting absurdly because he is maintaining that a necessary truth is not the case, or one is simply using the words true and false in a different sense than Husserl. If these psychologicists are using a different sense of true and false then this has all been a misunderstanding and they should start using them in Husserl's sense, "which is the only sense we all employ to talk about logical laws" (Husserl 2001a, 80). But if they are using terms true and false as it is widely (and rightly,

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¹¹ The psychologicists could push back against Husserl here and claim that he is begging the question. Husserl is assuming his own meaning of truth and then arguing that since the psychologicists do not align with it, they are in the wrong. This seems like a fair critique, but it is important to note that the relevant aspect of the sense of truth here is its universality. This means that to reject Husserl's sense of truth is to reject the universality of truth claims. As we will see later, some psychologicists are willing to bite this bullet and reject the universality of truth.

according to Husserl) employed, then they are clearly contradicting themselves because they are claiming that necessarily true things are dependent on the species of the judge, and thus are simultaneously necessary and contingent.

The third argument against anthropologism is that it is deriving the laws of logic from a fact, which, in this case, refers to entities that are temporally and causally determined (Husserl 2001a, 80), and "from a fact it is only possible to derive other facts" (Husserl 2001a, 80).

Starting with a fact about the world means that one is starting with something bound by the laws of cause and effect and temporally existent and thus what is derived from this fact must also be about a state of affairs in the world, bound by the laws of cause and effect and temporally existent. In other words, there is no way to go from a fact about the world, such as how the human mind is constituted, to a universal and necessary claim, such as the laws of logic. There is no way, according to Husserl, to bridge the gap between the contingent and actual facts and states of affairs of the world to the necessary and ideal laws of arithmetic and logic via causal reasoning or abstraction. Thus, for psychologicists, the laws of logic must be contingent facts about the world. The logicists, on the other hand, think that the laws of logic are necessarily true and a theory that implies them to be contingent is clearly false.

The psychologicist could reply by saying that logical judgments are clearly psychological insofar as they are (contingent, causal, and temporally existent) states of mind and arise out of and are determined by the (contingent, causal, and temporally existent) constitution of the mind. Thus, logical judgments are really facts and laws of those judgments are laws concerned with facts and states of affairs in the world. Husserl thinks that this response confuses logical judgments with the content of logical judgments. While the judgments are "no doubt causally determined" (Husserl 2001a, 80), the content of the judgment does not depend on the mind and is

true necessarily. The judgment 2x2=4 is contingent, causal and temporally existent; 2x2=4 itself, the content of the judgment, is true universally and necessarily.

The fourth argument offered is the classic, straightforward critique of relativism: the absurdity of the statement 'there is no truth' (Husserl 2001a, 80). The statement 'there is no truth' is either true, thus showing that there is at least one true statement ('there is no truth'), which is contradictory and therefore absurd, or the statement is false and then there must be truth because the opposite of 'there is no truth' is 'it is not true that there is no truth' which simplifies to 'there is truth.' Husserl thought that this argument works against anthropologism because it maintains that "all truth has its source in our common human constitution" (Husserl 2001a, 80), which implies that "if there were no such constitution, there would be no truth" (Husserl 2001a, 80). It implies the statement 'there is no truth' is a possibility, but that possibility is absurd, and any system or justification of logic that makes contradictions and absurdities possible should be rejected.

The next argument Husserl levels against anthropologism, and psychologism by extension, is that if truth were determined by the constitution of a species, then it is possible that a species exists whose constitution is such that it "[yields] the 'truth', valid for the species, that no such constitution existed" (Husserl 2001a, 80). In other words, if anthropologism is true, then truth is relative to the constitution of species, and the truth for a judging species is relative to its constitution. If the judging species, then, were to be constituted such that the statement "this species is not constituted such that its constitution grounds the truth," then it would not be true, for that species, that its constitution grounds truth, but only because its constitution dictates that it does not ground truth. This is, of course, a contradiction. Husserl claims that anthropologism, by allowing the possibility of this contradiction, cannot be maintained.

The sixth and final argument that Husserl provides is that anthropologism relativizes the existence of the world itself. The truth of the existence of things in general—of my computer, pen, coffee cup, chair, as well as trees, mountains, and oceans—would depend on some judge's constitution and if the judges ceased to exist, then the statement 'there exist trees' would no longer be true. Thus, the truth that something exists depends on there being a judge. Husserl thinks this is clearly wrong (Husserl 2001a, 81). It is also circular because the judging species are part of the world, so the world has to exist in order for the judges to be constituted. But for the existence of the world to be a true fact, then there must be beings that constitute truth. How, though, could those beings evolve if they are already necessary for the factual existence of the world before their evolution began? Thus, we have the circle: "man evolves from the world and the world from man; God creates man and man God" (Husserl 2001a, 81).

These arguments, among others, were historically found to be quite convincing and the general historical narrative is that psychologism, at least in late 19th and early 20th century

Germany, fell out of favor (Kusch 1995, 3). Still, there are three ways that these arguments could be pushed back against: first, that psychologism does not necessarily imply relativism. Second, that relativism is not grounds for the rejection of the theory. Third, that psychologism solves a particular problem, which is how to justify or ground the laws of logic, and that while it may have the shortcoming of relativism, it is better to solve the problem, even if there are unfortunate implications, than to leave it unsolved.

The first way of defending psychologism from the charge of relativism can be to more fully situate (or reduce) the laws of psychology within the laws of nature. One could argue that the laws of psychology are dictated by evolutionary development and (more fundamentally) the laws of chemistry and physics. The mind is reliant on the brain (in some way or another), which

is a material entity with a material composition that is the site of constant electro-chemical reactions and bound by the laws of material nature. By extension, then, the laws of psychology that found the laws of logic would be determined by the universal laws of nature. Thus, while the laws of logic would be contingent because the laws of nature are contingent, they would be no more relative than the laws of physics.

This brief explanation, of course, makes a whole series of assumptions about the relationship between the mind and the body (which Fries and the Kantian psychologicists, at least, would certainly reject) and the reducibility of laws of nature to more fundamental laws of nature. Delving into these assumptions is beyond the scope of this project, other than to point out that they are contested issues and without a satisfying and consistent way of justifying them, this argument cannot get off the ground.

Furthermore, it does not solve all the issues of relativism that are brought up by Husserl and Frege. First off, the laws of logic, even if they are founded on some set of fundamental laws of nature, would still not be necessary laws, for Frege and Husserl. Instead, they would be based on the contingent physical laws of the universe. Second, the problem of aliens and angels having different logics would still stand, because, while based on more fundamental physical laws of nature, the way that those laws become instantiated in different species of rational beings would not necessarily be the same. Even if the laws of logic, grounded by the laws of psychology, were ultimately founded on universal laws of nature for all species, there is no guarantee that any two species should both hold the law of noncontradiction.

The second response is to simply acknowledge that psychologism implies relativism but instead claim that relativism is not clearly wrong. Many of the arguments put forward by Husserl and Frege simply posit that relativism is clearly false and anything that implies relativism should

be thrown out. They both seem to be aware of this, according to J.N. Mohanty, where "Frege rejects [identifying truth and takings-to-be-true] but is not sure that he can refute [it]" (2003, 117) and "Husserl...takes enormous pains to refute [relativism] but concedes that he would not be able to persuade the psychologistic and relativistic thinkers" (2003, 117). As they acknowledged, one can reject these claims (Margolis 1997, 308; Aach 1990, 318). This can be seen explicitly in W.V.O. Quine's philosophy (See Quine 1969 and Quine 1998) and Gerald Massey's writing on psychologism (1991). These refusals to reject relativism also, by implication, undermine the logicists' arguments in other places, such as Husserl's sixth argument, where he posits that the temporalization of truth is circular. There, Husserl is positing truth as a relation between the object in the world and an ideal statement or the meaning of an ideal statement. The truth of the statement "there is a tree there" is based on the correlation of a tree to an ideal meaning (of the statement) not the statement being made by a particular person or a particular mind. If this is the case, then relativism is clearly wrong, but it is circular and relativism is only clearly wrong if we accept this understanding of the truth relation. If it is rejected, it is no longer a circular statement. If truth is understood as a relation of the mind, then the existence of the world does not depend on the truth of the meaning of the judgment of a mind, even though the truth of the thought does.

If this is the case, relativism will not necessarily and obviously fail, as their arguments claim, and whose obvious failure their arguments often rely on. Instead, Husserl and Frege are relying on intuitions that are clear to them, many of their contemporaries, and current readers, but not universally shared. Some are willing to grant that the laws of logic are relative in order to save psychologism or in order to avoid relying on some form of a realm of ideas. In other words, Frege and Husserl may do a good job in showing that psychologism implies a form of relativism,

but this alone is not enough to make a committed psychologicist reject the theory. If I am willing to bite the bullet and accept relativism, and to revise my understanding of truth enough to avoid the obvious pitfalls that come with it, it is not clear that I need to reject psychologism. If I am willing to sacrifice necessity for an empirical basis foundation for logic, then I can keep psychologism. While Husserl and Frege would reject this acceptance of a relativistic logic out of hand, if one is willing to make the tradeoff, then their theory can stand as self-consistent.

The final response to the logicists' charges is to say that while psychologism has its shortcomings, it is better than any given alternative or than leaving the question unanswered. I am much more likely to accept anthropologism, a form of relativism that at least applies to anyone I will ever meet or argue with (unless my life, and human history, take some very unexpected turns), if the alternative is that logic has no grounds or I am forced to accept some unconstrained form of idealism. The critics, then, are charged with coming up with an alternative ground for the laws of logic that does not have these shortcomings and is at least equally as plausible as psychologism, lest the critic admit the flaws of psychologism but maintain their belief because the alternatives seem clearly worse. The next two chapters will address Frege and Husserl's attempts to do so, respectively.

Chapter 5: The Foundations of Logic in Frege

Many of the arguments that Frege made against psychologism were against the implications that, for psychologism, logic is contingent on facts about the world, namely human psychology, and thus that the laws of logic did not hold with necessity. For psychologism, logic is subjective and the composition of the mind determines the laws of logic. Frege, of course, did not limit himself to a negative critique of psychologism and instead developed his own theory of the foundations of logic, which was consistent with his objections to psychologism. He maintained that logic was both necessary and objective. The laws of logic were eternal truths that could not possibly not be the case and, as will be shown, are derived from the objective side of the subject-object dichotomy. Rather than understanding the content of the judgment as representations in the mind, he externalizes the content of logical judgments and concepts themselves. By externalizing both sides of the truth relation, which the laws of logic, as laws of truth, are bound to; he externalized the laws of logic.

The externalization of concepts leads to a few questions: If concepts are not mental entities, what are they? If they are external to the mind, how do they relate to the ideas of the mind? Over the course of the following chapter, I will present Frege's answers to these questions. I will do this by first explaining Frege's move to externalize concepts (5.1). This will lead to a discussion of the ontological status of concepts (5.2) and a reevaluation of the idea of truth with respect to this new formulation of concepts (5.3). I will then discuss how the sense of an object dictates how it is presented to the mind and the implications of sense for logic (5.4).

From this understanding of logic, I will discuss how Frege's concept of sense can be used to address the problem of how ideas relate to concepts (5.5). This will lead to a discussion of how humans relate to and come to know the laws of logic (5.6). I will end the chapter with a discussion of how Frege's conceptualization solves the problems he found in psychologism (5.7) and how he addressed the various themes of psychologism, as highlighted in the previous chapters (5.8).

5.1 The Externalization of Concepts

For the psychologicists, both along the Kantian and Empiricist ends of the spectrum, concepts were viewed as mental entities (See Fries 1807b, SS 164 and Mill 1974a, 24). They were seen as ideas that categorize and make sense of the world or as abstractions from experience. Importantly, as ideas, they are internal to the human mind and, as mental entities, followed the laws of the mind (Mill 1974a, 374). On top of this, for the psychologicists, logic is tied to concepts, insofar as it is the laws by which one comes to truth via concepts and the laws by which the truth of concepts is governed, as shown above in Part I.

Frege agreed with the psychologicists, broadly speaking, about the relationship between concepts and the laws of logic, insofar as he believed that concepts are bound by the laws of logic and that the laws of logic govern the truth of concepts (Dummett 1993, 23 and Frege 1964, 13). How did he maintain that concepts are governed by the laws of logic without conceding that the laws of logic are laws of mental entities? He could claim that concepts are not mental entities by externalizing concepts and casting them as existent external to, and independent of, the human mind.

What, then, is Frege's claim about concepts? How does he argue that they are external to the mind? According to Kenny, his claim is that concepts are mind-independent entities (1995, 7). In other words, they are not found internal to the human mind nor are they mental entities, but rather they exist independently from the human mind (Frege 1984, 363). One can grasp a concept and think or imagine it, but to do so is to grasp something objective and external to oneself, coming to a subjective understanding of the objective concept (Dummett 1993, 22 and Frege 1984, 369).

According to Michael Dummett, Frege justifies this claim through a combination of acknowledging the communicability of concepts and maintaining that the subjective sphere is deeply private and incommunicable (1993, 25). We seem to be able to communicate with others about concepts. While some people may grasp concepts in slightly different ways, for the most part, people can communicate about concepts. For example, people can, and do, have sophisticated discussions about the nature of freedom or morality, arguing about specific features or aspects of them. While there may be disagreements about the specific nature of these concepts and there is no concrete, material object out there that can be pointed to or investigated empirically, people, for the most part, know what they are talking about and understand the statements that others are making. While not exactly the same, due to the ontological status of concepts being different and thus how one actually relates them is different, the relationship between subjects and any given concept is analogous to how a physical object is shared in the world. A tree, for example, is an object external to the mind that different people may grasp in different ways but stands as an independent object that is graspable by the mind. People can disagree about its nature, but in disagreeing and voicing their oppositions to each other, they are doing so by referring to an actual entity in the actual world: the tree. Similarly, by disagreeing

about concepts, people are disagreeing about something external to themselves that is shared between them because the concepts are external objects that are available to everyone involved. As we will see later, they are available to everyone, according to Frege, because they exist in a third realm of thoughts and concepts that people can access through mental acts (Dummett 1993, 25). More will be said on this in Section 5.2.

The claim that concepts are external rests not only on the communicability of concepts, but also on Frege's "strongly subjective interpretation of sensations and mental images" (Dummett 1993, 24). Frege understands ideas as the images within the mind (Currie 1980, 238). Furthermore, ideas, as an aspect of our own conscious experience, would have to exist temporally, as a mental state or image in consciousness (Burge 1992, 637). For example, my idea of red (assuming there is no external concept of red) would be the mental image that I hold which characterizes "some of my own sense-impressions" (Frege 1984, 362). When I look at my red pen on my desk, my mind receives a series of red sense-impressions which lead to the idea of redness. When I think about redness, I have a specific mental state that relates to red sense impressions. This mental state exists at a certain point in time and relates to other mental states that also existed at certain points in time through various mental processes. In other words, ideas are the content of a particular consciousness, produced by particular mental processes. Ideas are "owned" by the individual subject.

Frege then maintains that because internal ideas are specific to subjects, they are not completely communicable. This seems like a strong claim. How does Frege justify it? One way is by claiming that the meanings of a sentence change when it is externalized, as opposed to when it is a subjective idea. For example, if I were to have the internal idea "I am hungry," the meaning of it is something along the lines of "I am having the suite of subjective feelings that I

associate with hunger." Another person can have the similar idea, but the meaning of that idea would not be the same, according to Frege. Why? Because the idea is within another stream of consciousness and belongs to another person (Kenny 1995, 188). The subjective idea, "I am hungry" is held by different people and characterizes different suites of sensation. Thus, it is a different idea for different people who think it.

Ideas having owners implies, according to Frege, that "no two men have the same idea" (Frege 1984, 361). The idea of hunger is my idea (it is an internal mental state that is part of my personal conscious experience) of hunger. If there were no external concept of hunger, then when I experience hunger and think, "I am hungry," I am referring to a set of internal experiences that I associate with hunger. It is my hunger. With respect to communicability, this implies, according to Frege, that when someone hears that I am hungry, they are not experiencing the same set of internal experiences that I am, but rather understanding that I am going through that set of experiences. In other words, I am communicating that I am experiencing a set of sensations, not those sensations themselves. I am not imbuing the other person's psyche with what is going on internally in my own psyche, but rather only giving signifiers of it that they then understand conceptually. What is going on subjectively is not being conveyed, but rather a signifier of it. In speaking, I am communicating via concepts, explaining one thing rather than another via part of an external, shared world of concepts that may or may not accurately refer to what is going on internally (Frege 1984, 363). In other words, in communicating what is internal, we make use of something external to our minds that carries meaning.12

¹² Interestingly, Frege doesn't seem to consider language itself or forms of human practice as the external link in communication (Burge 1992, 638).

If we accept Frege's view of subjectivity, that ideas are internal and relate to our specific sense impressions and other internal ideas, there is a second problem. Frege claimed that it would mean that mathematical and logical claims would be specific to each consciousness. He says that we would not have "the 'Pythagorean theorem', but 'my Pythagorean theorem', 'his Pythagorean theorem', and these would be different" (Frege 1984, 362). The Pythagorean theorem, or any other concept, would change from person to person because it would be owned by different people. It would be internal to different people's minds and relate different people's suites of sensations and ideas together. There is no concept "two" that exists universally or non-temporally, but rather "as new generations of children grew up, new generations of twos would continually be born" (Frege 1980, 37). This is unacceptable to Frege and his position (as seen last chapter) that the laws of logic and mathematics must be universally true.

Thus, we have two lines of arguments against thoughts and concepts being internal to the mind. The first is that (1) thoughts and concepts are communicable, but (2) what is internal to the mind is not communicable and thus (3) thoughts and concepts are not internal to the mind. Second, Frege thinks that if thoughts are internal, then they could not be universal and timeless because they would have to have specific, temporal owners. Since he believes that logical and mathematical truths are universal and non-temporal, as seen last chapter, then thoughts and concepts cannot be internal to the mind. But, if thoughts and concepts are not mental entities, then what are they? How do they exist in the world, if not within minds of thinking beings? Frege postulated that there is an ideal realm of concepts, that exists independently of any particular thinking being (Frege 1984, 363).

5.2 The Ontological Status of Concepts

Concepts, for Frege, exist as ideal entities outside of the minds of thinking entities. He claimed that "thoughts are neither things in the external world nor ideas" (Frege 1984, 363). Thus, as Jonathan Cohen sums up, for Frege "thoughts are neither sensible objects in the world nor private ideas in the heads of individual thinkers" (2010, 47). When beings have thoughts about concepts, they are grasping the concepts and gaining a particular understanding of those concepts (Frege 1984, 368). How then, do they exist outside the mind? For Frege, they exist because of what Michael Dummett has called a "mythology of the 'third realm'" (1993, 131), where the third realm is a "compartment of reality distinct from both the physical world and the inner world of private experience" (Dummett 1993, 131).

Why must there be a third realm, according to Frege? It is not only because thoughts and concepts are external to the individual thinker, as Frege claimed they must be, but also because they cannot be members of the external, material world. The members of the third realm "cannot be perceived by the senses" (Frege 1984, 363) and their truths are not dependent on any material thing's existence in time (Frege 1984, 363). This, of course, stands in opposition to Frege's understanding of the material world, which can be perceived and is not timeless. In his *Logical Investigations*, Frege uses the Pythagorean theorem as his example. One sees that, while one may perceive triangles and use them to calculate the relationship between the hypotenuse and the two sides adjacent to the right angle, no one actually perceives the theorem itself (Frege 1984, 32). At best, one sees a signification of it (written as $a^2 + b^2 = c^2$). While triangles may exist in the world one does not see the Pythagorean theorem. Furthermore, the Pythagorean theorem, according to Frege, would not cease to exist if there were no actual right triangles. Instead, it seems clear to him, that "the Pythagorean theorem is timelessly true" (Frege 1984, 363). He thus is arguing that

1) thoughts and concepts are external to the mind (as seen in 5.1), 2) thoughts and concepts are not part of the material world (as shown above), and thus, 3) there must be some external realm where thoughts and concepts exist. In other words, once we rule out thoughts and concepts existing in the mind and in the material world, we must conclude that there is a third realm in which they exist.

Thus, concepts and thoughts cannot exist in a subjective realm of ideas nor in the material realm. Frege concluded that there must be a third realm for them. What are the qualities of this realm? As already seen, the realm is timeless and exists independently of any given perceiver or thinker. He claims that a concept within it "needs no owner" (Frege 1984, 363) and that the concepts within the realm can interact with one another without anyone knowing, much like "a planet, even before anyone saw it, was in interaction with other planets" (Frege 1984, 363). The concept of a right triangle relates to other concepts in such a way as captured by the Pythagorean Theorem, timelessly, and held true before it was discovered. It will hold true if all thinking beings were to forget it. The third realm thus has two key features: it shares "in common with ideas that it cannot be perceived by the senses" (Frege 1984, 363) and in common with the material world that its objects do "not need an owner" (Frege 1984, 363). The third realm, then, consists of all those things that are timeless and non-physical (Frege 1984, 363). This includes thoughts and their contents, concepts, logical objects, and the relationships between them (See Currie 1980 and Burge 1992).

How, then, do we access this third realm? Frege seems to think that, while it exists independently, we have "purely intellectual access" (Schweizer 1991, 226). According to Tyler Burge, Frege maintained that we know thoughts and concepts through faculties of the mind (such as the faculty of reason for logic (1992, 645) and intuition for mathematical truths (1992, 633)).

In other words, the human mind has cognitive faculties that allow it access to the third realm.

Much like how we access the material world through the cognitive capacities associated with the senses, we access the third realm through a set of cognitive capacities associated with it.

5.3 Frege's Conceptualization of Truth

Frege believed that the laws of logic were the laws of truth and that concepts and thoughts were entities in a third realm, existing externally to the mind. Part of the reason concepts and thoughts needed to exist outside of the mind is that they are communicable, and what is internal to the mind is "owned" by a specific thinker and not communicable. His understanding of truth, then, was bound up with and "involved in his metaphysical commitments" (Burge 1986, 107). Thus, the truth relation is not between the internal and external, or an idea and the world because they are two different kinds of things and cannot completely coincide (Frege 1984, 353). For Frege, "what is objective cannot be compared to what is subjective" (Frege and Carnap 2004, 73) because the subjective representations, ideas, and impressions are distinct from external reality or the third realm of thoughts. A mental representation of a tree is different from a tree and the concept "tree". This implies, according to Frege, that "there can be no complete correspondence, no complete truth" (Frege 1984, 353). Since subjective ideas and representations are of a different kind than thoughts, they cannot completely align with one another; one will always be an idea and the other will always be a thought. Furthermore, since there cannot be complete correspondence between the subjective and objective, then there cannot be any true subjective thoughts or representations because "truth does not admit more or less" (Frege 1984, 353); truth must always be complete.

Instead of relying on the relationship between the subjective and the objective, truth must lie within the relationships of thoughts themselves (Frege 1984, 353). Thus, Frege cannot maintain a representational theory of truth, like the psychologicists did, where something is true when the representation or idea accurately mapped onto the external world. Instead, as will be seen below, truth became defined through the objects themselves.

According to Kenny, throughout his life, Frege went back and forth about whether truth was an object that "all true sentences named" (Kenny 1995, 180) or a property of the object (Kenny 1995, 180). In his later writings, he settled on truth being a property, although one that itself cannot be defined (Frege 1984, 353). In this chapter and moving forward, we will focus on the latter definition of truth.

When Frege understood truth as a property, he claimed that "no bachelors are married" has the specific property of truth. Here, the concepts of bachelors and marriage are related in such a way that when combined in the thought "no bachelors are married," they possess an additional property, that of being true.¹³

The laws of logic are about the laws of truth, and share a number of themes that highlight Frege's understanding of truth in a way that distinguishes his position from psychologism. First, truth comes from an objective realm. Second, there can be false thoughts. Third, the purview of truth seems to be the relationship between objects. I will deal with each of these in turn.

For Frege, truth is objective. This does not mean only that what is true is true regardless of who is cognizing it. It also means that truth is a property of objects (in his later works). This

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¹³ Frege expresses some caution in describing truth as a property of thought, because unlike other properties, it seems "that nothing is added by my ascribing to [a thought] the property of truth" (Frege 1984, 354). Nevertheless, he seems to believe that it is best to understand truth as a property of thoughts as long as we are careful to understand it as a unique property of thoughts (Frege 1984, 354-355).

means that the subject making judgments about truth is not involved in the truth-making aspect of whether a statement or thought is true. If I have the internal idea that "no bachelors are married," I am grasping the external thought, "no bachelors are married." For Frege, it is the thought, not the idea that is true, because the concepts in the subject and predicate of the statement are related with a "truth-property." The thinking subject does not have a role in making the thought true. This stands in contrast to the representational theory of truth, where truth is a relation between the representation or idea, and the object. The thinking subject is involved in the truth relation in that case, because they form the idea that must, in some way or other, map onto the world. This is not the case for Frege, because strictly speaking, truth applies to thoughts, not ideas (Ricketts and Levine 1996, 122).

While truth is found with objects, this does not mean that all objects and relations between objects have the property of truth. There can be false thoughts (Frege 1984, 354 and Frege 1917, 121). The falseness of these thoughts, though, is still based on the objects involved in the thought, rather than the thinking subject. A thought is false when the relationship between the subject and predicate of the thought does not have a truth relation and instead has the relationship of falsity (Pagin 2001, 14); it is false when the subject-concept does not correctly apply to the object-concept. If I were to say "some bachelors are married" it would not be true. It would still be a thought, though, because, while false, it is still communicable and constructed of graspable concepts (bachelor, married, and so forth) by anyone who can read it. The thought, "some bachelors are married" is constructed out of concepts that exist within the third realm and are graspable by anyone who can grasp things within the third realm of concepts, but the concepts 'married' and 'bachelor' are such that combining them in that way is incompatible with the property of truth. In other words, in speaking of married bachelors, we can relate concepts to

each other in an external manner, as a thought, but that relation is not a truth relation. The truth, as objective but not containing all relationships between objects, is a feature of some of the relations of objects. Only a certain subset of object-object relations shares the property of truth.

5.4 Sense and the Presentation of Concepts

Before going into depth on the laws of logic that govern what makes some relationships between objects true relationships and how to truthfully move from thought to thought, another distinction needs to be made: the distinction between sense and reference. Frege defines sense as containing the "mode of presentation" (Frege 1948, 210), "through which the name is directed to its reference" (Haaparanta 1986, 155), or that points to an object which is the reference (Frege 1948, 210). For Frege, then, "every simple name has a sense as well as a reference" (1986, 51), according to Hans Sluga. In other words, when an object is named, the name not only refers to the object itself, but is presented in a particular fashion.

There are objects, in both the material world and the third realm of thoughts, that are presented in particular ways, or with particular senses. The senses do not necessarily contain the whole of the object, but instead act as ways of comprehending or getting at the object. Objects and thoughts can be presented in different ways without having different truth values (Frege 1948, 210). Frege's classic example is that, when referring to the object "Venus" the phrases "Venus," "the morning star," and "the evening star," carry a different sense (Frege 1948, 210). But, since they are all referring to the same object, truth claims about any of Venus, the morning star, or the evening star would be true of any of them. So, the truth of the claim, "Venus is the second planet from the sun," is equivalent to "The morning star is the second planet from the

sun." One, of course, has to be careful because there are occasions where the phrases "Venus" and "morning star" do not share a referent (Frege 1948, 219). For example, the referent for "Venus" could be the Roman deity, and thus would have a different referent than "the morning star." When they do all share a referent, the planet in this example, the sentences that contain them share a truth-value. The claims, "Venus is the second planet from the sun" and, "the morning star is the second planet from the sun" share the same truth value because they share a referent.

It is easy, when speaking about modes of presentation, to slip into a subjective understanding of sense, where one thinks of sense as how I, specifically, cognize an object. Of course, my cognition will be limited in all the ways that I am, being limited by contingent human circumstances and contemporary knowledge. I get the sense of "morning star" for Venus because of my knowledge of cosmic entities and how I perceive them in the sky. For Frege, this is wrong. Sense is no more subjective or psychological than thoughts and concepts (Kenny 1995, 129). They are modes of presentation, and objects come with senses and ways of being understood. Senses are bound to the object. They are communicable (Frege 1948, 213). The sense "morning star" is not exclusive to me, nor is it lost in the shadowy realm of my own mind. Instead, I can share thoughts of it and use the sense in conversation with others.

If senses are modes of presentation, but are not subjective, what are they? First, as Burge and Paul Schweizer each note, they "are, or are components of, abstract thoughts" (Burge 1979) and thus are, ontologically speaking, members of the third realm (Schweizer 1991, 266). We then access them through various forms of our cognition. Concepts are then presented to us in thoughts. Thoughts about objects do not occur uniformly, though, and can take many different forms. When looking at the night sky, I see the evening star, when reading about the solar

system, I think of it as Venus. Both times, I engage with the object through the medium of thoughts and thus engage with the concept of Venus. Sense is the ways that concepts occur to us in different forms through having thoughts that name them in different ways. They are how Frege tries to "account for differences in cognitive value" (Burge 1979, 402) where the thoughts that present the object present it differently such that it means something different to the person cognizing it, while still referring to the same object.

5.5 Objective Laws of Logic

As seen above, the laws of logic are objective, for Frege. They govern what is true, and truth is not a relation between subject and object or the mind and the world, but rather a function relation between objects, within thoughts (Frege 1917, 122). A thought is true when the subject of the thought encapsulates or contains the predicate (Frege 1917, 121). Another way of putting it is that the predicate is a function of the subject, where the predicate follows from the concept of the subject of the sentence. The thought "a bachelor is an unmarried man" is true because bachelor encapsulates "unmarried man" and "unmarried man" follows from the concept "bachelor." In other words, "bachelor" is an object and "unmarried man" is an object and the two are related in a truth relation (for later Frege). The two are in the truth relation because the predicate of "unmarried man" is one of the predicates contained within the concept-object of bachelor. To use the language of functions, if I define two functions f and g, where f is the gender of the subject and g is the marital status of the subject, then f(bachelor) would be male and g(bachelor) would be unmarried, showing that unmarried man is a function of bachelor.

These relations are not limited to subjects and predicates, which are concept-objects in the third realm, but can also relate material objects to concepts, albeit in the form of thoughts (Frege 1948, 216). For example, I can claim "my coffee mug is ceramic," where my coffee mug is in the material world. The thought is true because my coffee mug is, in fact, ceramic. One of the properties of my coffee mug is that it is ceramic, where "ceramic" is a concept used to categorize a type of material that various things are made of in the world. In the language of functions, if I were to define the function f as the material out of which of an object is made, then f(my coffee mug) would yield "ceramic." If I said "my coffee mug is glass" the statement would be false because f(my coffee mug) does not yield "glass." The predicate "glass" is not contained within the subject "my coffee mug."

As shown, not all thoughts or statements are true, because sometimes the predicate is not a function of the subject; the predicate is not always contained within the subject. "Bachelors are married men" and "my coffee mug is made of glass" do not relate in a truthful manner because "married" is not contained as a predicate within "bachelor" nor glass within "my coffee mug."

Truth functions and how subjects and predicates can share a truth relation operate with some constraints. There are laws that truth must follow. These laws are the laws of logic (Frege 1964, 13). For example, a truth function cannot yield both a predicate and its opposite, g(bachelor) cannot be both "married" and "unmarried." Thus, I cannot claim "bachelors are men who are both married and unmarried," regardless of what the actual true predicate is, because I would be claiming a contradiction, which cannot possibly come from a truth-function. Which of the contradicting claims (married and unmarried in this case) is true depends on the object (what it is to be a bachelor), but the fact that it cannot be both is determined by the laws that dictate truth relations.

Since both sides of the statements contain concepts that themselves can be further predicated, following the laws of logic, one can use true statements to develop new true statements. To see how this works, we can look at the classic syllogism, "All men are mortal. Socrates is a man. Therefore, Socrates is mortal." In this case, "man" is a predicate of Socrates. "Man" is also a concept that contains its own set of predicates, such as "mortality." Since man is a predicate of Socrates, mortality must be as well. Therefore, Socrates must also contain the predicate "mortal."

In formulating new true statements, one must follow the laws of logic or else there is no guarantee that the new statements have the truth relation. While this may involve some translation to fit the format of the given laws, the translations are equivalent with respect to the truth relation.¹⁴

For Frege truth comes from the relationship between two objects as expressed in a thought or statement, where the subject of the statement must encapsulate the predicate. In other words, the predicate must be a function of the subject. These relationships are bound by the laws of logic. Following the laws of logic, then, can lead one to new statements that also have the truth relation.

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¹⁴ The example often is translated as "If something is a man then it is mortal. Socrates is a man. Therefore, Socrates is mortal." in order to fit this format of Frege's logical syntax rather than that of classical, syllogistic logic.

5.6 Logic for Humans

If the laws of logic are objective, about the relationship between the subject concept and predicate concept of a statement, and exist outside of the human mind, then how does one relate to it as a human being? Frege describes the human relationship with logic as the same as it would be with any other science of the external world (Frege1980, 34). In other words, concepts exist and are true independently of thinking beings and then thinking beings must go out and discover them. The difference is the tools one uses to discover the laws of logic. One uses empirical observation and experimentation to discover things about the objective, material world. The mode of discovery for the laws of logic does not follow the same lines. Instead, one relies on deriving them from a few, given general laws (Frege 1980, 4).

For Frege, one starts with a few axioms that are apodictically clear and cannot be justified beyond their apodictic self-evidence (Jeshion 2004, 131). These laws, like the laws of non-contradiction (Schirn 2019, 467), identity (Schirn 2019, 444), and the excluded-middle (Snyder and Shapiro 2019, 346), do not have any further justification. They simply are true. They are true because they are the laws that govern the third realm of concepts and thoughts. One knows them to be true because they are apodictically self-evident.

One constructs the laws of logic and rules of logical syntax out of these self-evident rules and knows that these constructions are true because they follow from the laws. Furthermore, following the established rules leads one to move from thought to thought clearly. One then knows what is true based on how one is able to move from what is known to a new thought by following a chain of deductions (Frege 1980, 4). Frege further breaks judgments down between analytic and synthetic based on what these chains of deductions involve. An analytic judgment is

derived from general laws and concepts, whereas a synthetic judgment appeals to facts and "contain assertions about particular objects" (Frege 1980, 4).

The use of apodictic self-evidence, seemingly, leaves one open to the argument from the psychologicists: if the way that we know the laws of logic is internal reflection, which is a function of the mind, would not logic rely on the constitution of the mind through the mind's role in internal reflection. The constitution of the mind, then, seems to be foundational to logic in this case.

The difference for Frege is that, while one's understanding of the laws of logic depends on human psychology, the laws of logic do not. One needs the laws of psychology to understand logic because humans are beings whose understanding is bound by the laws of psychology. Thus, one's understanding of logic is going to be bound by the laws of psychology. The laws of logic themselves, though, are not bound by these natural laws. They are true independent of any thinking being or the psychological laws that allow anyone to grasp these true, independent laws of logic. To claim that the laws of logic are based on psychology because how one grasps them is based on the laws of psychology, to Frege, would be the same as claiming that the laws of physics are based on the laws of psychology because one's understanding of those laws is also bound by the laws of psychology. For him, as Burge notes, the objects of both (concepts in the third realm and the physical-temporal objects of nature), "are independent of thinkers in the same way" (1992, 639). In other words, for the reasons given in sections 5.1 and 5.2, thoughts are communicable and not "owned" by any particular person and must apply timelessly. Frege claims that we know that the laws of truth are external to us, and thus not dependent on human psychology. It is only the fact that as human subjects we are psychological beings means that we experience these external things through our psychology. Human psychology is thus not

necessary for the foundations of logic because they exist ideally independent of us. It is only for us to understand the ideal laws of logic because we use our minds to understand them.

5.7 Solving the Problems Outlined in the Critique of Psychologism

It was shown in the previous chapter that two important arguments against psychologism were that psychologism treated logical entities as psychological entities and that psychologism inevitably leads to relativism. Frege's alternative thus needs to avoid treating logical entities as psychological entities and avoid sliding into relativism. If not, his position will fall to the same criticisms that he levelled against the psychologicists.

The first criticism, that psychologism treats logical entities as psychological entities, is resolved in the externalization of thoughts and concepts. Recall that Frege, "takes the psychologistic logician's denial that there are non-psychological laws of logic to manifest a confusion of the objective and subjective" (Ricketts 1986, 67). Since, for Frege, thoughts and concepts are external to the mind, residing in his third realm, they cannot be subjective, psychological entities. Instead, they exist independently of any thinker or speaker, and thus are objective. While thinking beings have ideas that grasp at these thoughts and concepts, the laws of logic do not deal with ideas. The laws of logic, as seen above, govern the truth of external thoughts and concepts.

The externalization of thoughts also keeps Frege's understanding of logic from falling into relativism. The laws of logic govern and are founded on the relationships between these external entities of the third realm that are timeless and exist independently of any thinking being. The laws of logic, being derived from the timeless objects of the third realm, are also

timeless. They are not contingent or true at one time when one set of thinking being exists but cease to be true when those beings cease to exist, because they are based on timeless relationships of timeless objects. Thus, the laws of logic always hold true, regardless of any change in subjects or the arrangement of the material world. They are objective, eternal, and necessary. This means that logic, for Frege, cannot be relativistic.

5.8 Frege's Logicism and the Themes of Psychologism

In the following section I will look at several of the themes that were shown to be central to psychologism and address where Frege's understanding of logic falls with respect to them, highlighting some of the similarities and differences between the two theories.

The first theme that I will look at is the role of the representational structure within psychologism. The psychology of both Fries and Mill explained human cognition in terms of a representational structure, and by extension, the laws of logic were also built on a representational structure. Logic was grounded in and understood via the mind and representations of the mind.

The grounding of logic within a structure of representation was rejected by Frege. While he did not necessarily reject the representational theory of human psychology, he rejected any role that it would play in the foundations of the laws of logic, saying that mental pictures are "completely immaterial and incidental" (Frege 1980, vi). Since human psychology had nothing to do with the laws of truth, the structure of human experience—representation for the psychologicists—plays no role in the foundations of logic. The truth of the laws of logic was thought to be based on the relations of external objects that could be represented, meaning that

they exist prior to any human representation, rather than being constitutive of the laws of logic themselves.

Much like the representational structure of cognition, Frege rejected introspection as the means for finding the grounds for logic. Whether introspection is a legitimate tool for finding the laws of psychology, it played no role in grounding logic. While rejecting introspection, Frege did think that some form of reflection on mental experience was a legitimate way to find the laws of logic and relied on apodictic experience to discern them and as a way to see that they are being followed (Jeshion 2004, 131). The difference is that Frege saw internal reflection as a way of finding out what the laws of truth were, not a foundational part of them. In other words, reflection is a way that one can know something that itself is true independent of one's knowing it. Instead of a rejection of reflection as a tool of discerning the laws of logic, introspection was rejected as a way of reflecting on one's psychological states with some form of an internal sense.

Another theme shared by the psychologicists is the reliance on and prioritization of epistemology over other areas of philosophy or types of knowledge. Because it relies on representational views of psychology and knowledge, the truth of claims built on representation relies on the accuracy of the representations. Therefore, any further claims about the world are dependent on the reliability of representations. Thus, questions of how one knows what one knows are elevated over claims about the content of the representation and become the central questions of philosophy. In other words, if logic comes from psychology, in one way or another, one has to get the psychology right in order to get the logic right. Psychology is bound by empirical laws that come with epistemic problems and solving those problems allows for a more complete understanding of the foundations of the laws of logic.

Although Frege rejected the psychologistic framing of epistemology, he still prioritized epistemology (Kitcher 1979, 236). The psychologistic framing relies on the importance of representation to truth, which, as seen above, he rejected. Instead, he made the question of how one knows what one knows dependent on the laws of logic, which, in turn, were based on a series of basic principles, because, for Frege, the laws of logic are external to the mind and necessarily true. Thus, any epistemological theory will be bound to the laws of logic because, otherwise, it would be nonsense. Logic, as the laws that bind true judgments, gives the guidelines for formulating true judgments and coming to knowledge. Epistemology, bound by logic, precedes all other fields of knowledge, such as the sciences and metaphysics, and any knowledge about them must accord with the laws of logic (Ricketts and Levine 1996, 126).

While Frege did not rely on the representational structure of the mind in his grounding of logic, he still made use of the subject-object dichotomy on which representation relies. Recall that the subject-object dichotomy maintains that there is a self-contained subject that is separate from the self-contained objects with which the subject experiences and interacts with. They each subsist on their own and have their own essential natures. Frege maintained this dichotomy. The subject-object dichotomy can be seen in a number of ways. First, it can be seen in the externalization of thoughts. He separated what is subjective and internal, such as ideas, from what is objective and external, such as thoughts and concepts. Thoughts are separate from any subject or subjective grasping of them and exist independently of any subject because they are objective. According to Joan Weiner, Frege understands objectivity as that which is, among other things, "independent of sensation, intuition, and imagination" (1986, 22). The subject-object dichotomy is further reinforced by his understanding of the third realm of thoughts. Not only are thoughts external and objective, but they exist in a timeless realm that one grasps in an analogous

fashion to the material world. Both these realms, the material world and the third realm of thoughts, are independent of thinking subjects and populated by objects that have their own existence, properties, and substances. Frege does not simply posit the separate existence of thoughts as objects, but posits them as entities with some form of metaphysical reality of their own.

Frege's argument for the externalization of thoughts also assumes a dichotomy between the subjects and objects. He argues that what is subjective and what is objective are fundamentally different with respect to their communicability. Ideas are internal, subjective, and incommunicable. On the other hand, he views what is external and objective as essentially shared and communicable. The two realms are fundamentally distinct from each other in this way.

Chapter 6: Husserl's Logicism

Thus far, we have seen the logicist arguments against psychologism, mainly criticizing its treatment of logic as focused on mental entities and its drift towards relativism, and how Frege built out his foundations of logic to address those critiques. In this chapter, I will investigate Husserl's logicism. Starting from the arguments he made against psychologism (as seen in Chapter 4), I will show how he built his own theory of logic to accommodate his critiques of psychologism. To do so, I will begin with a basic outline of how Husserl understood logic (Section 6.1). This will raise several questions, which I will seek to resolve in the following two sections. His understanding of logic will be built around ideal entities, which will be addressed in Section 6.2, and imply the intentional nature of experience, which will be explained in section 6.3. Once the concepts of ideal entities and intentional experience are fleshed out, I will then be able to give a more complete explanation of logic within Husserl's philosophy (Section 6.4). In Section 6.5, I will tie Husserl back to the previous chapters by analyzing where he falls with respect to the various themes of psychologism. I will then address the objection that, while Husserl levels intense criticism against psychologism when he is on the offensive, when it becomes time for him to formulate the foundations of logic on his own, he falls back into psychologism, concluding that these objections miss the mark (Section 6.6). Chapter 6 will end with a brief discussion of the different paths that Frege and Husserl took in formulating their understandings of the grounds of logic and the different directions they took logicism.

For the sake of this chapter, I will be focusing primarily on Husserl's *Logical Investigations* (*LI*) and *Formal and Transcendental Logic* (*FTL*), though I will use his other works to add depth and clarity. While some of the failures of *LI* led to developments in Husserl's mature philosophy and there are important differences between it and his later works (Drummond 2002, 30 and Melle 2002, 112), the differences will be beyond the scope of this chapter. I will, instead, focus on the thematic continuity between Husserl's works, resulting in *LI* being seen as a work that lays the groundwork and prepares the space for Husserl's later works (Sokolowski 1977, 94 and Patzig 1977, 179). This will serve to form a complete look at Husserl's logic while still framing it with respect to his response to psychologism, as well as setting up Heidegger's later critique.

6.1 Outline of Logic for Husserl

Two major lines of argumentation that Husserl levelled against psychologism, as highlighted in Chapter 4, were that psychologism 1) reduced logical entities to mental entities and logical laws to mental laws and 2) that psychologism inevitably leads to relativism. Husserl, then, needed to construct an understanding of logic that did not fall prey to either of these flaws. He sought to do so by grounding logic in the essences of ideal entities (Patzig 1977, 195). In the words of Rudolf Bernet, logic, for Husserl, "expresses necessary connections between ideal conceptual forms" (2002, 27). This can be seen both before and after his transcendental turn. In SS 72 of the *Prolegomena* of *LI*, Husserl claims that in pure logic "we are dealing with nothing but concepts, whose notion makes clear that they are independent of the particularity of any material of knowledge, and under which all concepts, propositions and states of affairs that specially appear in thought, must be ordered" (Husserl 2001a, 153). After his transcendental

turn, in *FTL*, he claims "to each cognition-objectivity, as a judgment-objectivity, there belongs a "categorial" form.... Formal logic determines objects with pure universality by that form" (Husserl 1969, 110), where the categorial form is understood as an "ideal signification" (Husserl 1969, 46) by which one is able to intuit concepts.

This can further be seen when Husserl claims, both in *LI* and later, that logic is the theory of theory (Husserl 2001a, 152 and Husserl 1969, 91). For Husserl, a theory is a unified set of propositions or ideas that are either deductively or inductively related to one another (Husserl 2001a, 76). Rather than being focused on specific, material, and perceptual objects, they are focused on ideal, possible objects (Bernet 2002, 20). Botany is not focused on this plant in front of me, but rather plants in general, or all possible plants. Logic, as the theory of theory, is the theory about how all of the ideal objects and concepts of the theory tie together. It focuses on how one can move with deductive certainty or inductive probability from one to another. If I know that all roses photosynthesize, how am I able to move from that general statement to the claim that this rose photosynthesizes? If I know both that Socrates is a man and that all men are mortal, how can I move to the conclusion that Socrates is mortal? Logic, then, is the theory about the possibility of theory itself, through the interrelations of ideal entities, such as concepts (Husserl 2001a, 150).

Logic, as a theory of theory, is not interested in any relationship between concepts, but is specifically interested in the truth-relationship. It is interested in how one moves from one ideal entity to the next deductively such that it preserves the truth with certainty, or inductively such that it preserves the truth probabilistically.¹⁵ Thus, as Dummett points out, for Husserl, much like

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¹⁵ This would be distinct from generative relationships where one concept leads to the development of another or associative relationships where one idea leads to the thinking of another.

Frege, the laws of logic are the laws of truth (2001, xvii). More specifically, they are the laws of how ideal entities relate to one another with respect to truth.

All of the above, of course, has to be understood within the context of Husserl's phenomenological project. In *LI*, he is looking for the foundations of logic and turns to descriptions of experience to clarify the concepts involved (Husserl 1977c, 197). His reinterpretation of his teacher Brentano's use of intentionality becomes central to this project, where the ideal entities of logic and the truth-relations between them relate to an experiencing consciousness and can only be understood within the intentional structure of experience. One can only know of them and have theories if they appear to consciousness in some meaningful way. The intentional structure of consciousness becomes an essential aspect of any theory of theories, because it is one of the necessary conditions to any possible theory and because, for Husserl, ideal objects, like all intentional objects, are inextricably tied together with an experiencing consciousness (Husserl 2001b, 112). Thus, in order to understand Husserl's conception of logic fully, one needs to understand the nature of intentionality, ideal entities, and truth within Husserl's philosophy. The next three sections will seek to explain each of them in turn.

6.2 The Intentional Nature of Experience

For Husserl, all experience is an experience of something in a meaningful way (McIntyre and Smith 1989, 149). In other words, every form of experience, be it thought, perception, imagination, or anything else, is focused on some object and that object is present to consciousness in a meaningful way. In perceptual experience, I perceive things; I am conscious of the objects of my desk. I see my coffee mug, my book, and my pen. They are the objects of

my perception. In the same way, if I am writing and remember I left a kettle on the stove, the kettle is the object of my experience. If I am imagining a unicorn, my consciousness is directed at the unicorn. Each experience of the object is also a meaningful experience. I experience it in a certain way that is sensible to me, in a way that I can understand. I perceive my coffee mug, book, and pen as physically present to me (Husserl 2001b, 282). They are right there and usable. I understand that I can drink out of my mug, read my book, and write with my pen. I remember my stove; it is physically absent but is posited as part of a specific, past perception (Husserl 2014, 216). The unicorn is present as a fluid possibility which is absent and can be changed on a whim (Husserl 2005, 263).

There are two sides to each intentional experience: The side of the subject (which will, after *LI*, be coined the *noetic* side) and that of the intentional object (the *noematic* side) (Husserl 2014, 174). Husserl categorizes them as two moments of the same whole (Husserl 2001a, 193). They cannot be understood separately and must always be contextualized within their relationship to the whole. They can be grasped and described as separate, but necessary, parts of the whole (Husserl 2001b, 12). There can be no subject without an object nor an object without a subject, but one can understand the subject as a constituent of the unity of the whole of intentional consciousness and one can understand the object as another constituent of the same whole. The final part of the unity is the intentional act, which is the way that the two relate to one another. I, the subject, can experience my coffee mug, the object, in several different ways. I can perceive it, remember it, make plans for it in the future, and so forth.

The meaning that is given to the subject in intentional experience is determined by both the intentional object and the intentional act, or both from the thing the subject is relating to and the way that the subject relates to it. When I look at my mug (through the intentional act of

perception) I see that it is black with white writing because, within the realm of my intentional experience, the coffee mug is black with white writing. If I were to picture it in my imagination, or remember where I left it, it would still be black with white writing, because, to me, it is black with white writing. The intentional object has a set of qualities and in relating to it, those qualities are given to the subject (Husserl 2001a, 195). They are given in certain ways that are determined by the intentional act (Husserl 2001b, 116). In other words, as Shaun Gallagher and Dan Zahavi phrase it, "one is never conscious of an object *simpliciter* one is always conscience of an object in a particular way" (2008, 112). When I perceive my mug, it is given as physically present to me; when I imagine it, it is absent. There is nothing about the object that dictates it be seen, remembered, or imagined. In each case what the subject relates to is the same intentional object. The coffee mug I remember is the same object as the coffee mug I see. Rather, the mode of givenness is determined by the act that relates the subject and intentional object together.

Objects are often not given in isolation. Instead, they are given within a broader context (Husserl 2001b, 13). For example, when I look at my mug, it is within a broader horizon of other perceptual objects (Husserl 2014, 77). I see my mug as sitting on my desk next to my pen. I can shift my focus to the pen or the desk or the mess on my desk as a whole. I can make judgements based on this horizon about how the objects relate to each other. The coffee mug appears on top of the desk. The pen is slightly to the right. These relationships between the intentional objects are given in intentional experience by the objects because they present themselves in experience within a shared horizon.

It is worth noting that objects here are understood as intentional. When performing phenomenological analysis, both in early and later Husserl, the focus is on how objects appear as

part of meaningful conscious experience. ¹⁶ To do this, Husserl brackets metaphysical questions about how the object exist outside of the intentional structure. In investigating the structure of conscious experience, the relevant aspect of my coffee mug is how it appears in experience. Questions of its existence beyond this are, for Husserl, at best, simply not relevant, and, at worst, distort the investigation of intentional experience, which precedes any metaphysical theorizing (Zahavi 2002, 94).

While the intentional structure of conscious experience can be seen easily in acts towards everyday objects, the intentional objects can also be concepts, categories, or other ideal entities. They are grasped in categorial intuition (Husserl 2001b, 281). Categorial intuition is founded within the structure of intentional acts such as perceiving (Husserl 2001b, 282). For Husserl, when I have a perception, I am not merely experiencing sensuous data, but also the categories and concepts through which I make sense of the thing. I look at my coffee mug and see a coffee mug, not a gathering of black data-points that I can then abstract away from and name coffee mug. In perception and other intentional acts, "the overreaching unities of act[s] are rather always present, in which, as new objects the relationships of the parts become constituted" (Husserl 2001b, 287). The sensuous perception, or the sense data of the object, is part of a higher order unity that includes various categories. I not only get the sense data of the coffee mug, but I see it as black. I see the white writing as both white and writing. In my perception of the mug, I do not see the white sense data and later think "oh, that's writing," nor look at its color and add to the experience, "oh, that is white." The fact that there is white writing on a black mug is part of the whole of the experience. It is given within the intentional act, within intuition.

¹⁶ In his more mature writing this shows up as the phenomenological reduction, but it also frames his earlier investigations (Edie 1977, 140).

How does this work? For Husserl, in the act of perception one receives a sensuous intuition that founds a further subdividing intuition where a quality is noticed as a quality. This, for Husserl, is not a separate act, but rather a moment within the larger whole of the perception, where, according to Dieter Lohmar, "the subdividing acts are special intentions within the simple [intentional] act" (2002, 131). I have the act of perception and I see it as black from the sensuous qualities of the mug. They occur together where "they [are] bound together in a single act" (Husserl 2001b, 287). Then, once a quality is noticed as a quality, a third moment can occur: a synthetic intuition where the quality is related to a category (Lohmar 2002, 133). The sensuous blackness is related to the category "black." The way the white sense data is organized is related to "writing." The shape falls into "coffee mug."

An important implication of categorial intuition is that one has intuitions of universals. In the categorial intuition, one relates a particular to a category within intuition. The relationship is given in the whole of the perceptual act and these categories can be understood as universals. I perceive blackness in my mug, not merely a set of sense qualities. I can then shift my focus from the whole of the perception to a moment of it, and focus on the category being given in the perception. Doing so repeatedly will allow someone to perform what Husserl calls ideational abstraction, where one becomes "aware of the identity of the universal through the repeated performance of such acts upon a basis of several individual intuitions" (Husserl 2001b, 292). In doing this, the universal or idea "is brought to consciousness, and achieves *actual givenness*" (Husserl 2001b, 292). One actually intuits the ideal object. Thus, "talk of an intuition, and more precisely, of a perception of the universal is...well-justified" (Husserl 2001b, 292). Categories, concepts, and ideas can thus be intentional objects. These ideal entities and their relationships will be the foundation of logic.

6.3 Ideal Entities

As seen above, ideal entities, because of categorial intuition, can be experienced as intentional objects. These entities are not "real" in the sense that they are not perceptual, positional entities that are given materially and temporally in the perceptual act, but rather, they are ideal. They are not of a certain thing given as spatially existent. Rather, they are given as a general form to which positionally given entities can conform (Husserl 1969, 20). These ideal objects are not fictions or schemes added on to experience; rather, they are meaningful in their own right. For Husserl, "they will yield real meanings, meanings real as meanings" (Husserl 2001b, 69). For example, my mug is round. I have the category of "round" and can focus on it in experience. Roundness can become my intentional object. Whenever I see my mug, I see that it is round, or that it abides by the form of roundness. I can also look at my pen and see that it is round. They both participate in the same categorial form: roundness. The form of roundness, as an ideal entity, is experienced within the horizon of round things. It has "empty" material content, meaning that rather than having a definite material object (my mug) it applies across the spectrum of things that fill it in (Husserl 1969, 168). Roundness is intuited in my mug and my pen and what applies to roundness (such as not having corners) applies to all the things that "fill in" the category of roundness.

Ideal entities are also universals (Husserl 1977a, 37). They are super-temporal and apply to all things of their type (Bernet 2002, 20). Roundness is not limited to a certain set of objects or time span, but all objects that share the quality of roundness. They are able to be universal because they are given *a priori*. While I intuit categories in experience, the categories themselves are self-contained and given through the intuition of the ideal, not the empirical. The category of roundness is given in experience of objects and I learn it through multiple experiences of round

objects, but roundness itself is not bound to any particular experience. It is, rather, a self-contained concept that is synthetically given with and focused on the empirical object. The category roundness has a universal, *a priori* sense or definition that then applies or does not apply to the being in question, is or is not given alongside the present object. The category (in most cases) is given as self-apparent.¹⁷

The *a priori* universality of ideal entities is what allows Husserl to claim that his descriptive analyses of experience are distinct from empirical psychology (Husserl 2001b, 136). As David Woodruff Smith points out, Husserl claims that because he is looking at universal entities in their self-givenness and necessity, he is no longer dealing with the empirical mind, but the ideal structures of meaningful experience (2002, 53). The intentional structure of experience is not just empirically how the mind happens to work; instead, it is the necessary structure of experience, given the nature of intelligible experience. Any non-intentional experience, then, is not just a particular mind working differently, but, by definition, a totally different type of thing than intelligible experience. Perception is perspectival; if an experience is not perspectival, it is, by definition, not perception. What goes for the ideal structures of experience goes for other categories as well (in this respect, at least). If a thing has corners, it is not an empirical experience of a round object. Given the self-contained definition of roundness, the cornered thing cannot be given as round.

Ideal entities are not isolated beings, and instead relate to one another in certain ways.

Some concepts applying restrict the possibility of other concepts applying. For a thing to be

¹⁷ The border cases, where it is not self-apparent, are addressed in Husserl's mature works through eidetic variation.

round is for it not to be angular. For a thing to be round is for it to have a shape. To be perspectival is to not be non-perspectival. These relationships follow apodictically not only from the ideal entities themselves, but from the nature of ideal entities in general (Husserl 2019, 123). In other words, Husserl carries out a formal ontology, describing the form of the being of these ideal entities (Husserl 1969, 12).

To describe how ideal entities relate to one another, we will need to answer three questions: First, what does it mean for ideal objects to relate to one another? Second, how does one know there is an ideal relation? Third, what is it about ideal objects that make these relationships significant, with respect to logic?

First, Husserl describes ideal relations, like all relations of objects, as displaying "an identity form, all variation depending on the underlying acts" (Husserl 2001b, 297). For all relations of intentional objects, whether ideal or not, the act of relating implies that they are understood as having their own identity. To intuit that my coffee mug is on my desk requires me to understand the unity of my coffee mug and my desk. To understand the intentional relationship, I must understand the subject as a unity and the object as a unity. To relate bachelors to marriage, I need a unitary concept of what it is to be a bachelor and what it is to be married. Notice that the related concepts do not themselves have to be independent or to be able to stand on their own. The intending subject and intended object are moments that require each other; they need to have an identity that remains across various intentional acts. Thus, relationships between ideal objects are relationships between two separate unities of identity.

The relationships between ideal objects are also ideal (Husserl 2001b, 310). They are "empty" in the same way as ideal objects. If two concepts relate to one another, then no matter what material or sensuous content they have, the relation holds. Roundness applies to my

perceptual coffee mug, my imagined coffee mug, my perceived glass of water, and my remembered pen in the same way. A thing participating in the concept of "roundness" precludes it from having corners, and thus from one intuiting corners within the object, so that the concepts of round and corners are mutually exclusive within a given object. The relation can be stated as "if thing A is round then thing A does not have corners." In the same way that I intuit the concept of roundness from any given intentional object that fits into the scheme of roundness, the mutually exclusive relationship to "cornered" also applies. Ideal relations are thus universal, timeless and bound by *a priori* laws in the same way as universal objects. Likewise, they cannot be psychological.

One knows about the relations between ideal objects because they are given in experience through intuition (Husserl 2001b, 297). I can investigate the object of a categorial intuition, or the intuition of a category or other ideal object, just like I can investigate a perceptual object. I can perform imaginative variations on the base object through which I draw the categorial intuition to see if the categorial intuition remains the same (Husserl 2014, 126) or perform categorial abstractions across a variety of categorial intuitions (Husserl 2001b, 292). In these intuitions, I will see how the category or concept relates to others. I will see that if I imagine my mug with corners or see a square box, I can no longer intuit the category of round. If I see a married man, I cannot intuit that he is a bachelor. In the same way, I see that the category of human holds through variations of other concepts, such as Socrates, myself, man, woman, child, and so forth, showing that they are related to "human" insofar as they all can fall within the concept.

Formal logic follows from these relationships (Husserl 1969,66). It tracks along how categories and concepts relate to one another, with respect to apophantic judgments about these

objects. Since ideal objects share a formal way of being, they share a set of laws that govern how they act and relate. These laws can be described by the laws of logic. I cannot intuit a concept and its opposite from the same intentional act, thus I come to the law of noncontradiction.

6.4 The Nature of Truth

As seen above, the laws of formal logic and the nature of truth are intertwined. The laws of logic are derived from ideal and objective relationships. As such, they are ideal and objective. They also act as the laws of truth, where following them from one true statement leads to other true statements or insights. Thus, in order to come to a more complete understanding of Husserl's logic, one must have a working understanding of Husserl's theory of truth.

For Husserl, because the scope of his study is limited to the moments and unity of intentional experience, truth cannot be representational. Husserl is dealing with meanings in experience and the structure of experience, not the relationship between experience and an extra-experiential reality. Thus, he cannot understand truth as the relationship between a mental representation and the external world. This is because he does not understand one's relationship to objects as representational (one is really engaging with the object, not a mental image of the object) and because any relation to the extra-experiential world is already bracketed.

In his lecture series *Logic and General Theory of Science*, Husserl presents truth as polysemous, but whose three primary meanings are interrelated. The first is that a proposition is understood as "true provided it can display its legitimacy with [*Evidenz*]" (Husserl 2019, 242). The second is if a judgment aligns with an "intuitively given state-of-affairs" (Husserl 2019, 242) and the third is that the judgment can obtain within the state-of-affairs (Husserl 2019, 243). The shared themes of these definitions of truth can shed light on the concept of truth in Husserl's

work more broadly. These judgments are often understood propositionally and thus can be understood as the relationship between a proposition (such as "my coffee mug is black") and a state-of-affairs (the blackness of my coffee mug).

A state-of-affairs, though, is not understood in the sense of how the real world actually is. Rather, the state-of-affairs is how beings are present to consciousness within the intentional structure (Husserl 2019, 88). An appeal to a state-of-affairs is thus an appeal to givenness in experience, not the arrangement of a real world beyond the bounds of one's experience or that one gets to through certain methods or modes of engagement. The state-of-affairs is not the "real world" behind phenomenal experience, but what is given within phenomenal experience.

In each of these definitions, a key marker of truth is that it is given self-evidently. Since there is no way to appeal to evidence beyond experience, the truth must be given within the intentional experience (Husserl 2001b, 263). This is possible because truth is a category and thus can be given through categorial intuition (Husserl 2001b, 264). What does it mean for the truth to be self-evident? It is most apparent in *a priori* truth claims, where the truth of what is stated is self-apparent in the statement. When I claim "all bachelors are unmarried" it is given within the definition of bachelor that they are unmarried. Thus, if I understand the claim, the truth is given with it. One knows it is true because it is given as true; it has inward evidence that serves as the best mark of correctness (Husserl 2001a, 17).

Self-evidence is not only for analytic truths and logical axioms, but also is given with truth claims about objects seen in perception, memory, or the imagination. If I judge that my coffee mug is black and then see that my coffee mug is black, the intuition of the mug is fulfilled and I feel certainty that the judgment is true. I do not simply intuit the mug as black, but rather

the intuition presents the blackness as fulfilling my judgment as well (Husserl 2001b, 251). The categorial judgment is fulfilled (Husserl 2001b, 264).

Self-evidence is also a marker of truth when moving from judgment to judgment. When making judgments based on axioms or earlier knowledge the movement from one true judgment to another true judgment is given with certainty, where "propositions that are immediate objects of insight lead, in evident elementary arguments, to propositions that become evident therewith as consequent truths" (Husserl 1969, 42). This will play an important role in understanding formal logic, which will be seen in the following section. For now, though, it shows that self-evidence extends to indirect judgements about things that are not given directly in consciousness.

The second important aspect of truth, for Husserl, is that it reflects ideal relationships. He claims that self-evidence is "the ideal relationship which obtains in the unity of coincidence... among the epistemic essences of the coinciding acts" (Husserl 2001b, 264). What is given as true is given self-evidently when what is essential about the given judgment is fulfilled in intuition. The essences are ideal (Husserl 2001b, 264). This is obvious in the categorial part of the judgment, where, as seen above, the category in the judgment is ideal. Thus, true analytic judgments, such as "all bachelors are unmarried" are clearly ideal because they involve two ideal categories. This also applies for synthetic judgments about "materially" given intentional objects. When I claim "my coffee mug is black" I am claiming that the ideal category of blackness does not only apply to this given presentation of my coffee mug in perception, but to my coffee mug in general, across all variations and presentations of it. The truth is given as self-evident at the coincidence of the category and the ideal version of the coffee mug. It is given as a universal judgment about the mug, not as a contingent judgment about a specific intentional act oriented

towards the mug. The ideal nature of truth, while showing up in the *Logical Investigations*, continues throughout Husserl's work. ¹⁸

The third aspect of truth is that truth claims intentionally relate to some object or state-of-affairs. Husserl claims that "the notion of the relationship of self-evidence yields us truth as the rightness of our intention...its adequacy to its true object, or the rightness of the intention's epistemic essence in specie" (Husserl 2001b, 264). The truth relation is an intentional relationship, where the judgment-act is fulfilled in the intentional object. It thus relates to a state-of-affairs, be it a perceptual state-of-affairs, a categorial one, or one given in any other mode of consciousness. The judgment that all bachelors are unmarried is about bachelors and the judgment that my coffee mug is black is about my coffee mug. The state-of-affairs here is not brute reality and truth claims are not compared to something external and (metaphysically) real, but rather is, as Zahavi explains "a system of validity and meaning which needs subjectivity" (2010, 80). It is a system of fulfilled intuitions within intentional experience.

Finally, the truth is not "disordered chaos, but is dominated and unified by law" (Husserl 2001a, 18). Truths are not arbitrary or random, but instead are bound and constrained by laws. These laws are ideal and necessary (Husserl 2001b, 12). They are found in one's intentional relations to the objects of experience and furthermore, are set forth by the ideal entities that are intended. The judgment that my coffee mug is black is true because of the blackness of the intentional coffee mug. I have the empty concept "black" and when I see the mug, the concept is materially fulfilled. That all bachelors are unmarried is true because of the nature of bachelors. The mortality of Socrates follows from the facts that all men are mortal and that Socrates is a

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¹⁸ For example, see Husserl's *Ideas I* (2014, 11), where the truths of pure essences are the most universal kinds of truths and *The Crisis of European Sciences and Transcendental Philosophy* (Husserl 1970, 153).

man because of the nature of Socrates, men, and mortality. In other words, the truth of the judgment is present in things and bound by universal, ideal laws and the concepts are applied and fulfilled in intentional experience.

Husserl's distinction between what is true and what is real is relevant here as well. To claim a judgment about a thing is true is not the same as to claim that a thing is real (Husserl 2019, 243). The real, for Husserl, is only one mode of givenness, given originally and primarily in the intentional act of perception (Husserl 2014, 194). The real is given spatially and temporally through the senses and is understood as materially existent (Lohmar 2002, 126). Not all things that are given to consciousness are given within this mode of presentation. Truth claims can easily be about non-real entities. I can have imaginary objects or entertain categories and concepts as ideal entities. Thus, I can make truth judgments about them. These judgments are just as true as judgments about perceptual, real objects. Truth judgments about fictional characters, numbers, and roundness are structurally still truth judgments, even if the object is not perceptually real.

On its face, this account seems relativistic, where Husserl's reliance on self-evidence and the categorial intuition does not account for how intentional experience applies rightly to a concept. It seems, further, that this would undermine Husserl's understanding of logic because, as seen previously, one of his fundamental goals was overcoming relativistic views of logic. Husserl objects to charges of relativism and, according to David Carr, maintains that phenomenology leads to "objective, non-relative truths" (1985, 19).

For Husserl, it must be kept in mind that phenomenology occurs behind the reduction, which Zahavi sums up as meaning that when one is dealing with how concepts apply to intuition, one needs to keep in mind that concepts themselves need to be understood within a

phenomenological framework (2019, 32). This means that concepts and categories need to be understood as empty, ideal entities that are given in and can be fulfilled by intuition. They are not external things that our intentional experience must rightly map onto, but part of our broader intentional horizons. To have the right understanding of a concept is to understand what must be given in experience for that concept to be fulfilled.

Due to how concepts are fulfilled in intuition, we can make universal claims about concepts. When we make a universal claim, the claim is that it must always be the case that a certain concept has a certain essential feature because if it lacked that feature it would no longer be fulfilled in intuition as an instance of the concept. For example, an essential feature of triangles is that they have three sides. If I see a four-sided figure, the concept of triangle would not be fulfilled within my intuition, but rather the concept of quadrilateral would be fulfilled. Thus, for Husserl, we find universal claims in self-evidence and logic is founded on these universal, non-relativistic, claims.

6.5 A More Complete Look at Husserl's Logic

For Husserl, the laws of formal logic are the laws of truth-relations that set the terms for theory in general. Truth, though, is not representational nor based on the relations of entities occupying a third realm, but rather is when judgment-acts are fulfilled in intentional experience with self-evidence. Furthermore, since true judgments are ideal relationships, the laws of logic are also ideal. They relate the ideal entities to one another and show how the ideal categories relate to one another.

The concepts and categories of logic are "rooted in the ideal essences of meanings as such" (Husserl 2001b, 74). The meanings are given in intentional experience, in the relation between the subject moment and object moment. Thus, as Paul Ricœur points out in his commentary on *Ideas I*, "'Noetic' conditions are distinguished from the purely logical conditions which are grounded in the contents (*Inhalt*) of knowledge" (1996, 80), which means, as Mohanty claims, that according to Husserl they are the ideal contents of the intentional object (1976, xvii). This means that not only are the categories of logic (such as negation and identity) ideal, they are derived from the essences of the objects themselves. I know that A=A and I cannot have both A and ~A because of how these judgments are fulfilled in the intuitions of the objects themselves.

The laws of logic are also given as self-evidently true to anyone who understands the categories of logic (Husserl 2001a, 86). Anyone who understands identity will have identity judgments given as true or as fulfilled. The laws are universal because anyone, regardless of background or psychology, on the condition of having meaningful experience, will have these laws presented as self-evident. This is what it means for the laws of logic to be ideal. They then bind judgment-acts and how one moves from judgment-act to judgment-act while maintaining the truth-character of these acts, universally (Husserl 1969, 95).

Self-evidence also tracks along with the movements from statement to statement within a logical system. Husserl claims that "It is understandable that the being decided as the consequence in the final judgments from the premises, which is simultaneously given with insight, are the consequences that have to be truths, if the premises themselves were revealed in insights" (Husserl 1977b, 43). ¹⁹ When one follows the laws of formal logic, one is making

¹⁹ My translation.

movements from one proposition to the next according to categorial judgments that are self-evidently true. The conclusion is then given as true as well, because the conclusion was given through self-evident logical movements and is then given as self-evidently following from the premises. If I believe that Socrates is a man, and all men are mortal, then the inclusion of Socrates within the category of mortal beings is self-evident based on the fact that he is a man and all men are included in the category of mortal beings. Thus I "see" that Socrates is mortal.

All these laws are understood within the realm of intentional experience. They are given to a subject as a moment of the overall whole of intentionality. Particularly, they are understood through categorial intuition. Since they are categorial, they are materially empty, applying across, and being fulfilled in, particular experiences to be understood as universally valid. Furthermore, the self-evidence and fulfillment that signify truth are given in experience as well. For concepts or categories to be fulfilled in the manner of truth, one must be within the intentional structure. Fulfillment occurs within an intentional act, though it is the case of a universal, ideal entity being fulfilled. This is not simply a psychological fact, that in order for a truth to be seen one must be there to see it, but rather the necessary structure of any given truth-judgement. For a truth-judgment to be possible, it must be within the intentional structure, no matter the psychology of those involved. It is an ideal condition of intelligibility of the judgment, not of a particular being making the judgment. What makes the judgment hold and be fulfilled is then, necessarily, part of the intentional structure, but it is fulfilled due to the nature of the intentional object.

As noted, the nature of ideal entities separates Husserl's logic from psychologism. This is in two ways. First, the intentional relationship is ideal, describing a condition for the possibility of intelligible experience. It is not a description of human psychology as an empirical science of

a particular species of being, but rather, according to Husserl, uses particular experiences to come to an understanding of what intelligible experience, as intelligible experience, must be. Husserl is not merely doing descriptive psychology, but making universal claims about the nature of intelligible experience. Thus, he is not making claims about judgment-acts for human beings, but for all possible and imaginable judgment-acts.

Second, the categories that are the intentional objects of categorial intuition, which include the categories of logic, are ideal entities. As ideal entities, categories are universal rather than bound to particular experiences. This universality applies to both sides of the subject-object relation. Identity, as ideal, is universal insofar as it can be fulfilled in any particular experience that fulfills the category and gives it in categorial intuition. It is also universal insofar as it is the same across all subjects who understand what it means (Husserl 2001a, 79). Since it is ideal, to understand identity is to have the categorial intuition of identity fulfilled. If one were to understand identity differently, it is because one is using the term identity to describe a different categorial intuition, not because identity is not universal and ideal.

Formal logic, for Husserl, is the study of these forms of judgments that are self-evidently given to take one from one true judgment to the next. They are based on and derived from categories given in categorial intuition that relate concepts to one another. As such, they are ideal, applying across all possible fulfillments of those acts within intuition.

6.6 The Introduction of Transcendental Logic

Husserl, in his descriptions of formal logic and in the way he founds it on categorial intuitions given in intentional experience, is making universal claims based on individual, subjective experience. How does he justify doing so? It is not through abstraction in the empiricist sense (Husserl 2001b, 292). While he admits that there is a form of abstraction in categorial intuition, where one notices the experiences where the same category is given and comes to know said category, this abstraction does not get him to universal judgments, but still is limited to judgments for a particular subject. How does one go from describing one's own subjectivity to prescribing how all subjects must be? Furthermore, there is no way for judgments to be anything but subjective. Husserl claims that "there is no conceivable place where the life of consciousness is broken through, or could be broken through, and we might come upon a transcendency that possibly had any sense other than that of an intentional unity making its appearance in the subjectivity itself of consciousness" (Husserl 1969, 236). There is no way to step outside of one's conscious, intentional experience and look at the totality of all subjects' experiences to make universal necessary claims.

Husserl, instead, moves from his subjective descriptions, reflections, and intentions to universal claims through transcendental arguments. This is realized in his more mature philosophy.²⁰ In transcendental reason, one starts with one's own subjectivity and then moves to make universal claims based on the meanings given in one's experience through investigating the conditions for the possibility of the experience of those meanings (Husserl 1969, 236).

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²⁰ See *FTL* (Husserl 1969) SS 92 and the introductions to *Ideas I* (Husserl 2014) and the *Cartesian Meditations* (Husserl 1970).

Transcendental reason is universal because once the inquiry moves to the conditions for the possibility of an experience, the focus changes away from the particularities of the experience to the underlying structures themselves (Barua 2007, 2). It no longer is a question of "how am I structured such that I am experiencing X?" Instead, the question becomes "how must one be structured such that one can experience X?" In other words, in inquiring into the necessary structure, the question changes from a particular inquiry about a particular empirical situation that I am in to a structural inquiry into how one must be in order to occupy the given situation. The question becomes "what must anyone who is capable of occupying this situation be?" In this move, it becomes universal. It is no longer a question of my own particular experience, but of what any being capable of this experience must be like. Thus, the claims about my subjective experience become claims about any subject that is capable of like experiences.

Thus, formal logic, as built on the meanings given in categorial intuition, follows from what is discovered through transcendental reason. It gains its universality because the structures that ground it are necessary for any being to be a subject in the sense that I am a subject. In order to have intelligible experiences in a way that is identifiable as an intelligible experience, I must have meaningful experience structured intentionally and which give categorial intuition.

Otherwise, I would not have intelligible experience in the way that it is understood by Husserl. I would be a different sort of thing with different sorts of experiences.

6.7 Husserl and the Themes of Psychologism

Now that Husserl's critique of psychologism (Chapter 4) and his alternative theory of logic have been shown, it is now time to turn to how Husserl's philosophy relates to the general themes of psychologism (as shown in Chapter 3). The four themes that will be investigated here are the representational theory of psychology, the role of introspection, the prioritization of epistemology, and the assumption of a subject-object dichotomy.

The first theme of psychologism is a representational theory of the mind, where one's phenomenal experience is not of the objects in the world themselves but of images or copies of the objects mediated by the senses or the categories of the mind. Husserl rejects representational psychology. He does so on phenomenological grounds, in two ways. First, representation, particularly the empiricist formulations, fails descriptively because it tries to reduce experience to sense impressions. Second, he argues that representational psychology is making metaphysical claims about the nature of the (real) mind that cover over the actual nature and objects of experience.

The first criticism, that representational psychology fails to accurately describe and account for phenomenal experience, is because representational psychology "aims at reducing everything to 'impressions' (sensations), and associative concatenations of 'ideas' (images), the enfeebled shadows of 'impressions'" (Husserl 2001a, 291). Here Husserl is taking aim at Hume's representational theory and its empiricist followers, but the critique applies to theories that share the core tenets of reducing perception to internal copies of sensations and maintaining that ideas are copies derived from prior copies that eventually bottom out in the internal or external perception.

Representation also fails to account for the available phenomena. Ideas (which would include concepts and categories) cannot be boiled down to sensations because they are given alongside sensation in experience. When I look at my coffee mug, I understand that it is black and round within the perception of the mug. The categories are given in intuition. I have categorial intuitions. But if I have these categorial intuitions, they are not reducible to senseimpressions because they are co-given, rather than one being abstracted from the other (Husserl 2001b, 280). If, in phenomenal experience, ideas are not reducible to sense impressions, then one must either reject phenomenal experience or this form of representationalism. Since empiricist representational psychology is supposed to be based on careful introspection and observation of one's experience, one cannot be an empiricist and reject what is seen in experience. Thus, the empiricist cannot reject the phenomenal evidence that categories are given alongside sensations while remaining an empiricist. It is a contradiction that cannot be maintained and thus representation ought to be rejected. Furthermore, I experience my coffee mug as my coffee mug in perception, not a representation of it. It is given in a particular, meaningful way (as real in perception, as potential in imagination, as real-but-absent in memory, etc.). The 'as' within phenomenal experience is not present in a representational formulation of experience, beyond appeals to intensity. Therefore, because neither ideas nor the nature of intentional acts, which are given in experience, can be reduced to sensations in the way representational psychology claims, one ought to reject representational psychology.

The second reason to reject representational psychology is because it is making metaphysical claims based on what Husserl considers to be a naïve realism. For Husserl, when describing experience and deriving the nature and structure of experience from these descriptions, what one is dealing with are meanings that are immanent to the intentional structure

of experience and one cannot step outside of this structure to talk about what the world is outside of the intentional structure. Thus, one cannot make claims about the world as such, but only of the world as experienced. To do so, to properly look at the way the world shows up as meaningful, one needs to bracket one's metaphysical assumptions (Husserl 2014,53). In his more mature philosophy, this will become the phenomenological reduction (Husserl 2014, 55). The naïve realism seen in my normal engagement with the world is part of my experience and needs to be investigated not as a metaphysical claim about the world, but rather as an aspect of experience (Butler 2016, 2040). Representational psychology, though, is metaphysically naïve. It takes what is given as real beyond the intentional structure and uses it to make claims not about the ideal structure of experience, but about the nature of a particular thing in nature, the human mind.

The second relevant theme of psychologism is its use of introspection. Given the prominent role of reflection in Husserl's philosophy, at first glance, it seems like he shares this theme with them. On closer inspection, though, Husserl's reflection is distinct from the psychologicists' introspection. First, empiricist introspection relies on a methodological distinction between internal and external experience and often relies on a metaphysical distinction between the two. Internal experience is accessed differently than external experience. While Husserl will sometimes use the language of internal and external experience, it is not a fundamental difference and all experience falls within the same intentional structure. What is given in the modes of consciousness that are often taken as internal, such as the imagination, is structurally intentional and dealing with objects that are simply presented in a different form.

Furthermore, introspection, for the psychologicists, is used to make metaphysical claims.

When I introspect, I am reflecting on experience and making claims about the real existence and

functioning of a particular entity, my mind. In introspection, for the empiricists, I am reflecting on my experience and saying "this is how my mind works" or making a broader abstraction and saying "this is how the human mind works." On the other hand, Husserl, when reflecting, is not making psychological claims about the human mind, but ideal consciousness. He is not saying, "based on my reflections, human minds work this way" but rather "based on my reflections, conscious experience, in general, must be structured this way." Both Husserl and the psychologicists reflect on experience to make their claims, sharing that aspect of introspection, but they use it to make different claims and come to their reflections with different assumptions about how introspection informs metaphysical claims about the world.

With Husserl's move away from representation and metaphysical commitments to the real, he fundamentally transforms the epistemological task. It is no longer, "how do I know if my representation corresponds with what is real?" The question becomes about the sort of evidence with which an intentional object is given. Is it given as spatial? Is it given as shared? Do I know it apodictically, like the laws of logic, or with probability, like the laws of physics? Many of the central questions of Husserl's phenomenology are thus epistemological questions. They are questions about what constitutes knowledge, the various forms of knowledge, and how one comes to know things. According to Nela Mircica, Husserl's phenomenology transforms the epistemic task to coming "to an understanding of *how* objective knowledge is possible" (2011, 186), where these questions precede any metaphysical concerns (Zahavi 2002, 94). Furthermore, the questions of givenness and knowledge precede any question of the being and structure of entities. These questions are also primarily about theoretical forms of knowledge; they are about how I know things from a theoretical standpoint. I analyze my experience to know how to define

the essence of an object or structure of an intentional act. Thus, as Richard Schacht notes, "Husserlian phenomenology is first of all an epistemological enterprise" (1972, 295).

Logic falls broadly within the realm of the epistemic. The laws of logic are given apodictically, and their truth and universality follow from the way they are given. To understand the grounds of logic, one needs to understand epistemic categories. Furthermore, logic, as a tool or technology, is used to ensure correct thinking, which is based on a more fundamental science of what is given self-evidently in experience (Husserl 2001a, 26). To come to what the laws of logic are and what true claims are, one first needs to understand how evidence is given and how the idea of knowledge fits within the intentional structure.

Finally, while laying the groundwork for moving past the subject-object dichotomy, Husserl still makes use of it. He relies on the subject-object dichotomy because he postulates the two sides as self-contained moments within the intentional structure. While they both require the other and the broader structure of intentionality, they can each be understood in their own terms. The subject is always oriented towards an object, but there is still an ego that subsists through changing intentional acts and relationships. 21 At the same time, the object is given as transcending the ego (Husserl 2014, 71). While the intentional object can only be understood as an object meaningfully given to a subject, thus making the subject necessary to the object, it is still held out as separate from the subject as the thing given. Furthermore, the distinction is important to Husserl's understanding of logic because, as seen above, the laws of logic are grounded in the ideal content of experience, which stands on the object side of the relationship. Thus, through his phenomenological philosophy, Husserl developed an objective theory of

²¹ Though the form the ego takes varies throughout his philosophy.

meaning, often framed against psychologism's subjectivism, and his theory of logic too was objective (Mohanty 1974, 55).

While still assuming the subject-object dichotomy, Husserl begins a movement beyond it. He understands the two sides as moments within a wider whole. They are each part of the intentional whole that is necessary for meaningful experience. There are not independently existing and subsisting intentional objects and anything beyond the intentional object is beyond the scope of what is meaningfully given. As Dermot Moran points out, for Husserl claims about them are idealizations based on the intentional object (2012, 68). These claims ultimately boil down to, and are founded on, the intentional object, which is bound to an intending subject. At the same time, any subjectivity is bound to intentional objects. It cannot exist on its own, because to be a subject is to have an object.

6.8 Isn't this just Psychologism 2.0?

Despite Husserl's attack on psychologism and his lifelong antipathy to it, many of his critics claimed that he himself was putting forward a psychologistic philosophy. ²² Given his reliance on the structure of experience and how he relates any object or piece of objective knowledge to a knowing subject, it is not hard to understand these arguments. Since objects are always intentional and moments of the larger structural whole of experience, would not logic, as set forth by a categorial objects, be reliant on the structure of human experience? Thus, would

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²² See *Psychologism: A Case Study in the Sociology of Philosophical Knowledge* (Kusch 1995, 96-100) for a brief rundown of these claims.

logic not be reliant on human psychology in a similar manner to the Neo-Kantian psychologicists?

In many ways, this is an understandable objection, given that, according to Mohanty, Husserl was trying to find a middle path between psychologism and Platonism, where he could engage with ideal entities without a third realm (1976, 1). But the elimination of the third realm and the reduction of ideal entities to the psychological realm, and thus psychologistic philosophy, misses two major themes in Husserl's philosophy that distance him from psychologism. The first is the bracketing of metaphysics in the phenomenological reduction and the second is the generalizing nature of his transcendental phenomenology.

As noted above, in order to investigate the meanings given in experience, Husserl sought to bracket his metaphysical commitments and avoided making claims about the nature of existence or what is real. Psychologism, though, is the claim that logic is reliant on the human psychological constitution. These claims, then, are metaphysical claims that Husserl brackets. Furthermore, they use methodologies to come to conclusions about the human mind, such as introspection, that not only make illegitimate—according to Husserl—metaphysical claims, but also presuppose flawed metaphysical claims about the nature of the human mind, such as the representational structure and a strong distinction between the internal and the external. Husserl either brackets or rejects these assumptions. Thus, the metaphysical assumptions and methodologies that make psychology recognizable as psychology are not present in his philosophy. He is not doing the psychology implicit in psychologism.

Furthermore, Husserl, in his idealizing and transcendental moves, is claiming not to look at the conditions for and structures of the meaning in human experience, as Fries was shown to be doing, but rather of meaning in general. Because his phenomenological studies are idealized

to apply to experience, meaning, and objects in general, not to particular instances of these, he is able to broaden his claims to meaningful experience as such, not simply human intelligibility. Any meaningful experience, regardless of the individual psychology of the experiencer, must follow these conditions and be structured in this way, or else it is not having a meaningful experience in the way that Husserl understands meaningfulness. Not to have this structure to one's experience would be to not have the same kind of experience. This means that the intentional structure that is necessary to logical consciousness and ideal, logical objects is not a psychological fact, but rather an ideal structure that is neither reliant on any given psychology nor a natural (metaphysical) law.

The final reason that Husserl is not psychologizing logic is that the moment of the intentional structure that dictates the laws of logic is the objective side of the relationship. The laws of logic are given in self-evidence and concern the meaningfulness of what is given (Mohanty 1976, 103). In other words, the laws of logic come from the objective side of the subject-object relationship. The law of noncontradiction is due not to my inability to (psychologically) grasp a thing as both true and not true, but instead due to the categorial intuited objects of true and untrue being mutually exclusive. The law of noncontradiction is given with the objects. Contrast this with Fries' interpretation of Kant, where through the careful analysis of the objects of thought one can come to know the categories that the mind uses to construct phenomenal experience. One can learn the laws of logic, according to Fries, from studying objects and finding out how they must be constructed according to the categories of the mind. While one learns the laws from studying the objective side of the subject-object relationship, the laws themselves exist due to how the mind constructs experience. They are dependent on the

constitution of the subject side of the relationship. Husserl, however, postulates the laws of logic as part of what is given, implied by the objects themselves.

6.9 Logicism's Branching Paths

While Frege and Husserl levied many of the same criticisms against psychologism, their own understanding of logic took very different paths. Though they shared many themes and ideas in common, the two diverged dramatically when it came to the ontological status of logical entities and the nature of concepts and categories. Frege relied on a third realm, where logical entities were understood to exist independently of any thinker, committing him to a modern form of Platonism (Hale 1984, 238). Frege's Platonism committed him to the existence of logical entities as mind-independent entities that, while not material, were real and existed in an accessible, eternal realm of ideas. Truth came from this realm as either a relationship between its entities or as another entity within the third realm. The laws of logic, according to Frege, are determined by the relationships between the entities of the third realm. Working out the relationships of these entities, language, the mind, and the material world would become the basis of analytic philosophy in the early 20th century, leading many to consider Frege among the founders of analytic philosophy (Kenny 1995, 210; Haaparanta and Hintikka 1986, 3).

On the other hand, Husserl looked to the intentional structure of experience and analyzed what he believed was given in it, coming to a phenomenological understanding of logical entities. He believed that they were given in categorial intuition. Truth, in its most fundamental sense, is given in the self-evident experience of intentional objects, as are the laws of logic.

These laws are ideal entities, but they do not occupy some third realm. Instead, they are given in

experience as categories and laws that apply across a multitude of experiences. They are not things found externally to the experiencer, but from the objective side of the intentional whole and operate as the conditions for meaningful experience, meaning that any being with experiences that can be understood as meaningful must come to these categories from experience. Critiques and developments of Husserl and his students' philosophies would become central to continental philosophy (Steinbeck 1997, 201).

From very similar critiques, two radically different movements of philosophy were kicked off, though it is important to note that the continental-analytic divide followed these two philosophers and their students. Frege, Husserl, and those who studied with them came to develop these divergent streams of thought within an atmosphere of engagement with those who would be cast on the opposite side of the divide, as well as the preceding schools of thought that would be marginalized by the movements they started (Friedman 2000, xi).

Martin Heidegger was one of the most important philosophers to rise from this milieu and move beyond it. He would move through Husserl's phenomenological project to a radical new understanding of ontology, human existence, and the nature of logic. Over the course of Part 3, I will investigate the way Heidegger engages with and critiques Husserl early in his career (Chapter 7) and then broaden the scope to his engagement with Frege and his descendants (Chapter 8) and psychologism (Chapter 9) by both looking at his writings on them and extending his critiques of Husserl to the two other schools of thought, where they apply.

Part III:

Heidegger and his Response to the Psychologism Debate

Chapter 7: Heidegger's Critique of Husserl

Now that both sides of the psychologism debate have been established, where the psychologicists think that logic is founded on the empirically understood mind and the logicist believe that it is founded in the ideal objects it studies, I will turn to Heidegger's critique of each side of the debate and of the debate as a whole. I will start with Heidegger's critique of Husserl's logicism in this chapter and Frege's in the next. Then I will move to his critique of psychologism (Chapter 9).

I will begin to show Heidegger's critique of Husserl with a discussion of the two interrelated disagreements about the purpose and method of phenomenology (7.1 and 7.2). This discussion will lead to Heidegger's critique of how Husserl, and the wider philosophical tradition, illegitimately prioritize theoretical knowledge and epistemology (7.3). In Section 7.4, I will explain Heidegger's critique of Husserl's concept of intentionality, which, as seen in Chapter 6, is central to Husserl's understanding of logic. The chapter will finish with Heidegger's explicit critique of Husserl's understanding of logic.

7.1 The Purpose of Phenomenology

One of the driving forces of Husserl and Heidegger's split was their fundamental disagreement over the purpose and role of phenomenology.²³ While Husserl saw phenomenology as the first science that grounded all other sciences (Husserl 2001a, 56), Heidegger, leading up to and through the publication of *Being and Time*, thought of it as an entry point to fundamental ontology (Sheehan 1997b, 47). In the following section, I will first explain Husserl's position and then give Heidegger's critique of it. I will finish the section with an explanation of Heidegger's understanding of the purpose of phenomenology.

Husserl believed that the role of phenomenology was to provide the epistemological foundation for all other sciences. This, of course, as Gabriella Farina notes, includes providing the "sources from which the fundamental concepts and ideal laws of pure logic derive" (2014, 52). Thus, we are to find the grounds of logic through phenomenology rather than empirical psychology. According to Robert Sokolowski, Husserl thought that phenomenology must be the first science (2010, 6). This leads to two questions. First, why is phenomenology the foundation of all the other sciences? Second, why is this phenomenology's primary role? I will answer each of these questions in turn.

Husserl sees three main ways that the sciences need a phenomenological foundation.

First, the sciences do not choose the types of beings that they study, often called their regional

²³ This, of course, is not their only point of disagreement. They also disagreed about method (as will be explored in 7.2), whether or not phenomenology ought to be taken in a transcendental or hermeneutic direction (Heidegger's hermeneutic understanding of philosophy will be explored in Chapter 10) and Husserl's prioritization of the pure transcendental ego over a historical and engaged ego (the critique will be touched on in 7.3 and Heidegger's understanding of human existence will be given in Chapter 10), which culminated in disagreements about the nature of phenomenology itself and their ultimate philosophical falling out. Their disagreement over the purpose of phenomenology stands as an entry point into these further disagreements within the context of the psychologism debate and which will, in turn, act as a launching point into Heidegger's philosophy more broadly.

ontology, and instead follow from a pre-selected set of beings (Husserl 2019, 419). For example, chemistry studies the interactions of different types of atomic matter, biology studies living things, and anthropology studies human societies. The methods of these sciences are developed in order to better understand the things they study. Importantly, according to Husserl, these methods are developed after the regional ontology has been selected. The sciences develop after a categorization of beings has been carried out (Husserl 2019, 416). If the organization and development of the sciences are to stand on something other than an arbitrary starting point, there must be a justification for the division of the regional ontologies.

Phenomenology, according to Husserl, can provide these justifications. Specifically, phenomenology deals with objects in general, or the field of objects that founds all the regional ontologies on which the sciences are then built (Stroker 2013, 14). In other words, the regional ontologies of chemistry, biology, anthropology, and so on are built out of already understood intentional objects that we already understand as grouped together in one way or another. To understand that living beings should be grouped together and studied by biology, I already have a concept of living beings. I understand them as distinct from non-living beings. I come to these, often pre-theoretical, understandings in my lived, everyday experience (Husserl 1970, 126). I then use these understandings from experience to form the regional ontologies of the sciences. Husserl thinks that phenomenology, as an analysis of the structures of lived experience and the ways things are meaningfully given, can shed light on both the process of how we go from the objects of lived experience to the regional ontologies of the sciences²⁴ and the essential features of the regional ontologies themselves (Husserl 2019, 416). While going into the specifics of how

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²⁴ As seen in Husserl's discussion of Nature in Appendix XVIII of *Logic and General Theory of Science* (Husserl 2019).

phenomenology founds specific regional ontologies is beyond the scope of this chapter, Husserl claims that it provided the justification for the regional ontologies of the other sciences and thus was necessary as a first science to ground the other sciences.

The second reason that phenomenology is needed to found the sciences is that the sciences uncritically go from lived experiences (such as what is going on in the lab) to laws and end up assuming a naïve objectivism, and according to Moran, unwittingly take "a stance that does not know it is a stance" (2013, 105). As seen in Chapter 6, Husserl believes that the empirical explanations for the move from lived experience to the universal laws of nature fail to accurately describe the process. Thus, a phenomenological explanation is needed because phenomenology investigates and explains lived experiences themselves while bracketing the natural attitude. By investigating experience, we can set the foundations that the sciences lack, and phenomenological reflection, by avoiding the presuppositions of naïve realism and reflecting on experience itself, gives us a way to do this investigation. Without this explanation, the move from the individual experience of the scientist to the laws of nature will be unjustified.

Husserl thinks phenomenology can offer this explanation. Instead of relying on empirical abstraction, Husserl believes that the sciences idealize experience and then make their theories from these idealizations (Husserl 1970, 313). When I perform an experiment and then make claims about the laws of nature based on the experience of performing the experiment, I am idealizing the actual, individual experiences (this weight fell to the earth, this metal sample corroded, this mouse got sick), transforming them into ideal forms that apply to all empirically fulfilled situations that share its form (every similar weight will fall to the earth, every similar piece of metal will corrode, every mouse with the same injection will get sick). In other words, I am transforming the object from an empirical, individual object to an ideal object that applies

categorially to all situations that share the form. This conclusion comes from an analysis of the structure of scientific experience. It comes from phenomenological analysis. Once again, the details and exact justifications are beyond the scope of this chapter, but this shows that Husserl thought that phenomenology provides an explanation for how one moves from individual experience to scientific claims, which is a necessary move in scientific practice. This implies that phenomenology, once again, provides necessary justifications for the other sciences, according to Husserl.

Finally, as Matthew Ratcliffe notes, the other sciences rely on the world and the things within it being given meaningfully to the scientists, while phenomenology studies how the meaning that the scientists rely on is itself given (2013, 73). In other words, when someone pursues a science, he is doing so via experiences that he can make sense of without acknowledging how the intelligibility of the experience itself affects the science. The meaningfulness is a necessary condition for carrying out scientific and phenomenological investigations. Studying how the experiences are meaningful and how the objects are meaningfully given can provide the foundations for the sciences that simply assume the meaningfulness of experience. Thus, Husserl claims that in phenomenology "we take our point of departure from what lies in advance of all standpoints: the entire realm of what is intuitively given, even prior to all theoretical thinking itself' (Husserl 2014, 38). In other words, the sciences already assume the meaningful way that their contents are given, which itself is the starting point for phenomenology. Furthermore, even when carrying out scientific study, the meaningful way that entities are given is "still functioning for [the scientist] ... as the source of self-evidence, the source of verification" (Husserl 1970, 126).

While Husserl claims phenomenology's primary role is providing a sure foundation for the other sciences and thus serving as first philosophy (Moran 2007, 136), Heidegger rejects this claim (Crowell 1990, 510). As Thomas Sheehan points out, Heidegger thinks of it as a tool for doing fundamental ontology (1997b, 47). Phenomenology is a way to come to an understanding of being through the being of Dasein, or the being that can question and understand its own being (Kisiel 1993, 365).²⁵ This can be seen in his draft of the *Encyclopedia Britannica* article on phenomenology, when he claims that "philosophy seeks to clarify being via a reflection [Besinnung] on one's thinking about entities" (2007d, 310) and "with the turning of the gaze to the phenomena a universal task opens up, that of exploring systematically the multitudes of lived experiences, their typical forms, levels and interrelations of levels, and of understanding them as a self-contained whole" (Heidegger 2007c, 311). In other words, the method of doing philosophy through the analysis of phenomenological experience makes the study of Dasein possible and is to be used to explore its structure. Heidegger goes on to explain in the introduction to Being and Time that phenomenology "signifies primarily a methodological conception" (H. 27). It does "not characterize the what of the objects of philosophical research as subject-matter, but rather the how of that research" (Heidegger 2008, H. 27). Phenomenology is how we get to what we want to study in philosophy, but does not itself decide the subject matter, which is "fundamental ontology, from which all other ontologies can take their rise" (Heidegger 2008, H. 13).

Heidegger's claim that phenomenology is primarily a tool for fundamental ontology leads to three questions: Why is understanding fundamental ontology the primary goal of philosophy?

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²⁵ At least through the 1920s, or in his "early" years, when he positively engaged with phenomenology as a tool for engaging with the question of being. He would later distance himself from the phenomenological movement in his pursuit of understanding being, but this dissertation will mostly focus on his engagement with the phenomenological tradition rather than his later works.

Why is phenomenology the tool for doing so? Finally, how is this distinct from Husserl's understanding of phenomenology?

To address the first question—why fundamental ontology gets priority—Heidegger argues that the sciences, including Husserl's phenomenology, are already making ontological assumptions. They are already making implicit claims about being and distinctions between beings. For example, he criticizes Husserl's phenomenological reduction. According to Husserl, through the bracketing of the natural attitude one can separate the individual, psychological consciousness from one's transcendental subjectivity. Heidegger says of it: "the most radical distinction of being is drawn without actually inquiring into the being of the entities that enter into the distinction" (Heidegger 1985, 114). In other words, in performing the phenomenological reduction, Husserl is distinguishing not only between modes of givenness, but also between ways of engaging with and making sense of the world. When phenomenologists perform the reduction, they engage with what they experience differently after the reduction is performed than they would in everyday life. Heidegger criticizes Husserl for assuming this distinction without properly fleshing out what each side of the distinction is and without inquiring into the being of consciousness before and after the reduction or the being of the entity that is able to perform the phenomenological reduction in the first place (Heidegger 2005, 42). This leads to two questions that Heidegger felt were neglected: What is the being of the intentional objects and intentional acts and what is being itself (Heidegger 1985, 115)? Heidegger maintained that in neglecting questions about being, Husserl was basing his phenomenology on unexamined presuppositions about the nature of human existence and being in general. Thus, as Steven Crowell notes, Heidegger moves to explore the questions of being and to show the ontological

structure of Dasein and how it makes Husserl's conception of consciousness and phenomenology possible (2001, 66).

A similar argument can be seen in the introduction to *Being and Time*, where Heidegger claims that "ontological inquiry is indeed more primordial, as over against the ontical inquiry of the positive sciences" (Heidegger 2008, H.11). By the time the positive sciences get started, they already have their basic concepts and a general understanding of the type of being they are studying. These basic understandings, though, "have already been worked out after a fashion in our pre-scientific ways of experiencing and interpreting that domain of Being in which the area of subject-matter itself is confined" (Heidegger 2008, H.9). In other words, we come to these concepts in our pre-scientific life and then demarcate and explicate them into the sciences. This argument is roughly parallel to Husserl's, where we come to the regional ontologies prior to the doing of science and thus need to justify the regions of being that the sciences study. The difference here is that Husserl addresses the selection of these regional ontologies by investigating how objects are given to consciousness and the intentional structure within which they are given, but Heidegger claims that this approach makes too many assumptions about the nature of the experiencing consciousness and the entities being experienced. Instead, one needs to

[ascertain] the *a priori* conditions not only for the possibility of the science which examine entities as entities of such and such a type, and, in so doing, already operate with an understanding of Being, but also for the possibility of those ontologies themselves which are prior to the ontical sciences and which provide their foundations. (Heidegger 2008, H.11)

In other words, before we can begin the positive sciences, we need an understanding of how it is possible to know or investigate entities as a given type of entity (a plant as a plant in botany, a chemical compound as a chemical compound in chemistry) as well as the conditions necessary for us to break the world down into these ontological categories.

This leads quite naturally into Heidegger's claim that phenomenology is the way that one ought to investigate being. Heidegger claimed that "the task of ontology is to explain Being itself and to make the Being of entities stand out in full relief" (2008, H.27). For him "phenomenology' signifies primarily a methodological conception" (Heidegger 2008, H.27). It is how one studies phenomena, which is "that which shows itself in itself" (Heidegger 2008, H. 28), where one lets "that which shows itself be seen from itself in the very way in which it shows itself from itself" (Heidegger 2008, H.34). In other words, the way that one does ontology is through phenomenology. In order to come to an understanding of being, our being, and various other things' ways of being, we must allow them to show themselves as themselves. Thus, "phenomenology is our way of access to what is to be the theme of ontology, and it is our way of giving it demonstrative precision. Only as phenomenology, is ontology possible" (Heidegger 2008, H.35). Understanding being starts with an analysis of what shows itself to us and how it is shown to us because it leads to seeing the phenomena in an originary way. It is superior to using other sources or systems, such as the philosophical tradition or the empirical sciences, as a starting point because they bring in their own embedded presuppositions that present the phenomenon in a specific light and thus cover-over aspects of it (Heidegger 2008, H.36).

One needs to start with phenomenology to do this because "the consideration of being takes its start from beings" (Heidegger 1982, 22) and phenomenology is taking beings as they show themselves. As Sheehan summarizes, the things that we engage with are first

"meaningfully present to us. They do not just exist, they make sense" (2015, 111). In order to come to a fundamental ontology, we need to carefully look at the ways things are meaningfully present to us, or how things show themselves as making sense to us. If we do not, we are neglecting the fundamental way that things are shown to us. Furthermore, other ways of studying things already assume and build on how they show themselves as making sense, on how they are meaningfully present to us. When I engage with one of the positive sciences, (for example, physics or botany) I am already engaged with the world in a meaningful way and the objects of the sciences (particles and plants) are already meaningfully present. If I want to know the being of the objects of the sciences, I need to be aware of how they are present for me and thus I cannot rely on the sciences for knowledge of being or fundamental ontology. The sciences already assume a knowledge of being and the ways that the world shows up as meaningful, or in other words "what is neglected is what is the genuine object of concern: human existence" (Heidegger 2005, 66).

7.2 The Method of Phenomenology

Husserl and Heidegger's disagreements extend beyond their beliefs about the purpose of phenomenology, and philosophy more generally, to the methods of philosophical research. For Husserl, phenomenology is primarily reflective. He claims that the "phenomenological method moves entirely in acts of reflection" (Husserl 2014, 139); "the intentionality that comes to life in any actual following and understanding is asked what it is properly aiming at. Reflective sense-explication [*Die Besinnliche Auslegung*], as critical clarification, must provide the answer" (Husserl 1969, 10-11). In order to perform phenomenological analysis, one has an experience and then reflects on the experience in a particular fashion. Phenomenological analysis takes the

form of a series of reductions that guide one's reflections. For example, according to Husserl in *Ideas I*,²⁶ phenomenological analysis starts with the phenomenological reduction, where one brackets the natural attitude and one's metaphysical presuppositions, allowing the phenomenologist to look at the experience itself (Husserl 2014, 54).

Further reductions, or modifications of how one reflects on experience, can be carried out, depending on what the phenomenologist is looking to analyze. For example, if someone is looking for intuitions about the essences of an act or category, one can perform eidetic variation, where one imaginatively varies the properties of the act or category in order to see what variations would lead the intuition of the act or category to no longer be fulfilled (Husserl 1969, 309). When figuring out what makes a perceptual act a perceptual act, I can, in my imagination, take away various properties that are given in perception, such as the field of color, its naïve commitment to reality, its perspectival nature, its temporality, and so on. If the subtraction of the property results in the intentional act no longer being given as perception, I would then know that the quality is essential to perception. If I imagine seeing something without doing so from a perspective, for example, I would cease to understand it as the same sort of thing as perception, and thus I know that perception's perspectival nature is essential to it. Importantly, though, in doing these further reductions, one is still reflecting on acts and experiences, according to Husserl.

²⁶ It is worth noting that Husserl's understanding of phenomenology and phenomenological method shifted throughout his career, the emphasis on reflective consciousness remained central, as seen in the preceding quotations from *Ideas I* (published in 1913) and *FTL* (published in 1929). Most importantly, for the sake of this Chapter, it was central to Husserl when Heidegger was primarily engaging with him, where we can see in Husserl's first draft of the Encyclopedia Britannica Article on Phenomenology, he calls phenomenology a "return to reflective experience" (Husserl 1997, 84) as evidence in making claims about perception.

Heidegger disagrees with Husserl's method, often dismissing it out of hand (Sheehan 1997a, 30). The problem is that reflection, as Husserl does it, objectifies experience and makes it into something primarily theoretical and present-at-hand (Heidegger 2005, 217). In other words, when Husserl phenomenologically reflects on experience, he distances himself from the actual experience itself and transforms the experience into a theoretical entity. He transforms "the phenomenological principle 'To the matters themselves!' [into meaning] 'to them insofar as they come into question as the theme of a science" (Heidegger 2005, 211). In doing so, one would miss the foundational experience that the phenomenological reflection is built on. For example, in reflection on a mode of givenness, such as perception, I am no longer merely perceiving the mug, but perceiving it while in a reflective state. Thus, the mode of givenness is no longer just perception, but a reflective, objectifying modification of normal perception. It is no longer the perception of the experience that phenomenology is supposed to describe. Thus, "being in the sense of being a region for science misplaces more than ever the possibility of letting the entity be encountered in its character of being" (Heidegger 2005, 2008). Instead, taking the entity as given in a region of science already transforms the entity into a theoretical one to be scientifically investigated.

The more fundamental problem with Husserl's method ties in to their disagreement over the purpose of phenomenology and the nature of the being of the phenomenologist. Heidegger believes that we are deeply embedded in our factical life and that things first make sense to us within our lived experience. In order to come to an understanding of being, we need to look to life rather than to forms of reflection that seek to bracket it or isolate particular intentional acts from the structural whole of life. For Heidegger, as will be shown in Section 7.4, intentional acts can be understood only within the wider context of Dasein's being, and thus analyzing these acts

and using them as the framework for analyzing consciousness is already a step removed from studying being, which is, ultimately, the goal of phenomenology. The means that Heidegger, in Crowell's words, needs "a reappropriation...of the genuinely phenomenological concept of reflection" (2001, 137).

Since Heidegger is looking for the ontological structures that are underneath the objectified understanding of consciousness in Husserl's phenomenology, he cannot simply rely on phenomenological reflection because, according to Zahavi, "reflection is a theoretical stance, and every theoretical endeavor, every observation and demonstration involves a certain objectifying modification, involves a certain element of 'de-living'" (2003, 159). Since the foundation for the theoretical knowledge of Husserl's reflections is pre-theoretical, a method that already objectifies the foundation, like Husserl's, cannot get a good look at the pre-theoretical foundations (Zahavi 2003, 160). Instead, he claims that "we must therefore remove ourselves from this realm of objective experience oriented towards the acquisition of theoretical and scientific knowledge and backtrack to a more original sense of be-ing" (Heidegger 2007a, 139) by looking to factical life to see how Dasein acts and lives in order to see the structure of Dasein, because this is where we normally are engaged in a pre-theoretical manner (Heidegger 2007a, 140).

Thus, Heidegger developed methods of looking at factical life to come to an understanding of being through a number of non-objectifying ways of seeing (Crowell 2001, 137). These often take the form of philosophical destruction (Chernyakov 2002, 12) and analyzing breakdowns in everyday life (Crowell 2001, 210).

First, Heidegger addresses how we are able to ask the questions that lead to philosophical destruction. He claims that we are able to do so because we have a pre-theoretical understanding

of the matter at hand that we are then trying to conceptualize in discourse. We are the sort of beings that are engaged with the world and can come to know ourselves through our engagement with the world, such that Dasein's "ownmost Being is such that it has an understanding of that Being, and already maintains itself in each case as if its Being has been interpreted in some manner" (Heidegger 2008, H.15). We then take these pre-theoretical understandings and cast them into philosophical concepts. In doing so, as Kiesel notes, we cover over the phenomena of pre-theoretical understanding themselves (1993, 146). Thus, "I have myself in pretheoretical, precognitive, and preobjective ways that defy classification into regions and other objective realms, even though I have myself at different levels of coping with life and its import" (Kisiel and Sheehan 2007a, 123). We thus need to find a way to see how these phenomena show themselves as themselves. For Heidegger, then, "what needs to be done is not to 'capture' or 'catch' but rather to enter into these actualities as they actualize their proper sense and articulate themselves" (Heidegger 2007a, 138). We thus enter into pre-theoretical experience to get to the ways of everyday coping with the world in order to form philosophical concepts that better capture our modes of engagement, where the pre-theoretical engagement sets the stage for the self-evidence that the concepts show themselves with (Heidegger 2008, H.157). One way of doing this is to engage with the formal, theoretical concepts of philosophy not as ways of engaging with the pre-theoretical world themselves, but rather as formalizations of those ways. Philosophical concepts serve as a way of pointing towards the pre-theoretical experiences themselves. Heidegger calls this philosophical pointing formal indication, which "proves in this way to be a 'method' of philosophical concept formation" (Heidegger 2007a, 138). Because philosophical concepts point past themselves to the pre-theoretical world, we can use them, through philosophical destruction, to get to the modes and structures of engagement with the

world beyond theoretical engagement (Casati 2022, 215), not by treating them as concepts to be argued with on their own, but as ways of expressing something more primordial.

Thus, we can use the philosophical tradition as a way of pointing to the fundamental structure of Dasein through a form of philosophical or creative destruction (Kisiel 1993, 250). While historical works of philosophy themselves may miss the mark and fail to understand their own ontological bases, they can be taken as formal indications, "in such a way that [they are] not taken directly (where [they say] nothing), but [are] related to the respective, concrete instance[s] of what [they] precisely [mean], then [they have their] legitimacy" (Heidegger 2005, 193). They can be read as expressions of the situations of the philosophers, which, in turn, are based on the philosopher's ontological structures. Thus, Heidegger claims that "every attempt to experience existence primordially comes to life out of the present-day position of the interpretation and conceptual determination of existence and life" and that one can "[dismantle] it in such a way that the basic categories of consciousness, person, subject are led back to their primordial sense" (Heidegger 2005, 82). In other words, philosophical works are the works of situated people coping with the problems of their times, while assuming certain fundamental, ontological principles. By looking at these principles and how they reflect their situation, we can come to an understanding of the ontological bases for their arguments and positions, which can provide a clue or indication of their fundamental situation, and "thus, the destruction as the critique of the present-day is the critique that makes visible what genuinely and primordially is positive in the past" (Heidegger 2005, 86).

Another way of getting to the structure of Dasein is to investigate "those moments in which Dasein's everyday self-understanding is most radically challenged" (Crowell 2001, 210). While directly reflecting on an experience can objectify it and change it to something other than

what it is, sometimes things happen such that in the course of our everyday lives we are pulled out of our nonreflective states. These breakdowns of everyday experience provide an opportunity to see what nonreflective experience looks like and how it is structured by pulling us out of the nonreflective state and making it present through the transition to a reflective state. In other words, reflection can occur "naturally" in everyday experience and by analyzing the experiences that lead to this reflection, we can tag along and see the structures that normally do not show themselves to reflection.

Two famous examples of this are Heidegger's analysis of tool-use and anxiety. In the first case, Heidegger makes the claim that we are unaware of entities as objects with properties in everyday life. Instead, we are focused on using them to accomplish various goals (Heidegger 2008, H.69). When in a workshop, I am not aware of the hammer as a certain entity with a certain height, width, shape, and hardness. Rather, it is the thing I use to drive nails. It is not a substantial metaphysical entity, but rather a tool to be used. I only come to know it as an object with properties when it breaks or is missing, when "it reveals itself as something just present-athand" (Heidegger 2008, H.73). This breaking causes me to reflect on what it is that makes the hammer so useful, such as the length of the lever arm and the hardness and weight of the head, because now I need to replace it. I need to find out which properties I need to replicate in its replacement. The breakdown, importantly, does not just tell me about the hammer, but also puts the world where I need the hammer into view. I need the hammer with certain properties because I have a project that I am working on (Heidegger 2008, H. 75). Perhaps if I struggle to replace my hammer, I am forced to further reflect on the project itself. Is it worth the effort? Why is it important? Reflection on this "natural" reflection can then show us the structures that everyday life follows. I engage with entities in order to fulfill some project, which in turn serves a broader

goal situated in my own understanding of my own life. Here, Heidegger is not reflecting directly on the experiences of everyday life, but instead on the breakdown of everyday life. He is not coming to a theoretical understanding of everyday life through making everyday life theoretical in reflection, but rather looking at the instances where pre-theoretical life becomes theoretical and describing everyday life based on the nature of the transformation.

His analysis of anxiety follows a similar vein. Anxiety is a mood where the everyday meaning structures and norms of life fall away (Heidegger 2008, H.188). In this state, we can question why we are doing what we are doing and how we understand ourselves (Heidegger 2008, H.182). This mood is characterized by an absence of meaning and this absence is a breakdown of everyday life (Crowell 2007, 54). It is a mood that pulls us into a reflective state. Reflecting on this breakdown and what is abnormal about it, or on what it drives us out of everyday experience, can reveal that everyday life is characterized by a structure of meaning that one is normally lost in. Once again, it is a reflection on the loss of everyday factical life on a disposition that is already reflective, rather than a reflection on everyday life itself.

7.3 The Critique of the Prioritization of the Theoretical and Epistemological

According to Sheehan, from the very beginning of his association with the phenomenological movement, Heidegger criticized Husserl for prioritizing the theoretical over lived experience and the pure ego over a historical and situated understanding of Dasein (1997a, 15). While Husserl would occasionally engage in ontological discussions, such as his formal ontologies of logical objects,²⁷ they were founded on and secondary to the phenomenological

²⁷ See Husserl, Formal and Transcendental Logic (Husserl 1969) SS 43, for example.

study of how their objects were given and the sorts of evidences that they were given with (Crowell 2001, 72). Thus, as Crowell notes, Husserl believed "that phenomenology can provide the foundations for an ontology by way of a differentiated theory of evidence based on a conception of intentionality purified of all psychological elements" (2001, 72). In other words, the foundations for ontology are in the primarily epistemological study of his phenomenology.

Heidegger's criticism of the prioritization of the theoretical and epistemological shows up clearly in his critique of the Cartesian understanding of the world and "the idea of Being as permanent presence-at-hand" (Heidegger 2008, H.98), where presence-at-hand is a way of engaging with things as theoretical entities, or as substances with attributes (Heidegger 2008, H.90). While, in *Being and Time*, he focuses his criticism on Descartes, he also associates Husserl's position with Descartes. As Sebastian Luft sums up, he "stands at the end point of a development gone awry since Descartes" (2005, 144). This can be seen in his claim that "if Being and Time is written 'against' anybody, it is against Husserl" (as cited in Sheehan 1997a, 22). In his lecture course, *Introduction to Phenomenological Research*, he directly connects Husserl to Descartes. He claims "the Concept of consciousness has in fact been simply taken over by Husserl from Cartesian psychology and Kantian epistemology" (Heidegger 2005, 208) and that "Husserl...stands within the uniform, basic tendency of Cartesian research, in such a way that in him the care of knowledge is ultimately at work as care about certainty" (Heidegger 2005, 199). He claims that Husserl operates within the basic way of understanding the world that Heidegger attributes to Descartes, namely, that Husserl engages with the world primarily theoretically and with entities that are primarily present-at-hand. Furthermore, for Husserl "being is equated with being a possible domain for treatment by a science" (Heidegger 2005, 198) where entities are thought of primarily insofar as they can be understood scientifically and

theoretically as objects. In this way, according to Heidegger, "Husserl moves *completely in the orbit of Descartes' sense* of [the content of consciousness]" (Heidegger 2005, 196).

Heidegger casts Descartes as believing that the world is constituted by objects that have their own substance and essential nature that exist independent of human existence (Heidegger 2008, H.94). In other words, my coffee mug, as an object, is first understood as an object that subsists through time and has some set of properties attached to it, such as its roundness, hardness, and conductivity. This set of properties allows it to, secondarily, become understood as a vehicle for holding coffee. Heidegger associates Husserl with this position as well, claiming "what matters is that consciousness, taken in the sense of the fundamental structure of intentionality, is a possible realm of being in which each transcendent being as such makes itself known and can be traced" (Heidegger 2005, 203) and that "the division between consciousness and entities, that announces itself in consciousness, is the primordial division in any doctrine of categories, according to Husserl" (Heidegger 2005, 203). He claims that, for Husserl, entities are first and foremost entities separate from, but available to, consciousness in intentionality. They are objects with properties that are given to consciousness. This tendency can be seen in Husserl's work. He claims "the noema [the objective side of the intentional relationship] in its entirety consists in the complex of inherent noematic aspects, that the specific, inherent aspects of sense form therein only a kind of necessary core layer, on which further inherent aspects are essentially founded" (Husserl 2014, 178); in the sphere of perception "the transcendent object exists—as immanent to the individual experiences and yet in the identity that transcends them as a transcendent pole of identity" (Husserl 1977, 146).²⁸

²⁸ My Translation

The problem with this setup, according to Heidegger, is that "the entity which Descartes is trying to grasp ontologically...is rather such as to become discoverable first of all by going through an entity within-the-world which is proximally ready-to-hand" (Heidegger 2008, H.95). In other words, these entities first show themselves as meaningful through our lived experience with them. I first understand my coffee mug pre-theoretically, as a tool to be used in drinking coffee, and then I am able to come to an understanding of it as having a set of properties.

Because of this, "the toward-which that the original experience of being aims at is not the field-of-being of *things* as a *theoretically* and thingly apprehended kind of object" (Heidegger 2007c, 168), but rather we are first oriented towards the world through engaging with it in a pre-theoretical manner (Heidegger 2007h, 259).

The Cartesian understanding of beings also hides Dasein's involvement in making sense of entities. He claims that "It also keeps [Descartes] from bringing Dasein's ways of behaving into view in a manner which is ontologically appropriate" (Heidegger 2008, H.98). If entities are primarily understood as substances with properties, then any involvement of the human being in making sense of them is purely epistemological. It is merely how we discover and know these substances and properties. Furthermore, "he takes the Being of 'Dasein'...in the very same way as he takes the Being of the *res extensa*—namely as substance" (Heidegger 2008, H.98). Our being becomes another substance to be known.

The problem here is that Descartes has already skipped over the question of being, which, as seen above (in Section 7.1), must come first. Instead, "he has secured this attitude toward the cogito by placing the search under a specific assortment of conditions" (Heidegger 2005, 195), which, as Kusch notes, leads to a "distortion of…the Being of humans" (1988, 112). Descartes (and Husserl) already have a conception of the cogito (or consciousness) and carry out their

analysis based on this assumed conception. According to Sheehan, Heidegger claims that theoretical knowledge assumes an understanding of being, of how the beings make sense of entities, but the way that the entities make sense is tied up with how Dasein engages with them (2015, 111). The way I make sense of my coffee mug changes between when I am drinking from it, when I am describing it for the sake of an example, and when I am reflecting on its history and the memories that come with it. It shows up for me as a tool, a theoretical object, and a keepsake, depending on how I am engaging with it. Descartes and those who follow his lead, of course, acknowledge this fact, but claim that it does so based on the fact that it is an object with properties and because of those properties it can be used as a tool or be studied. This means that "even the entity, insofar as it is to be studied principally in its immediate givenness, is taken in terms of the specific *theoretical conception* of it" (Heidegger 2005, 209). The problem is that this theoretical knowledge of objects is built on a pre-theoretical understanding of the entities in question (Heidegger 2008, H.73). To understand a thing theoretically requires me to already be making sense of it, to already have a more primordial understanding of its being.

Furthermore, the standards and methods of the sciences do not stand on their own.

Rather, "not only here but in our entire history of science, the *mathematical idea of rigor* has been uncritically erected as an *absolute norm*" and "the rigor is not an empty idea but instead something concrete that shapes itself out of the science itself" (Heidegger 2005, 74). The epistemic standards that are implied and fulfilled by the sciences are not themselves eternal or self-evident, but are developed historically and out of our own being. They are a mode of engagement with the world and are contingent on our own structure and ways of being in and interacting with the world. Thus, in order to understand the sciences and their findings, we must first understand our own being.

Understanding entities as substances relies on a more fundamental relationship between the entities and Dasein, which, in turn, means that one cannot neglect the being of Dasein in understanding the being of these entities. Heidegger argues that, rather than as a substance or consciousness, Dasein ought to be understood as being-in-the-world.

Heidegger understands Dasein as fundamentally situated within the world, claiming "Being-in-the-world belongs essentially to Dasein" (Heidegger 2008, H.57). It is not a separate substance that stands on its own and interacts with the world, but instead is characterized by its relationship with and embeddedness in the world (Heidegger 2008, H.55). Thus, being-in-theworld, as a character of Dasein's being, "stands for a unitary phenomenon" (Heidegger 2008, H.53). This unitary phenomenon, of course, should not be understood as the relationship between independent entities that are "Being-present-at-hand-together" (Heidegger 2008, H.55). Instead, they are related to each other through Dasein's investment in and meaningful engagement with the world (Heidegger 2008, H.57). The world is not all of the surrounding objects that we can engage with or not engage with, but rather a whole that we are already fundamentally engaged with, structured by care. Claude Romano sums it up, saying "the world is not a tally of independent possibilities but rather the structural and hierarchical totality that articulates them and that articulates all understanding and all projecting of meaning in general" (2009, 44). The world is not just comprised of things, but the meaningful ways that the things show themselves as part of the larger whole. The larger whole itself is structured by our engagement with the world.

7.4 The Critique of Intentionality

Heidegger's critique of Husserl extends to Husserl's understanding of the intentional structure. The critique follows the form that we have already seen, where Heidegger shows that Husserl's conception of intentionality already relies on the ontological structure of Dasein. Thus, to understand the intentional structure of consciousness, we first need to understand the being of Dasein.

As seen above, Dasein is being-in-the-world and "the world is something being encountered" (Heidegger 1999, 66), where it is "encountered as what we are concerned about and attend to" (Heidegger 1999, 66). In this concern and attention, we comport ourselves in different ways towards different entities (Heidegger 1982, 57). When I am writing, I comport myself toward my coffee mug in a certain way: I am aware of it as a way to drink my coffee or an entity within my visual horizon that I can stare at while formulating thoughts. The ways of attending to the world always "relate to something: they are directed toward this whereto; or, in formal terms, they are related or referred to it" (Heidegger 1982, 57). In navigating the world, I am always directed towards something. Heidegger claims that phenomenology calls the structure of always being directed towards something intentionality (Heidegger 1982,58). He further claims that "intentionality must not be misinterpreted on the basis of an arbitrary concept of the subject and ego and subjective sphere and thus taken for an absurd problem of transcendence" (Heidegger 1982, 64). Here he is critiquing the Husserlian conception of intentionality, according to which the subject or ego intends the intentional object with its own noematic core (Husserl 2014, 201). Instead, "the subject is first of all determined in its essential nature only on the basis of an unbiased view of the character of intentionality and its transcendence" (Heidegger 1982, 64). The concept of a subject is a way of theoretically understanding the being that is

already intentional and engaged within its world. In other words, according to Heidegger, Husserl's conception of intentionality, where an object is made meaningfully present to a subject, is already based on a pre-theoretical understanding of both poles and is founded on a more fundamental engagement with the world.

Husserl, though, understands theoretical knowledge to be founded on pre-theoretical knowledge, specifically sense-perception in the natural attitude (Husserl 1970, 124), and that "the theoretical is one possible outcome of our lived engaged dealings with things" (Moran 2000, 61). Theoretical intentionality, where I grasp the object theoretically, is based on our experience with the object, the context in which it is given, and the horizon of possible engagements with it. Furthermore, the fact that the object is intentional means that it is given to us and is part of the whole of experience. The fact that one is intending means that it transcends oneself toward the object as part of the intentional whole. This puts Husserl and Heidegger's understandings of intentionality closer together than is often acknowledged (See Dreyfus 1993, for example).

The distinction between them is not that Husserl fails to understand that the subject transcends itself and that the theoretical knowledge of the object is based on pre-theoretical engagement with the world, but rather that Husserlian intentionality itself is based on pre-theoretical knowledge that needs to be explicated. Husserl's intentional structure itself was already a theoretical construct that described how we relate to theoretical and ideal objects and, according to Moran, that "was more concerned with the epistemological role of these ideal entities as underpinning acts of genuine knowledge" (2000, 46). Thus, Heidegger thought that Husserl's conception of intentionality "is always construed...as *specific theoretical* behavior" (Heidegger 2005, 209) and that "the prevailing study of intentionality is itself oriented to the *intentional in knowing*" (Heidegger 2005, 209). It seems to be the case, as Moran claims, that, as

a description of theoretical, cognitive activity, Husserl's account of intentionality was perfectly adequate for Heidegger, but Heidegger sought to radicalize the question and find the ontological conditions that stand as its foundation (Moran 2000, 42). Our theoretical intentionality, as seen in Husserl, is possible only based on how we exist in the world: how we comport ourselves and our directedness towards the world.

Our comportments and directedness towards the world do not occur in a vacuum. Rather, we comport ourselves according to our ontological structure and "in intentionality itself and through it [will it be possible to see] directly into the heart of the matter, that of which it is the structure and how it is that structure" (Heidegger 1985, 47). Contrary to Husserl, who saw intentionality as the structure of experience (Zahavi 2003, 14), Heidegger claims that intentionality is a way of getting to, and derivative of, the structure of Dasein. Henry Pietersma summarizes this point, by saying that "an intention of an object is now held to be a comportment that is possible only on the basis of a directedness...towards the world" (1979, 200). We are directed towards the world because of our ontological structure and our ontological structure sets the terms for how we tend to be directed towards the world.

As seen above, the basic structure of Dasein that founds intentionality is our directedness towards and engagement with the world which we do not stand apart from, but rather are always beyond ourselves within. We are always projected beyond ourselves into the world because we are always already engaged with the world and "Dasein is itself the primarily historical being" (Heidegger 1985, 258). Nothing can be purely given. Rather our engagement with the world and the way we are directed to it are already influenced by our facticity, history, and tradition. Heidegger claims that our engagement with the world, as fundamentally interpretive, is situated through "an initial stand from which to view...a direction of view [Blickrichtung] which is

motivated by the initial stand" (Heidegger 2007c, 149) and "a range of vision [Sichtweite] which is demarcated by the initial stand and direction of view" (Heidegger 2007c, 150). In other words, the way we engage with things and come to understand them, the way that the world and entities within the world show themselves to us, is conditioned by an orientation towards entities that we already have, which sets down how we are directed towards them and which shapes the horizon of possibilities that we grasp with the entity. Entities show themselves as themselves to us in light of our own situation. The entities that we engage with are not self-contained objects, nor are they given to us in a pure, unmediated fashion. Rather, our engagement with entities and with the world is already shaped by our own situations. With respect to intentionality, this means that the ontological structure on which theoretical intentionality relies already shapes the intentional object. No object is reducible to being purely given nor can it ever be transformed into a pure ideal because it will always be built on and structured by a pre-theoretical engagement coming from one's situation.

7.5 The Critique of Husserl's Logicism

Heidegger does not speak about Husserl's conceptualization of formal and transcendental logic much. This leads some philosophers, such as Crowell, to conclude that insofar as Husserl was explaining theoretically understood concepts of logic through their already theoretically understood presentations of meaning, Heidegger, more or less, agreed with Husserl (Crowell 2001, 91). The idea here is that, in much the same way that Heidegger's objection to Husserl's concept of intentionality was not with intentionality itself, but with the fact that it relied on the more fundamental structure of Dasein, Husserl's logicism carries with it a number of presuppositions about truth and being that themselves rely on a more fundamental, ontological

basis, which Husserl left unexamined. This can be seen in Heidegger's claim that "logic is constructed on an ontological basis" (Heidegger 2010, 42). Considering the fundamental role of categorial intuition within the intentional structure for Husserl's logic, as seen in the preceding chapter, the through line of the critique of intentionality and logicism should not be surprising, for they are not themselves independent critiques.

Heidegger's critique focuses on the presuppositions that Husserl holds and how Husserl's concept of logic relies on an unexamined ontological foundation. His critique starts with Husserl's concept of truth. As seen in the previous chapter, truth, for Husserl, is an ideal relationship, given intentionally with self-evidence, where categorial claims are affirmed. This means, according to Heidegger, that for Husserl "truth is thus a characteristic of ideal being" (Heidegger 2010, 46). Truth, for Husserl, does not relate to the empirical acts of understanding, but instead to the contents of those acts (Heidegger 2010, 46). Thus, "ideal being can now be understood as the being of that something which makes an object be what it is" (Heidegger 2010, 47) because the ideal being is neither the experience of the object nor an external thing, but instead is a categorial form of the content of the act of thought.

The laws of logic, for Husserl, followed from the nature of truth, where they were the forms that the true categorial relations took. The ideal beings of "Man," "Mortality," and "Socrates" all align such that if Socrates is a man and all men are mortal, then Socrates must be mortal and thus the classic argument (Socrates is a man. All men are mortal. Therefore, Socrates is mortal.) follows from how these ideal beings relate to one another.

Furthermore, according to Heidegger, "evidence is determined for Husserl by his concept of truth" (Heidegger 2005, 210). In other words, the forms of evidence with which one grasps truth claims, which are ideally given in apodictic self-evidence (though they can come in weaker

forms) follow from Husserl's casting of truth as dealing with ideal beings. Because Husserl is dealing with ideal beings, meaningfully presented behind the phenomenological reduction, he must cast evidence with respect to the ways in which intentional acts are fulfilled (Berghofer 2019, 105). He cannot rely on representation or appeals to empirical methodologies. Since truth is ideal, accepted forms of evidence must relate to the ideal beings that truth relates to, not empirical acts or the permutations of the being given in acts. This can be seen in his claim in *FTL* that "evidence involves...that *original consciousness of correctness* in the event of actual adequation" (Husserl 1969, 128), where what is counted as evidence are the fulfilled intuitions in consciousness and where he describes "categorial objectivity" as "[consisting] precisely in being a fulfilled judgment having a corresponding sense-form" (Husserl 1969, 145). He is claiming that objective judgments are validated when the category is fulfilled in experience.

Logic, as a whole, for Husserl, relies on his concept of truth and thus his concept of ideal beings. This conception of truth, though, is conflated with the epistemic concept of validity, according to Heidegger (Heidegger 2010, 45). Validity is generally understood, within formal logic, as the relation where if the premises are true, then the conclusion must also be true. In other words, as Philipp Berghofer notes, validity is the measure of the internal unity of the set of concepts or statements being evaluated (2018, 15).

The conflation of truth and validity that occurs can be seen from both the vantage point of the forms of evidence and relationships between ideal beings. In the former, the form of evidence for both truth and validity is the same, apodictic self-evidence. If I know that Socrates is a man, all men are mortal and thus Socrates is mortal, I understand the validity of the statement (if Socrates is indeed a man, and all men are indeed mortal, then Socrates must be mortal) because it is given as self-evidently the case. To not see that these statements hold true is to not understand

the statements, to not see them clearly, and to not grasp the ideal sense, because "in itself every judgment is decided" (Husserl 1969, 197) and thus to fail to come to the true conclusion is within the intuition, by not coming to the correct understanding of the ideal object. At the same time, I understand that Socrates is a man because being a human being is essential to what it is to be Socrates, given self-evidently (presumably through some form of eidetic variation, where the intuition of Socrates cannot be fulfilled without his being human). The idea of human is also essentially given in self-evidence as mortal (if a being is not mortal, it would be given to us in such a way that it would be essentially different from the way that a human being is given to us). Furthermore, to check the argument, to see if the conclusion is true, not simply valid, we rely on Socrates being self-evidently given as essentially mortal. The standards for validity and truth, then, are the same standards.

Casting truth as a relation of ideal beings also contributes to the conflation of truth and validity. We saw in the *Logical Investigations* that "truth now is likewise an idea" (Husserl 2001a, 86), or that it is given in categorial intuitions. In being given categorially, as an ideality, truth is, like other ideal objects, "empty" or a form that is fulfilled through different intuitions. Truth, as formal and ideal, pertains mainly to other categorial statements and intuitions, to categories and concepts that are engaged with in experience, rather than with concrete perceptions or the "fulfilling" aspects of intentional experience. "My coffee mug is black" relates not only the categories of "black" and "coffee mug" as ideal categories that are fulfilled in all manner of black things and coffee mugs, but also the specific object "my coffee mug," which itself can be fulfilled across a variety of intentional acts and experiences. The truth of the judgment is about the agreement of the different ideal objects, the ideality of blackness and of my coffee mug, not about a certain given and fulfilled, concrete occurrence of the mug. Though

confirmation may be given in *Evidenz*, the truth relation itself is between the idealities. This means that the truth, for Husserl, is based on the unity of the categories and concepts at play, which closely aligns it with the concept of validity.

Heidegger thinks that conflating logic with validity fails to explain what truth actually is (Heidegger 2010, 65). It frames propositions as "the original and proper concretions of truth" (Heidegger 2010, 65) and covers over the "sole and primary meaning" (Heidegger 2010, 65) of being, reducing it to mere thereness. As seen in the above critique of Husserl through Descartes, Heidegger argued that entities could not originally be taken as objects with properties for scientific study and are not originally understood propositionally. Truth, thus, cannot be primarily propositional, it cannot be tied to the right arrangement of a set of sentences (such as (1) Socrates is a man. (2) All men are mortal. (3) Therefore, Socrates is mortal) because those sets of sentences are already derivative of something more fundamental. Being is more primordial than thereness and since "Being does indeed 'go together' with truth" (Heidegger 2008, H.213), truth itself must be more primordial than a conception of it built around the thereness of objects and propositions about this thereness and instead "the phenomena of truth comes within the range of the problematic of fundamental ontology" (Heidegger 2008, 256). The conflation of truth with validity, then, does not tell us what truth actually is, but rather gives a derivative form of truth that relies on something more primordial.

Furthermore, in understanding truth as ideal, as Husserl does, one must separate it from the real, which, according to Heidegger, relies on an "ontologically unclarified separation" (Heidegger 2008, H.216). In other words, Husserl is relying on presuppositions about ideal objects, standing as distinct from real objects, that have been left unexamined. Heidegger believed that this separation is itself illegitimate, based on a faulty abstraction away from our

engagement with the world and the phenomenon of truth, where "the actuality of knowing and the judging get broken asunder into two ways of Being" (Heidegger 2008, H.217), which will be explored further in the following chapters.

Understanding truth as ideal and consequently conflating it with validity lead Husserl astray and thus an ontological understanding of truth is needed to come to a proper understanding of logic. The nature of truth, according to Heidegger, will be discussed further in the following chapters, but for now it suffices to show that Heidegger's critique of Husserl's understanding of logic follows the pattern of his previous critiques. Husserl has bought too much into the Cartesian paradigm, where the object stands against the subject and exists primarily as a theoretical entity containing essential properties, and he has thus built a conception of logic on these presuppositions. Furthermore, with respect to logic, he saw both the subject and object as ideal entities, separate from the real acts that fulfill them. He failed to see that there was a deeper, more primordial way of grasping entities on which his own starting point relies. Thus, Husserl's logic is also derivative of a more fundamental way of grasping, and relies on a deeper ontological structure that has been covered over.

Chapter 8: A Heideggerian Critique of Frege

In the previous chapter, we saw Heidegger's response to Husserl and in the next we will see his response to Psychologism, both of which he addressed directly in his writing and lectures. He found both of them to have key insights into the issue, but thought that neither was able to capitalize on those insights because they were stuck within traditional paradigms, such as holding to an understanding of entities as mere presence and holding onto and implementing flawed dichotomies.

Heidegger does not address Frege in his writing or lectures in the 1920s and beyond, though he did note Frege's growing influence in 1912.²⁹ He claimed that "Gottlob Frege's logical mathematical researches are in my opinion not yet in their true significance" (Heidegger 2007e, 36) and that Frege "overcame psychologism in principle" (Heidegger 2007e, 36), though in a less comprehensive and systematic fashion that Husserl did in the *Logical Investigation* (Heidegger 2007e, 36).

Despite his brief reference to Frege, Heidegger mostly did not engage with him or his work. Nevertheless, drawing on the arguments Heidegger levelled against the other two positions and the themes displayed in his work, we can develop a Heideggerian response to Frege's position. We will start with a Heideggerian critique of two of Frege's key positions, the existence of a third realm of thoughts and concepts (8.1) and his understanding of truth as a relationship

²⁹ Specifically in a research review he wrote when he was 23 (Kisiel and Sheehan 2007b, 33).

between objects of the third realm (8.2).³⁰ I will then argue in Section 8.3 that Frege had two insights that Heidegger would agree with, but that Frege failed to capitalize on: that thoughts are not internal to the mind and language has a central place in the foundations of logic. I will conclude the chapter with an overview of a Heideggerian critique focused specifically on Frege's logic.

8.1 The Problem of the Third Realm

First, I will develop a critique of Frege's claim that there is a third realm for thoughts and concepts. The setup that Frege advocates for is that there are three ontologically separate realms: the mind, the material world, and the realm of thoughts. As Gregory Currie notes, the material world is the world of objects that exist in time and space, the world of trees, coffee mugs, computers, and so forth (1984, 256). The realm of thoughts is a non-spatial, non-temporal realm populated by concepts and abstract objects that are related together in thoughts (Frege 1984, 363). The mind is where we have ideas that tie together sense impressions and previous ideas (Frege 1984, 362). It grasps objects of the material world through the senses and objects of the third realm through intellectual faculties (Frege 1984, 368). Furthermore, in judgments about the material world, the mind is tying together both the material world and the third realm (Burge 1992, 635). When I judge "this coffee mug is black" I am engaging with the material coffee mug and the non-spatio-temporal concept of "black" to affirm that the concept applies to the material thing.

³⁰ To maintain continuity with Chapter 5, we will be using Frege's later definition of truth, rather than that of his middle period.

We saw Frege's arguments for this third realm in Chapter 5. The third realm offered an explanation for the communicability of concepts and a way for thoughts to exist outside of any given individual's mental experience. It further provides the grounds and references for making universal claims. When I say "all men are mortal" I am making a claim about the concept of "man" that exists timelessly in the third realm rather than to a set of material entities. Since I am referring to the concept "man," the thought would hold true even if there were no people around for it to refer to, because the reference of the thought is a concept in the third realm, not a material entity. Similarly, if I make the claim that the square of the hypotenuse of a triangle is equal to the sum of the squares of the two other sides, I am not making a claim about any material triangle, but instead referring to a non-temporal entity in the third realm.

The third realm, then, provides an explanation that aligns with three commonly held intuitions. The first is that the intuition that logical and mathematical claims are timeless and universal. They are so, according to Frege, because they refer to concepts in a non-spatio-temporal realm rather than to temporal entities. Furthermore, the laws of logic and mathematics are derived from these timeless entities rather than the temporal objects or the temporal workings of our minds. Second, it explains the general communicability of thoughts. On its face, at least, it seems that our ideas can be communicated with others. According to Richard Heck Jr., Frege explains this by saying that we communicate by grasping independently existing thoughts and then referring to them in speech so that others can also grasp these independently existing thoughts (1995, 85). Finally, it aligns with the intuition that the contents of thinking are not unique to individuals. In other words, it fits the intuition that my ideas of a triangle, the number two, and bachelors are not unique to me, but rather align with other people's understanding of triangles, the number two, and bachelors. For Frege, while we each would have a unique idea of

these things, because the idea is owned by each individual person, the content of the idea would be the concepts of triangles, the number two, and bachelors as they exist in the realm of thoughts.

The problem here is that Frege seems to be accepting the basic conceit of the Cartesian paradigm that Heidegger rejects, that subjects and objects exist as substances with properties and are fundamentally understood as merely present. Frege simply conceptualizes the external world as consisting of two separate realms, the material world and the realm of thoughts. In other words, Frege accepts the Cartesian paradigm of presence; he simply claims that present entities can exist in one of the two external realms (the material world and the realm of thoughts). The mind can access these realms, but it is itself distinct from them.

Recall Heidegger's arguments against the Cartesian Paradigm highlighted in Chapter 7. The first was that the paradigm casts entities as substances with properties that stood against subjects, which forgets that we first come to know entities through our dealings with them and that the Cartesian paradigm forgets how our pre-theoretical understanding of entities sets the stage for any theoretical knowledge. Second, the Cartesian paradigm forgets the involvement of Dasein in making sense of entities and the world. It sets up the cogito as passively taking in properties of objects and misses Dasein's active engagement with the world as it makes sense of it. In doing so, the paradigm never manages to question being nor the ways that it itself shapes how we make sense of the world.

Frege's three realms fall into the same trap as Descartes's two. He too reduces entities to mere presence, but this time we have postulated two spheres of existence for these entities, the material world and the realm of thoughts. We can see him paint thoughts and concepts as merely present when he claims "number words are to be understood as standing for self-subsistent objects" (Frege 1980, 73), that "I can also acknowledge thoughts as independent of me" (Frege

1984, 368), and that "the truth of a thought is timeless" (Frege 1984, 368). This means that for Frege, much like Descartes and Husserl, objects, regardless of their realm or our mode of access, exist as self-contained entities and possess properties. We simply access them to understand those properties. My coffee mug absorbs light in a certain way, has a certain shape, and has a certain conductivity. All of these things exist independently from any person thinking or speaking about them and they are what allow me to use it as a coffee mug. In a similar way, the concept of bachelor exists in a certain way independently from any person. It exists as a concept defined by the properties of "unmarried" and "male." I then can use the concept of bachelor in conversation because it has these properties.

Heidegger, of course, would reject this view, for the reasons highlighted above.

Understanding entities as substances with properties, as present-at-hand, theoretical entities, casts them as primarily coming to be meaningful as mere presence. As seen before, though, this misconstrues not only how we primarily engage with entities but also the being of those entities themselves. I primarily understand entities in using them and in how they are connected to my network of ends. I understand my coffee mug primarily as a way to drink coffee so that I can write. It is only when I stop my normal, everyday engagement with the world and contemplate my coffee mug, or when there is a breakdown that forces me to do so, that I start to see it as an object with properties standing against me. That is not how it is primarily meaningful, though. Furthermore, the properties of the object (such as conductivity and color) are themselves inextricably tied up with our engagement with the world.

It is the same for the inhabitants of the third realm. I primarily use thoughts (in Frege's sense of the term) and concepts to confer meanings to others or to straighten out my own thinking, rather than viewing them as present objects. When I tell someone, "My brother is a

bachelor," I am not engaging with the thought "my brother is a bachelor" or the concepts of "brother" and "bachelor" as objects with properties, but rather as ways of speaking about my brother, namely, expressing that he is unmarried. It is not until someone asks, "What does that mean?" that I stop and think about the term "bachelor" as if it were an object.

The same holds for numbers and mathematical laws. I engage primarily with numbers in speech about things. I use them as ready-to-hand entities in the pursuit of some end. I use the concept "one" when I say "there is one coffee mug on my desk" to describe the layout of my desk, use multiplication to calculate a tip, or use differential equations to calculate the maximum load a bolt can carry before shearing. I only think about the laws of mathematics when I am too tired or tipsy to calculate the tip straightaway or if the differential equation is beyond me.

The way that entities are primarily meaningful to us is through our engagement with them, rather than as present objects. This applies to the entities of both Frege's third realm and the material world. Frege could argue that even if we access things primarily through their use, we are able to use them that way because of their status as objects with properties. I can use my coffee mug as a coffee mug because of its conductivity, even if I know of its conductivity only because I use it as a coffee mug. As seen in Chapter 7, Heidegger would first argue that this cannot hold because any theoretical knowledge we have would be built on our pre-theoretical dealings with the world. Thus, the foundation of our knowledge lies in our pre-theoretical engagement, not in the presence of objects.

Furthermore, as seen previously, entities showing up to us as objects with properties is a way of meaningfully engaging with them. In other words, seeing entities as objects is not a way of accessing the entity in its true form prior to our experience with it, but rather another way for us to deal with it. It is something that is meaningfully present to us. It is a way of being for the

entity, not a way of getting to a form of the entity that exists without the engagement of human beings.

8.2 The Problem of Truth

As we saw in previous chapters, Frege (at least in his later years) saw truth as a property of relationships between thoughts. The thoughts, "the square of the hypotenuse equals the sum of the square of the other two sides," and, "all bachelors are unmarried," carry with them the property of truth. The relationships asserted within the statements are the case, and thus they have the property of truth.

While Heidegger does not explicitly engage with Frege, he does mention the definition of truth as a property of propositions in his lecture *Logic: The Question of Truth* (Heidegger 2010, 8). In it, we have a proposition, "the square of the hypotenuse equals the sum of the square of the other two sides," and that proposition has the property of truth. Heidegger claims that this definition of truth "has the formal structure of *just-as* or *as-so*" (Heidegger 2010, 8). As Joshua Rayman notes, the *just-as* structure designates the structure of propositional truth to be using theoretical statements to "show something as it is" (2013, 97).

Making statements about things, according to Heidegger, contains the moments of putting together and taking apart, or of *synthesis* and *diaeresis* (Heidegger 2010, 115). In synthetic and diaeretic prepositions, we have the *logos apophantikos*, or speech that points out (Heidegger 1995, 309). In making statements that can be true or false, I am taking two things

³¹ Heidegger fleshes out four other contemporary meanings of truth that also have the *just-as* structure. The first of the five, though, is the one that applies most directly to Frege.

together or separating two things from one another and disclosing something about those beings. When I say "the chalkboard is black," I am bringing "chalkboard" and "black" together and disclosing the chalkboard as black. This bringing together makes it possible to judge whether or not the statement is true or false (Heidegger 2010, 9). If I were to say "the chalkboard is not black," I would be separating "chalkboard" from "black" and disclosing the chalkboard as not being black.

The *just-as* structure, though, takes theoretical knowledge as the primary mode of truth. For Heidegger, "it is far from evident…that theoretical-cognitive truth, or even the truth of statements, is the basic form of truth in general" (Heidegger 2010, 9). As we saw in previous chapters, Heidegger rejected the notion that theoretical knowledge was primary or that theoretical engagement grounded other forms of engagement. Instead, he claims that our theoretical knowledge of entities is only one way of engagement (Käufer 2022, 42), based on our involvement in the world. This means that there is a deeper level to truth, prior to propositional statements about things, which is itself disclosed (Rayman 2013, 99). ³²

In other words, propositional truth, such as the claim "the chalkboard is black," relies on the content of the claim being disclosed to us. The claim, "the chalkboard is black," is true because there is an entity that we are engaged with and that is being disclosed to us, the chalkboard, that is black. Heidegger claims that "the subject matter is already present, and from that present thing the statement...is lifted out and highlighted, as it were, not as a new object but at first only in the sense of making the subject matter more accessible as what it is" (Heidegger

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³² This level of truth will, in turn, be based on a third, more primordial level: disclosedness as such. This will be later in the chapter.

2010, 120). In other words, the condition of the possibility of the *just-as* structure of truth is the disclosure of the entity being spoken about.

That disclosure of the entity itself as itself relies on a prior level of truth as well. ³³ In order for an entity to be disclosed to us, disclosure itself must be possible. If disclosure as such were not possible, entities could not be disclosed to us and we could not make propositional truth claims about them. Disclosedness, then, is the fundamental level of truth (Rayman 2013, 99). More will be said on the nature and structure of disclosedness in the following chapters. With respect to Frege, Heidegger's critique is that Frege's definition of truth has the formal structure of *just-as*, where we combine and separate beings in speech to show things as they are. This structure relies on a prior level of truth, though, which is what is itself disclosed. A necessary condition to the disclosure of entities in speech is disclosure itself, which is, for Heidegger, the fundamental mode of truth.

8.3 Insights that Miss the Mark

While a Heideggerian understanding of Dasein and our being-in-the-world leads us to reject Frege's claims about truth and the third realm, there are some insights Frege had that align with Heidegger, though he was unable to deliver fully on them. One such insight is that the contents of ideas do not exist within the mind. Instead, he claims that our ideas grasp thoughts that are not internal to our minds.

³³ Some philosophers, such as Mark Wrathall and Taylor Carman, among others, (Carman 2007; Knowles 2022; Koskela 2012; Wrathall 1999; Wrathall 2002) miss the foundational level of disclosedness-as-such and end their analysis with uncovering. In doing so, they overlook the structural elements of *Dasein* that make uncovering (and *just-as* truth) possible and which shape the way that uncovering can occur.

Frege claims that because ideas are "owned" and internal, they cannot be directly communicated. Instead, ideas grasp at thoughts that are available to others through our shared access to the third realm. Though he took it to the wrong conclusion, that thoughts are external and reside in a third realm, the insight that they are not internal to the mind is important. Frege was on the right track when he argued against thoughts existing as internal to the mind.

Additionally, Frege's arguments for founding logic on a third realm also emphasize the importance of speech in the foundations of logic. We saw in Chapter 5 that he believed internal ideas had to be owned by an individual and were not directly communicable, which led him to claim that since thoughts were clearly communicable and were not unique to any given owner, there must be a third realm of thoughts. If I tell someone, "The square of the hypotenuse is the sum of the squares of the other two sides of a triangle," for Frege, the person I am speaking to, unless there are other circumstances preventing it, would understand and share the thought. We would both be grasping the same object: the Pythagorean Theorem. The thoughts, then, exist in the third realm and make it possible to communicate because when sharing a thought, we are referring to something external (rather than internal and owned by the individual) such that someone else can also grasp it.

Heidegger would agree with the direction of each of these claims, if not with the conclusions.³⁴ He also maintains that thoughts cannot be internal, but instead of externalizing them, he takes it a step farther and rejects the notion that there are distinct internal and external realms (Heidegger 2008, H.203). Furthermore, Heidegger maintains that any account of thinking

³⁴ This directional agreement has not been explored much in contemporary discourse, but can be seen in Barbara Fultner's work (Fultner 2005) where she investigates the apparent resemblance between Frege's "Sense" and Heidegger's "signification", and in Edward Witherspoon's work (Witherspoon 2002), looking at how the nature of language renders truth inexplicable within both of their philosophies.

must account for the fact that we are working with other people and we speak with them. Our thinking involves others. Thus, any account of thinking that does not involve engagement with others would miss something fundamental. I will briefly explain each of these in turn.

First, for Heidegger, the divide between the internal realm of the mind and the external world is illegitimate (Heidegger 2008, H.205). There is no internal space for ideas. There is no external space of material entities and non-spatial thoughts. Heidegger argues that the external world "can be discovered only on the basis of a world which has already been disclosed" (Heidegger 2008, H.203). In other words, engaging with the world as external reality "is founded ontologically upon the basic state of Dasein" (Heidegger 2008, H.202). In order to have an external world, we must already have a world within which we are immersed, or, as David Carr puts it, the mind "is already (i.e., a priori) outside of itself and in the world" (Carr 2007, 38). For example, in order to view my coffee mug as a real, external thing, I already have to be engaged with it and the world. I must already be living among entities in order to stop and look at them as external beings.

Instead, we are always already existing beyond ourselves in the world of entities. As seen before, I am not an independent mind that deals with things outside of myself, but rather I am being-in-the-world (Blattner 2007, 11). I am fundamentally engaged with things and this engagement is fundamentally unitary. I am in the world, existing in a horizon of beings that I work with and care about, structured by the ends that I am pursuing. The idea of the world as external to us is just one way the being of the entity is not primordial and instead is derived from our dealings with the world (Heidegger 2008, H.201). More will be said on the nature of Dasein such that it precedes any internal-external distinction in the following chapter (Section 10.1).

The problem with Frege's second insight, that meaningful speech is central to our understanding of thoughts and ideas, is similar. Once again, he is on the right track but falls back on the third realm as his solution. As seen above, Heidegger rejects any notion of a third realm, but he agrees that meaningful speech and our engagement with others are fundamental to our thinking and engagement with the world. This can be seen in his claims that we are ontologically constituted as being-with-others. Part of our constitution as Dasein is that we are always already engaged with other people whom we understand to be Dasein as well (Heidegger 2008, H.161). To engage with the world is to engage with it as one among others. Furthermore, for Heidegger, meaningful speech, which is understood in its primordial form as *logos*, pervades our experience and engagement with the world (Heidegger 2005, 28). We are born into a community of speakers with whom we are engaged and through speech we are able to articulate the world in which we act. In emphasizing the necessity of speaking with others, Frege hints towards these insights, but never quite makes it there, instead relying on postulating a third realm.

Furthermore, as seen above, the *just-as* structure that characterizes Frege's conception of truth is characterized by the *logos apophantikos*. It is characterized by a certain kind of speech. Frege had the insight that truth as *just-as* was built around speech, but never brought that insight to fruition.

8.4 A Critique of Logic

As we saw in Chapter 5, logic, for Frege, is the laws of truth, where truth is a property of thoughts that exist in the third realm. Thus, logic is based on a conceptualization of truth that Heidegger critiques, as seen above, and on entities existing in a third realm, which Heidegger would also reject. Frege's understanding of logic would then be rejected for two reasons. First, it fails because it relies on the third realm, which relies on both a subject-object dichotomy and a strong division between the internal and external worlds. Second, logic's laws draw on a derivative form of truth.

The first objection to Frege's logic follows the argument we saw in Section 8.1. For Frege, logic is the laws of truth, truth is a property of thoughts, and thoughts must exist in a third realm. Ultimately, then, logic is founded on objects in this third realm. Basing truth, and thus logic, on the third realm brings in two key assumptions: first, that the third realm is external, and thus that logic is founded on entities external to the mind and second, that the subject and object are self-contained entities that stand against each other. The thought exists outside of my mind in the third realm and then I can grasp it through my intellectual faculties. The thought is a self-contained, present entity with which I can interact.

As seen previously, Heidegger rejects both assumptions. He argues that we are being-in-the-world and thus are always already engaged with and within the world. We are always out beyond ourselves. The implication here is that there is no "external" world. Instead, the world is a constitutive moment of our being. The idea that the world is "out there" is based on engaging with world as a set of merely present entities, which is not our primary way of dealing with the world and furthermore is only possible because we are already engaged with the world. Thus,

thoughts and concepts cannot be external to us because there is no "external to us" within which they can reside. The laws of logic, then, cannot be grounded in an external third realm.

Heidegger rejected the subject-object dichotomy for similar reasons. Engaging with entities as objects standing against us is just one way of interacting with the world, though it has become the dominant way of viewing entities within the Western tradition. In doing so, we prioritize theoretical engagement with entities over other forms of entities and reduce them to mere presence. To view an entity as an object, though, requires us to be already out among entities and engaged in the world; it requires our existence as being-in-the-world. For Frege, though, truth is a property of thoughts, which are objects. Thus, if logic were grounded on present-at-hand entities, then they too would rely on our existence as being-in-the-world. The laws of logic could not be grounded on objects themselves, because existing as an object is a derivative way of being for entities.

The second reason for a Heideggerian rejection of Frege's foundations of logic is that Frege's logic involves the laws of a derivative form of truth. Frege's logic focuses on propositional truth, which Heidegger claims has the *just-as* structure. This *just-as* structure is founded on, ultimately, disclosure as such. This implies that Frege's logic is not the laws of truth itself, but the laws of the derivative forms of truth structured as *just-as*. Just as the *just-as* structure is founded on the deeper ontological structure of Dasein, the laws of truth would have to be founded on the structure of truth as disclosure itself.

The objections to Frege's reliance on the internal-external and subject-object dichotomies and his focus on a derivative structure of truth come together to show that Frege's logic is not

³⁵ Using a Heideggerian conception of objects. Frege maintained a narrower conception of objects that held them as distinct from concepts and thoughts (See Frege 1951)

grounded on a third realm of thoughts, but instead on our own character as Dasein. In order to engage with the entities of logic as merely present objects, we must be already engaged with them and be structured as ahead of ourselves within the world. Additionally, the *just-as* structure of propositional truth relies on the fundamental disclosedness of the world, which is part of our own being.

Chapter 9: Heidegger and Psychologism

While Heidegger distanced himself from the logicists, he did not do so by embracing psychologism. Rather he rejected both sides of the psychologism debate. In the first two sections of this chapter, I will explicate two of Heidegger's critiques of psychologism, which are that the science of psychology cannot ground logic because it would conflate two separate sciences with separate methods and regional ontologies (9.1) and that logic, and philosophy more broadly, cannot be founded on psychology because psychology is an ontic science (9.2). Nevertheless, Heidegger is sympathetic to some of the intuitions that guide psychologism and he thinks that there is a legitimate critique of logicism within the psychologistic movement. I will investigate this critique in Section 9.3. Finally, in Section 9.4, I will show that Heidegger undermines the themes of the psychologism debate as a whole and uses those critiques to move past the debate, setting the stage for his own conception of the nature and foundation of logic, which will be investigated in Chapter 10.

9.1 Psychologism Extends Psychology Beyond its Limits

The first critique we will look at is one made primarily in Heidegger's 1925/26 Winter Semester course *Logic: The Question of Truth*. He claims that there is no bridge from psychological knowledge to knowledge of truth and logic; "no matter how much psychological knowledge we accumulate, it will never help us clarify fundamental principles unless we pose the question of those principles right from the start" (Heidegger 2010, 80). In other words, the

concepts of logic, as a science of truth, must come from an investigation of the phenomena of truth (Heidegger 2010, 6), rather than from an investigation of the empirically understood mind. If we want to investigate truth and the laws around it, we need to pose questions about truth itself and how it shows itself to us, rather than ask questions about the human mind. As Bryan Reuther and Paul Stenner explain, when we study the mind, as understood by psychology, we are already acting on a set of presuppositions about the mind, such as it being a simply present entity rather than a being that is actively engaged with the world and views the mind as a separate entity from the world rather than as being-in-the-world (Reuther 2014, 2). These presuppositions restrict how we understand the entities under investigation (Stenner 1998, 68). Thus, as Charles Guignon points out, to investigate truth through the study of the human mind would confine our understanding of truth to being simply present and a relationship between ontologically separate entities, which as will be shown next in the following chapters, is an impoverished understanding of truth that is founded on a more fundamental uncovering of being (1989, 109).

In the last chapter, it was shown that, according to Heidegger, the various sciences relied on regional ontologies, where, by posing the questions of the science, a realm of being was delineated and then investigated. In botany, we delineate the realm of plants as objects with properties, in history we set apart the events of the past as causal and interrelated objects of study, and in psychology we look at the closed sphere of human cognition. These regional ontologies, in turn, as Joseph Rouse puts it, rely "upon an understanding of being in general" (2005, 5). In other words, in order to investigate psychology, we have already set apart a specific sphere of being: human consciousness understood as a natural object (Wearing 2013, 40). We will see Heidegger's critique of this formulation of the mind in the following section, but

granting this region as a legitimate field of (ontic) study, the problem remains that the questions of logic are not within this region.

The phenomena one investigates and the theories built up from those phenomena will be influenced by and follow from the regional ontology of the investigation. If we cast the mind as a natural object and then study it, we will come to understand the mind within the parameters of that regional ontology. As we saw last chapter, the phenomena we investigate, such as consciousness or human behavior will be selected for their alignment with the pre-selected regional ontology. Furthermore, as seen in the preceding chapter, the phenomena being investigated will be understood in terms of the regional ontology (Heidegger 2008, H.9). Seeing a red light will mean something different to a psychologist studying cognition, a physicist studying light, and a biologist studying the human eye. They will understand it, due to the regional ontology of their field, as a mental process, a specific wavelength of light, or as a certain alignment of cones in the eye.

Heidegger's criticism, then, is that the ontic study of logic, or the study of logic that has already been pre-delineated into a regional ontology and is thus based on a more fundamental understanding of being, follows from a different regional ontology than psychology. They are studying different things. Thus, trying to understand the laws of logic through the study of psychology fails "not because psychologism merely transgresses a boundary, but because it transgresses into what is not *psychology*" (Heidegger 2010, 81). In other words, in using psychology to study logic, one is moving beyond the scope of psychology into a new area of study, where the beings under investigation require different methods of engagement and are understood through different concepts. To move from psychology to logic is to no longer to

study psychology; it is to move to a different region of being, which requires its own form of investigation.

Aside from transgressing the boundaries of psychology, founding logic in the study of psychology and its regional ontology has a more fundamental problem: its regional ontology is not properly ontological. In other words, the regional ontology of psychology is an abstraction from a more fundamental ontology, which is impoverished by the presuppositions made in the abstraction. Psychology simplifies human existence to the mind and transforms it from being-in-the-world to a merely present object. This problem will be explored in more depth in the next section.

9.2 Psychologism Relies on the Ontic Science of Psychology

The second argument leveled against psychologism is that psychologism relies on psychology, which is itself an ontic science. Psychology, thus, relies on a more fundamental ontology that cannot be explained psychologically. As Elliott Sober and Adrian Cussins explain, psychologism maintains that the laws of logic are constituted by the human mind (Sober 2007, 166) and that the mind is an entity that can be studied through the empirical science of psychology (Cussins 1987, 124). Heidegger affirms this when discussing the debate around psychologism, saying that "psychology deals with real being and therefore is a pure natural science" (2010, 74). Since the natural sciences study real beings, as opposed to the ideal beings

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³⁶ He is specifically describing Heinrich Rickert's concept of psychology, but it is a fair assessment of the broader view among both psychologists and logicists.

studied in logic (Heidegger 2010, 74),³⁷ and psychology studies the real entity of the mind, then it is a natural science of real entities rather than an ideal science studying ideal entities.

The problem here is that by treating the mind as a real object and then studying it empirically, one has already made a few important presuppositions. The first is the distinction between the real and ideal (Heidegger 2010, 76). The second is that the mind is being engaged with as present-at-hand, which, as seen in the previous chapter, is already a derivative form of engagement (Heidegger 2008, H.98).

Psychologism holds that the laws of logic are based on the workings of a real entity, namely, the mind. A critique leveled against psychologism is that psychologism does not provide a way for the real entity of the mind to link up with the ideal content of logic (Heidegger 2010, 76). There are two separate realms, the real and the ideal, and psychologism bases the ideal on the real without giving an explanation of how we can go from the real to the ideal. Heidegger disagrees with this critique, describing the split between the real and ideal as a philosophical tactic where "first you invent these two regions, then you put a gap between them, and then you go looking for a bridge" (Heidegger 2010, 77). Furthermore, he is sympathetic to psychologism here, saying that it "can rightly appeal to the fact that this almost chemical separation of thinking from knowledge has provided nothing essential toward understanding what is the most actual of all: lived thinking itself, lived life as knowing" (Heidegger 2010, 77).

While Heidegger is sympathetic, psychologism does not get rid of what he sees as a false dichotomy between the real and the ideal. Instead, it simply doubles down on one side of the dichotomy. The laws of logic, for psychologism, are laws that regulate a thing that is empirically

³⁷ Once again, Heidegger is specifically referring to Rickert, though, as we have seen, it is a fair assessment of the psychologism debate as a whole.

real (See Fries 2018, SS 42 and Mill 1979, 139-141). The mind (and consciousness as explained by the existence of the mind) refers to empirically existent and available objects whose processes account for the laws of logic. The laws of logic, then, are no longer ideal laws, but instead are laws about and derived from empirically real entities. They are laws about the workings of the (empirically real) mind.

Psychologism, in simply embracing one side of the dichotomy, does not go far enough. Instead, Heidegger wants to get rid of the dichotomy altogether. He questions the validity of the distinction, saying, "maybe it is time to ask ourselves whether it is a real question at all, or whether there is something fundamentally wrong with it or with our understanding of it" (Heidegger 2010, 76). The distinction is not fundamental and is instead an abstraction based on different ways of engaging with entities and the world. Thus, the distinction is based on a "more original kind of being" (Heidegger 2010, 77). In other words, it is a theoretical way of understanding entities and is thus built on an underlying ontological foundation. In life, I neither experience things as fully ideal nor fully real. When I use my coffee mug, I use it as a coffee mug to drink coffee while writing. I engage with the coffee mug as a coffee mug. I do not understand it as only a physical entity, but as a thing whose type and use I already have a conception of and which already fits into my understanding of the world. It is a coffee mug, not a collection of properties that I happen to call a coffee mug. The "real" coffee mug only comes to being in my life through my engagement with it and my ways of understanding it; its possibilities are present based on my fore-conceptions (Heidegger 2008, H.232). At the same time, I do not engage with an ideal mug, but rather with an actual, present, usable mug (or memories and phantasies of actual usable mugs). The "ideal" is always embodied in the "real"; any appropriation "is always related to a determinate stock of beings" (Heidegger 2003, 194). This is

because the categories of real and ideal are abstractions of certain aspects of it, but these abstractions, as abstractions, lose part of the experience itself. We lose the fact that there is an original, fundamental unity of the real and ideal. Both psychologism and logicism, in losing this fact, are thus built up on a misunderstood distinction that does not have a firm, ontological basis and is instead maintained in spite of its misapprehension of the fundamental ways in which Dasein engages with the world.

Psychology also treats the mind as an object. The mind (for psychology) is an entity with properties, it follows natural laws, and can be investigated through the empirical sciences. The mind is an empirically real thing and certain processes occur within it that produce certain results (such as seeing the color red, liking certain pieces of art, or performing addition). This requires one to approach the phenomena studied in psychology theoretically, as an object of interest to be known by description.

As seen earlier, though, this present-at-hand engagement with the mind requires more originary phenomena to already have been meaningfully present to us, to already have been interpreted and understood in some way. With respect to empirical knowledge, Heidegger claims "only when objects as objects are directed toward objectness can empirical knowledge be directed to objects. Ontic truth presupposes ontological truth" (1997, 218). In order to study the mind (or anything else) through the empirical sciences we need to study it as an object. In order to study the mind as an object, we first need to take and make sense of it as an object. But taking it as an object requires us to have already made sense of it in some way prior to taking it as the object of scientific research. We already have a sense of the phenomena that will be (scientifically) known as the mind before we engage with it as an object. The science then presupposes the ontological truths about this prior engagement.

By presupposing the mind as an object, psychology is covering over aspects of the phenomena it is meant to be studying and is reliant on a set of philosophical presuppositions. Heidegger claims that these presuppositions cannot be explained by the science that already assumed them. Due to these presuppositions, the sciences of nature cannot successfully describe and explain the nature of human existence; they already presuppose the nature of human existence. Instead, we need to look to philosophy, understood as fundamental ontology, whose "object is never nature, but instead always *phenomenon*" (Heidegger 2005, 51). We must first come to an understanding of how things show themselves to us and the structure of our existence through investigating the ways that we make sense of the world.

Psychologism, of course, is not psychology, but instead a philosophy of logic built on the foundations of psychology. Since "it turns out that natural science with its own means of positive objects and working in general cannot attain philosophy's field of problems, then any philosophy making use of this natural scientific method in any way is thereby doomed" (Heidegger 2005, 50). Thus, psychologism must fail. In other words, since the natural sciences, in this case, psychology, are built on the ontological foundation that is to be explained by philosophy, philosophy cannot be, in turn, built on a scientific foundation. If it were, it would be dragging all the presuppositions of the sciences along with it, precluding it from getting to the phenomena beneath those presuppositions, which are the phenomena that philosophy must investigate.

9.3 The Insights of Psychologism

As we have seen, Heidegger is not wholly unsympathetic to psychologism. While explicitly critical of psychologism in some places (as seen in the preceding two sections) and implicitly critical of its themes (as will be seen in 9.4), He also believes that some aspects of psychologism hint at more fundamental truths. Specifically, he believes that psychologism develops from the insight that real acts of judgment cannot be separated from their ideal content (Crowell 2022, 19), though it fails to build on this insight in a clear manner. This prompted Heidegger to ask, "is not psychologism correct in holding out against this separation [between real acts and their ideal content], even if [psychologism] neither clarifies ontologically the kind of Being which belongs to the thinking of that which is thought, nor is even so much as acquainted with it as a problem" (Heidegger 2008, H.217)? In other words, while psychologicists misunderstand the being of Dasein, and logic itself, they correctly grasp that the truth is not extricable from Dasein, its relationship with entities and the world, and acts of judgment.

The distinction between acts of judgment and their ideal content cannot hold because truth becomes phenomenologically explicit when "knowing demonstrates itself as *true*" (Heidegger 2008, H.217). We only know a thing to be true when it shows itself as itself to us and "thus in the phenomenal context of demonstration, the relationship of agreement must become visible" (Heidegger 2008, H.217). A phenomenological account of truth, an account where we take the way truth shows itself to us seriously, must understand that truth shows itself in demonstration. We grasp truth in the entity in question showing itself to us. If I claim "my coffee mug is black with white writing," the truth of the assertion shows itself when I turn and look at my mug, and thus directed at the mug see that the mug shows itself as black with white writing. Truth, thus, becomes known in the act.

Those who maintain the distinction between act and content argue that though we know truth through an act, it applies to the content (Husserl 2001a, 79 and Frege 1964, xvi). The content of the judgment "my mug is black with white writing" is my mug, and the truth lies in whether or not the mug is, in fact, black with white writing. While it takes an act to demonstrate this, the relevant aspect is not the act, but the content. As Dummett points out, it would be true regardless of the form the act took, because truth acts are judgments about what is common to them (1993, 23).

The problem with this move is that it loses the phenomena. In making the distinction we are moving away from how truth shows itself to us and into a theoretical form of analysis that is derivative of this more primordial showing of truth. Truth shows itself primordially in the demonstration (Heidegger 2008, H.218). To focus solely on the content is to already separate out some aspects of how truth shows itself and prioritize them over other aspects. Truth-acts, then, when properly approached phenomenologically, cannot be broken down and separated into the two independent spheres of the act and the content. The content shows itself in the act, and is shaped by the act and the act is necessarily oriented towards content (Heidegger 2008, H.218).

Truth is only uncovered, which is to say, it only shows itself as itself, due to our ontological makeup. The demonstrations that show an assertion to be true can occur only because we are the type of beings that the world discloses itself to. Since we are being-in-theworld, we are cast into the world, engaging with it so that beings can show themselves to us as themselves and we can see these demonstrations of truth. Because truth is based on how beings show themselves as themselves, it is fundamentally oriented towards how beings are related to Dasein. It is founded on Dasein's structure of being-in-the-world (Heidegger 2008, H.219) and the world's disclosedness to Dasein (Heidegger 2008, H.220). Heidegger used the Greek term

alētheia to designate truth at this level (Heidegger 2000, 107), claiming that it captured the nature of truth as an uncovering (Heidegger 2008, H.18). More will be said about the nature of this uncovering in the next chapter, but for the sake of the act-content discussion, a discussion of its relational character should suffice.

For truth to be an uncovering, or a disclosure of an entity as itself, it requires an entity to be disclosed and an entity to which it is disclosed. Dasein is the being that being discloses itself to, or the being that can question and understand being (Heidegger 2008, H.15). Since Dasein is beyond itself in the world, it can uncover beings and have them disclose themselves to it. In its existence, Dasein is, in Sheehan's words, "open and disclosive both of itself and of something other" (2015, 142). It is fundamentally related to the world and this relation involves the uncovering of beings. Thus, Dasein is necessary to the truth. Entities show themselves to Dasein as themselves, which requires Dasein to be engaged with them in some way. We cannot have truth without this engagement because without this engagement there would be no disclosure, no uncovering. Without any uncovering, there would be no truth, because, primordially, truth is the uncovering.

Thus, we see that the separation of act and content is an abstraction away from this fundamental relationship. The content is ontologically tied together with the act. It shows itself through the act and, primordially, is bound to the act. Truth, as *alētheia*, is bound to both the act and the content, fundamentally relating Dasein to the entity in question. To break the uncovering apart into act and content, and then claim that the content is the only aspect relevant to truth is an abstraction away from the way truth itself shows itself to us, and covers over the phenomenon of truth, replacing it with theoretical abstractions.

9.4 Heidegger and the Themes of the Psychologism Debate

In the preceding chapters, it was shown that one of the themes of the debate as a whole is the prioritization of the epistemological over the ontological. This could be seen clearly in Husserl's search for the transcendental conditions of scientific knowledge (Zahavi 2003, 8). His focus was first on how things are given to us in experience, the ways that they justify knowledge claims, and the structure of conscious experience such that knowledge claims are possible. Once these conditions are established, one can move on to the positive sciences to make further knowledge claims, grounded on the sure footing of phenomenology. Psychologism, similarly, first focuses on the epistemological, as implied by its reliance on representational structures and that they attempt to establish psychology as a science (and epistemic framework) in order to establish logic and then move on to metaphysical questions.

Heidegger claims that the prioritization of the epistemological (and logic itself) over the ontological has the relationship backwards. One reason that the epistemological cannot precede the ontological is that the objects and categories of epistemology themselves already have some form of being. They are already intelligible to us in some way and thus rely on how we make sense of things. Because "making statements about objective things [*Vorhandenes*] discovers them in a mode peculiar to it, namely, as a *determining* of something as something" (Heidegger 1984, 127-128, italics mine), the way beings show themselves to us is prior to how we determine the validity and reliability of claims about them. Thus, we need a proper understanding of how we engage with the beings in order to understand and validate our epistemological stances.

The precedence of ontology over epistemology extends to the prioritization of logic over ontological claims, for much the same reason. Heidegger claims that propositional truth, which is the form of truth formal logic is engaged with, "is more primordially rooted, rooted in already-

being-by-things" and "already being with things belongs to the existence of Dasein, to its kind and mode of being" (Heidegger 1984, 127). Formal logic, in leading us from true claim to true claim or in ensuring truth, is already built on our being-in-the-world. We must already have entities meaningfully present to us in order to make truth claims and inferences about them and the way they show themselves to us. Thus, logic is bound to the ways things show themselves to us and to the ontological structure of Dasein. Furthermore, since logic is either seen as the laws of thinking or the laws of truth (for the psychologicists and logicists, respectively), logic, for both, must rely on a deeper ontological presupposition, either in the composition of the mind or in the nature of truth. Thus, logic follows from ontology, not the other way around (McDaniel 2022, 182).

Logic, as understood in the psychologism debate, can neither ignore nor precede ontology. Instead, "the entire problem of the possible precedence of metaphysics over logic or logic over metaphysics cannot be posed, discussed, and solved by logic, unless logic is conceived as the metaphysics of truth" (Heidegger 1984, 105). In other words, logic, in order to be anything other than a purely formal exercise that "has nothing in common anymore with philosophy" (Heidegger 1984, 5), must be understood as the study of the being of truth rather than a description of its laws.

The second theme of the psychologism debate that Heidegger undermines is both sides' reliance on the subject-object dichotomy. As seen in the preceding chapters, both psychologicists and logicists find the justification for the laws of logic on one side or the other of the subject-object dichotomy. The logicists believe that the laws of logic are derived from the objective side. For Husserl, the laws of logic are derived from the ideal objects given to consciousness within the intentional structure. Other logicists, like Frege, see them as the relations between ideal

objects in an ideal, third realm (Frege 1984, 363). On the other hand, the psychologists think that the laws of logic are founded on the subjective side of the dichotomy, where the laws of logic are based on the constitution of the human mind. Mill maintains that the laws of logic bottom out in inductive reasoning because the mind, ultimately, only reasons on a case-to-case basis, while Fries claims that the laws of logic are founded in the categories through which the mind constructs experience. The laws of logic for them follow from how the mind operates, or from the workings of the subject side of the dichotomy.

As seen in the preceding chapter, Heidegger rejected this dichotomy, viewing it as a misunderstanding of how we engage with the world and as founded on a more fundamental way of being. Breaking the world into a subject and object, even if they are necessary correlates, is founded on our fundamental structure of being-in-the-world, where we are already engaged with beings and invested in the world. Only on this basis can theoretical discussions begin and can we see entities as objects. Dasein is not a self-contained subject that deals with self-contained objects. Rather, it is a being that is always beyond itself and already engaged with entities, while entities are already related to Dasein and showing themselves to Dasein.

If the subject-object dichotomy is an illegitimate distinction, where does that leave the foundations of logic? They can no longer rely on the object because the object only exists as theoretical abstractions. Relying on the subject to found the laws of logic runs into the same problem. Much like the falling away of the distinction between the real act and ideal content, the loss of the subject-object dichotomy means that we need to turn to our primordial ways of engaging with the world and the existential structure of Dasein in order to come to an understanding of how we make sense of things, and from there to the foundations of logic (Heidegger 2010, 114). Instead of being founded on the subject or the object, logic must instead

be founded on our fundamental engagement with the world, on the ontological structure of Dasein.

Finally, as seen above, Heidegger undermined the distinction between real and ideal entities, claiming they are abstractions from a more primordial experience of the world. As seen before, Husserl and the logicists thought that the laws of logic were ideal and based on the relationships of ideal objects, while the psychologicists sought to undermine the distinctions between the laws of logic and what is empirically real. Once again, then, an important axis of the psychologism debate has been shown to be based on faulty assumptions about the being of Dasein and the nature of the entities it encounters. Thus, once again, we need to turn back to Dasein itself in order to come to a better understanding of the phenomena of existence and to set these assumptions right.

Heidegger, thus, undermined three key assumptions of the debate over psychologism. If his critiques are successful, then neither side can come out on top, because while one side might make stronger arguments than the other, they are both playing the same faulty game. Instead, to understand logic, we need to start with the ontological structure of Dasein by looking at how Dasein primordially engages with the world. From there we can work our way up to the laws of logic, thus founding them on the ontology of Dasein. I will do this in the next chapter.

Chapter 10: Heidegger's Conception of Logic

Heidegger was critical of the logic of his time. He claimed that it had become superficial and lost sight of its own subject matter (Heidegger 1984, 5), which is "speech, specifically with regard to truth" (Heidegger, 2010, 6). Because contemporary logic lost its focus and became so disconnected, in order to understand logic, we have to "prepare ourselves to retrieve the genuine tradition from out of the ruins of the sham, to really appropriate the productive and living elements that lie under the rubble" (Heidegger 2010, 11).

The attempt to retrieve a genuine understanding of logic guided Heidegger's radicalization of the psychologism debate, as we saw last chapter. In doing so, Heidegger also turned to the philosophical tradition and analyzed the way that logic developed over the course of history. He saw that

research into the history of logic by way of the history of its problems does not take logic as a discipline of philosophy and the order outlined by its textbooks, but as the research into categories, in which the fundamental structures of [first] addressing and considering objects by life are raised to the conceptual level. (Heidegger, 2007g, 112)

Logic cannot be understood merely as a way of relating concepts or sentences to each other, but rather must be focused on the ways that the structures of Dasein are conceptualized and theoretically explicated. Logic follows from how one engages with the world, how one is structured, and how beings show themselves to Dasein. Thus, "ontology and logic are to be

returned to their unity of origin in the problematic of facticity and are to be understood as the derivatives of principled research" (Heidegger 2007c).

Thus, in order to understand logic, we first need to come to an understanding of being, how entities show themselves as themselves, and the ontological structure of Dasein. As seen in the preceding chapters, this starts with the ways we engage with the world and the entities of the world, or with phenomena, but "the expression of [phenomena] is accordingly not a conceptual category, but instead a manner of being, how something is encountered and, indeed encountered in the *first* and, as such *first legitimate* way" (Heidegger 2005, 10). Logic relies on the structures of being, which we know through beings showing themselves to us. Thus, in order to come to an understanding of logic, we need to understand how we can make claims about the ontological character of Dasein (as was addressed in Chapter 7). Thus, we need to know the ontological character of Dasein itself (10.1). Since logic is understood as speech about truth, it relies on the proper understanding of truth (10.2). The nature of truth and Dasein will lead to a discussion of the hermeneutic character of the understanding (10.3) and the role that logos plays in the disclosure of being (10.4). With the foundation shown, we can turn to an explanation of what Heidegger believed to be the proper understanding of logic (10.5). Once a Heideggerian understanding of logic has been fleshed out, we can then conclude with a final word on the psychologism debate, where it will be shown how Heidegger builds on his critique of the debate to form a radical new understanding of logic (10.6).

10.1 The Ontological Character of Dasein

The explication of the ontological structure of Dasein, which will ultimately ground logic, will begin with a discussion of being-in-the-world and being-with-others. It will involve explanations of the nature of disclosure and set the stage for further discussions about Heidegger's conceptions of truth, *logos*, and apophantic speech.

Being-in-the-world is a primordial structure of Dasein's being. Heidegger claims that it "is a basic phenomenon and is not resolvable further; on the contrary, it is a primary and perhaps *the* primary ontological fact of Dasein itself" (Heidegger 2003, 256). Dasein is, fundamentally, being-in-the-world. It is a unitary structure, meaning that, while it consists of the moments of being-in and the world, they can only be grasped as moments of the whole of being-in-the-world. Neither can exist or be understood without reference to the other (Heidegger 2008, H.53), or, as Marilyn Stendera puts it "Dasein would not be without world, and world is structured by Dasein" (2015, 240).

The first moment that we will discuss is "that entity which in every case has Being-inthe-world as the way in which it is" (Heidegger 2008, H.53). Heidegger is speaking of Dasein,
the entity that can question its own being and make sense of the world around it. Since being and
beings are intertwined, all beings have being (Kaufer 2005, 483) and you cannot have being
without beings (Vallicella 1981, 399). An integral part of being-in-the-world, or a mode of being
that is engaged with and makes sense of the world, is the particular being that is engaged in this
sense making. The sense-making being, Dasein, is necessary to truth, according to Heidegger.
Truth, as we will see later, is inextricable from the being of Dasein (Rayman 2013, 101), such
that without Dasein, there could be no truth. This is because disclosedness itself, which, as we
will see later, is the fundamental level of truth, is essential to the constitution of Dasein

(Heidegger 2008, H.228). The implication here is that "because the kind of Being that is essential to truth is of the character of Dasein, all truth is relative to Dasein" (Heidegger 2008, H.227, italics removed). In other words, because truth is disclosedness, which is the character of Dasein, Dasein is necessary for there to be truth, and all truths, ultimately, relate to Dasein. This is because Dasein is who the truths ultimately are for and come to being through.

The second moment of being-in-the-world, being-in, is the description of "that entity which in each case I myself am" (Heidegger 2008, H.54). In being-in, we are not present-at-hand alongside other present-at-hand entities, or objects with properties alongside other objects with properties. Instead, being-in refers to dwelling among and being familiar with the world, "which is familiar to me in such and such a way" (Heidegger 2008, H.54). We are familiar with the things of the world and engage with them; we grasp them and make sense of them. Heidegger claims that "existence as being in a world (being-in) is a being that discloses" (Heidegger 2005, 76). Entities disclose themselves to us as we grasp them, engage with them, and become familiar with them in our everyday existence. This disclosure is central to the way that we are in the world and, as seen in the discussion of truth as disclosure in Chapter 8, has three modes. The fundamental mode of disclosure is the disclosedness as such of the world. For there to be any disclosure of entities, we must be structured in such a way that entities can disclose themselves to us and the way that we are structured as within the world shapes how disclosure occurs. Within this structure, we understand and navigate the world as a unified whole. Subordinate to the whole of the world, entities also disclose themselves to us. In navigating the world, I engage with entities and they disclose themselves to me through that engagement. Finally, entities disclose themselves to me through acts of synthesis and diaeresis. In these acts, the ways that entities exist for us are pointed out in propositions through taking together or pulling apart. For

example, I can say, "my coffee mug is warm." This propositional claim pulls the entity, "my coffee mug," together with warmth in speech. In doing so, it discloses the warmth of the mug. The mug is not solely disclosed through the propositional claim, though. Instead, I am already engaged with it. I use it to drink coffee and thus feel that it is warm. Furthermore, it is not disclosed to me in a vacuum. It exists within the broader context of my desk, my room as a whole, my goal of writing this chapter and so forth. In drinking from the mug, I am also disclosing the world as such. I am navigating the broader context within which the coffee mug fits and must have an understanding of the world in order to use (and disclose) the coffee mug and in order to make synthetic and diaeretic claims about it.

As Sheehan points out, since we are being-in, we always exist beyond ourselves, thrown into the world (2015, 114). We are always already alongside things and engaged with them. Our existence beyond ourselves means that we are tied up with the world and invested in it (Heidegger 2001, 68). I do not engage the entities around me for no reason, but have some goal that I am trying to achieve. I use the hammer so I can build a bookshelf because I want my apartment to be marginally less messy. I drink coffee from a coffee mug so that I am less tired, so that I can write, so that I can graduate, and so forth. I have ends that I pursue in the world and have a fundamental interest in it. I am only capable of this because I exist ahead of myself and alongside these entities. Thus, my structure is not only to be in the world, but to be ahead of myself and already within the world (Heidegger 2008, H.293). In other words, the way that I am being-in is characterized by the ontological structure of care. As Heidegger claims, "Dasein's Being reveals itself as *care*" (Heidegger 2008, H.182).

The final moment of being-in-the-world is the world. As mentioned earlier, the world is not a set of present-at-hand entities that exist around us and independently from us. Instead, the

world is "a characteristic of Dasein itself" (Heidegger 2008, H.64). The world is not an independent entity that we are within or a vague descriptor of the suite of entities that surround us, but part of the unitary structure of Dasein. The world designates the way that we make sense of that which we are thrown into. The world is that which we are preoccupied with (Heidegger 1985, 168), where we are interested in how we engage with it and the possibilities that come with this engagement. It is, as T.A. Fay describes it, the network of entities that we engage with, make sense of, and care about, which exists in relation to us (1972, 165). It is encountered as a whole, rather than a set of individual entities and, as it relates to us, we are projected into it. For example, my immediate surroundings consist of a computer, a coffee mug, a stack of books, a phone, a pair of unopened COVID tests, and a bag of dog treats. None of these items is intelligible to me in isolation; rather, they come together as my workspace, and are tied to me and each other through how I engage with my workspace. My computer rests on my desk to the left of my mug and is primarily used as a tool used to type this chapter, existing with the books to be used for the same goal. Each of the entities exists as meaningful to me and within a frame of reference not only pointing to their potential usefulness but also to my goals and to each other. The world is then the meaningful whole of those entities with which I relate and engage, within the structure of my existence as being-in-the-world.

According to Heidegger, the world is already discovered through our engagement with it. He claims, "whenever we encounter anything, the world has already been previously discovered, though not thematically" (Heidegger 2008, H.83). The world is not only our network of meaningful engagement, but it goes ahead of us, setting the realm of possibility for our encounters with entities. Structurally, part of encountering entities, part of grasping and making

sense of things, is that by the time we are aware of them and encountering them, they are already part of our network of meaning. They are already integrated into the whole of one's world.

Equiprimordial with being-in among the entities of the world and with the world as the meaningful whole of entities, I am being-with-others. This equiprimordiality means that neither being-in-the-world nor being-with-others has priority over the other or founds the other, but both arise as fundamental structures of Dasein; they are both essential relations of my being (Heidegger 2008, H.131). Heidegger claims that "being-with belongs to Being-in-the-world, which in every case maintains itself in some definite way of concernful Being-with-one-another" (Heidegger 2008, H.161). Dasein exists within the world and among other people who share the same way of being, and "are themselves Dasein" (Heidegger 2008, H.121). We do not engage with others as if they are ready-to-hand entities (Heidegger 2008, H.121) or as present-at-hand subjects (Heidegger 2008, H.123), but rather they show themselves to us as the same sort of beings as us. Primordially, others show themselves as also engaged in a meaningful environment of ready-to-hand entities while pursuing some end (Heidegger 2008, H.123). When I run into someone at the office, I do not see him as a disembodied subject or as a tool to be used, but rather, I first engage with him as if they are engaging with the world pursuing their own goals.

Much like how we are always already among the entities of the world, Dasein is always already cast out among other Dasein and engaged with them. I am always engaging with the world as if I am among others. I engage with things in a manner passed down to me through a tradition or from others, and see the world through a horizon shaped by my interactions with other people. Furthermore, Heidegger claims that "knowing oneself [Sichkennen] is grounded in Being-with, which understands primordially" (Heidegger 2008, H.124). My reflections are shaped by my engagement with other Dasein.

In being equiprimordial, in sharing the status of essential relationships of Dasein, both my engagement with the world of entities and the world of others mutually affect and inform each other. Neither is prior to the other, but they help to set each other's terms. Let us return to the previous example of building a bookshelf. In the example, my given end was to make my room marginally less of a mess. I do not come to that goal in a vacuum, but rather for a variety of reasons that are themselves intertwined with the entities in my room (such as books) and others. I feel a sense of shame when someone sees the mess, I want to be able to find my books more easily, I have a picture of an ideal workspace that I want to meet, and I want more room on my desk to make writing easier. The goal of a cleaner room comes from a blend of desires that are motivated by both my use of the ready-to-hand entities that make up my desk and my engagement with others. Furthermore, the justifications themselves (avoiding shame, finding books) are also intertwined. How the embarrassing mess of the constellation of things on my desk shows itself to me is bound by the spatial constraints of my desk and the way the entities themselves are scattered about. My desire to find my books more easily is tied to my desire to write this chapter in a timely manner, which I am motivated to do through my relationships with others.

10.2 The Nature of Truth

If Dasein is, fundamentally, being-in-the-world, then Heidegger needs an explanation for how his conception of truth relates to and is compatible with Dasein. Heidegger does so, as seen previously, by defining three levels of truth. Truth, in its most fundamental form, is defined as disclosedness as such. The second, subordinate level is the entities that are disclosed. Finally, the tertiary level of truth is ontic truth, characterized by the *just-as* structure. In the following

section, I will explain what he means when he defines truth in this way, along with a series of implications of his conceptualization of truth.

As we saw in Chapter 8, ontic conceptions of truth, such as propositional or representational definitions, have the formal structure of *just-as*. This structure is oriented around theoretical knowledge (Heidegger 2010, 9) and functions through acts of synthesis and separation in speech (Heidegger 2010, 116). When I make the claim, "all bachelors are unmarried," I am taking a concept, bachelor, and attaching the property "unmarried" to it. When I say, "a carbon atom has six electrons" I am synthesizing "carbon" with "six electrons" and when I say, "my coffee mug is not green" I am separating the color "green" from the object "my coffee mug."

As we saw in the preceding chapters, Heidegger thinks that the basis for popular conceptions of truth is found in how beings show themselves as themselves. Beings disclose themselves to us in certain ways, which is the basis of any conception of truth, as seen in Heidegger's claim "the entity itself which one has in mind shows itself *just as* it is in itself.... just as it gets uncovered as being" (Heidegger 2008, H. 218). This means that the ontological basis of truth is in how Dasein is related to the world, as being-in-the-world. Because we are engaged with the world and are ontologically constituted through our relatedness with the world, the world and its entities disclose themselves to us in our engagement with it. As I use my coffee mug, it reveals itself to me and different aspects of it are uncovered. When I drink from it, it discloses its texture, weight, how it conducts heat, and its usefulness in holding coffee. It discloses its color and shape as I stare blankly at it when formulating sentences.

Acts of uncovering, though, are also acts of covering over, as Fay has noted (1977, 13). We do not exhaust the entities and our world in our engagement of them. When an entity

discloses itself to us, it does so in a certain way based on our engagement with it and not in other possible ways. This is in many ways obvious. When I look at my mug, it shows itself as black with white writing, but not as conducting heat, because I am not engaging with it in a way that I would feel the heat or in a way that the mug could disclose its conductivity. It also extends to the ways in which the being shows itself as a whole, rather than merely its aspects or properties. When I am using my mug to drink, it shows itself as a tool for that end, but in doing so it does not show itself as a substance with properties (which it could show if I were to study it as a scientific object) or as a tool to some other end (as a pen-holder, for example). Our relationship with entities is finite and their disclosure to us is thus also finite, which means that "clusiveness is a feature proper to the existing world as existing" (Heidegger 2005, 28). This is because "the elusiveness of things comes to life by virtue of the fact that we encounter them circumstantially" (Heidegger 2005, 28). The disclosure of beings in their own being, which stands as the second level of the Heideggerian concept of truth, comes in a relationship between Dasein and the world, which is fundamental to the being of both Dasein and the world.

Thus, we understand things primordially through our engagement with them. This is an engagement that requires a unified whole of both Dasein and the world, as seen in being-in-the-world. Claims and statements about entities (the statement "it is true that Socrates is mortal" is about Socrates and whether or not he is mortal) are also about Dasein. Heidegger claims "the idea of truth as disclosedness thus necessarily implies that truth is disclosedness of something and for something (properly for Dasein) every truth is truth about and truth for" (Heidegger 2007f, 286). I will look at each of these in turn.

First, truth at the level of uncovering means that, for Heidegger, "truth...belongs foremost to entities...themselves as they are encountered" (Bowles 2007, 213). Rather than

postulating truth as a property of the relation between entities and propositions or some other being, this tertiary level of truth originates and belongs to the entities being disclosed, where uncovering, in acts of assertion and knowing, "remains related solely to the entity itself" (Heidegger 2008, H. 218). The statement, "Socrates is mortal," is not merely a proposition that maps onto the facts of the matter, but instead is a way of grasping the being of Socrates. The truth, for Heidegger, is the disclosure of an aspect of the entity "Socrates," namely, the fact that he will eventually die.³⁸

This is distinct from definitions of truth that are derivative of truth as uncovering, such as representational definitions of truth, because it is not that the truth follows from the qualities of the entities themselves (for example: "Socrates is mortal" is true because it maps correctly onto the entity Socrates, due to Socrates being mortal) but rather the disclosure of the entity itself is the truth (i.e. the uncovering is the very disclosure of Socrates as mortal). Truth as uncovering is the disclosure of the entity. Thus, truth, at this level, is how the entity shows itself as itself to Dasein. The secondary level of truth is the truth of that entity; it is the entity as it is disclosed to us. True statements about the entity, or representations of the entity, ³⁹ are derivative of the disclosure of the entity, which is, in turn, subordinate to the structure of disclosedness as such.

Since truth, at this level, is a disclosure, it fundamentally involves the being to which it is being disclosed. A disclosure requires both an entity to be disclosed and a being to which it is disclosing. That entity is, of course, Dasein. Contrary to the more derivative ways of understanding truth, where what is true is true about representations, sentences, or ideal beings, and is thus eternal with respect to those representations, sentences or ideal beings, truth is always

³⁸ More about the relationship between speech and disclosure will be said in sections 10.5 and 10.6.

³⁹ Both of which are examples of the *just-as* structure of ontic truth.

for someone. According to Heidegger, it, "in its most primordial sense, is Dasein's disclosedness" (2008 H. 223). In order for there to be the disclosure of beings, there must be disclosedness itself and the disclosure of beings relies on the structure of disclosedness.

How, then, are we structured such that disclosure is possible? As seen above, we are structured such that we are in the world. This means that we are out amongst the entities of the world and they, primordially, are not structured as a set of independent things, but rather are all interrelated within a network of meaning. I can only make sense of, and make ontic claims about, things because they are within this meaningful horizon and because I am constituted such that I exist beyond myself in the world. Thus, as Rayman claims, the condition for the possibility of the disclosure of beings and thus of ontic truths, is the world (2013, 99).

A consequence of our being engaged with the world and of the world being part of the constitution of Dasein is that the entities of the world are encountered "in terms of the end-for-which of its serviceability" (Heidegger 2010, 121). Since the world is constituted as a meaningful network ordered by my ends, the entities within it show themselves within the framework of those ends. This means that structure through which we engage with the entities within the world is what Heidegger calls the as-structure, where we engage with "something as something" (Heidegger 2010, 121). I encounter my coffee mug as a way to drink coffee, my computer as a way to write, and my phone as a way to distract myself. I do not see my coffee mug and then mentally add the meaning of "can be useful to drink coffee," but rather engage with it first as the way to drink coffee.

The as-structure, then, is the structure through which disclosure is possible. Disclosure occurs, and entities are uncovered, by showing themselves as something. Truth *just-as* is thus also dependent on the as-structure of disclosedness. Not only is my coffee mug always disclosed

as something, but claims about my coffee mug are also, ultimately dependent on the as-structure. I can say "my mug holds coffee" and synthesize the mug with the property of holding coffee in language because I first use it to hold my coffee, which in turn is only possible because disclosedness itself has the as-structure.

As seen above, truth, in its most fundamental form, belongs to a particular being. That being, Dasein, is embedded in its own situation, tradition, and context. Thus, the two subordinate levels of truth are dependent not only on the structure of Dasein but also the facticity and history of the one to whom the truth is disclosed.

Beings are disclosed to us within an already established context. Heidegger claims that things are meaningful when they "become intelligible as something" (Heidegger 2008, H. 151) and the intelligibility is structured "from a fore-having, a fore-sight, and a fore-conception" (Heidegger 2008, H. 151). The structure of our engagement with the world is such that we already come to the beings of the world with a preliminary understanding of them, based on prior engagement with the world and our various ends that lead us to engage with them. For example, my coffee mug discloses itself to me in one way, due in part to my history with it (such as how I have used it in the past and where I got it) my prior knowledge about coffee mugs (such as that I know how this coffee mug and coffee mugs in general work and what to expect of them) and my current standpoint with respect to the mug (I need it at this time because I am tired and trying to get work done and it fits into the general scheme of the goals that I am currently pursuing).

The two implications of Heidegger's definition of truth come together to mean that truth, as an uncovering, is based on the context of both necessary aspects of the disclosure, the entity and Dasein, and the contexts of the two, which are inextricable from each other (Dahlstrom 2007, 68). The context of Dasein (its history, tradition, and goals) sets the terms for how the

entity shows itself and the possibilities that it reveals. At the same time, the entity shows itself and discloses itself to us through our engagement. My mug shows itself to me as a tool for drinking coffee based on my desire to drink coffee, oriented within my hierarchy of goals, and the mug itself discloses its capacity for being a tool for drinking coffee.

10.3 The Move Towards Hermeneutic Phenomenology

Heidegger's understanding of truth, which is ultimately disclosedness as such, implies the fundamental fact that the way I engage with the world and the knowledge claims I make are shaped by my own history and life. Not only is the way I engage with my coffee mug founded on previously sedimented engagements with it and similar entities, my theoretical knowledge of it is also shaped by these factors. Furthermore, the coffee mug is not given in isolation, but rather as part of a wider whole and the possibilities I draw from it are shaped by my own history.

What does this mean for knowledge? First, knowledge claims are built on pre-theoretical engagement with the world and are themselves a particular form of interacting with the world, namely, theoretical discourse about it. By the time theorizing occurs, it has already been interpreted as the sort of thing that can be engaged with theoretically.

Second, the output of theoretical engagement will be dependent on the wider context of engagement. Any theoretical knowledge we have is dependent on our context (Golob 2022, 83). This implies that knowledge itself, not just an individual's grasp of the facts, is contextual and based on one's engagement with the world and point of view. Not only can we not obtain a view from nowhere because we are finite entities, but there is no view from nowhere to obtain (Howdyshell 2021, 48). There is not a stash of universal knowledge that we try to grasp in our

finitude or some ideal of presuppositionless truth that we are imperfectly trying to find. Rather, theoretical truths are reliant on disclosure to Dasein and the structure of Dasein. All knowing is thus an interpretive exercise. There is no way to come to knowledge without interpretation because "being-here [Dasein] was characterized as pre-possessing the interpretation" (Heidegger 2005, 83). We are constituted by the pre-possessions that make knowledge interpretive and contextual.

Thus, as Blattner claims, universal claims, such as those about the nature of Dasein, would also be contextual and from a standpoint (1999, 247). They are developed through a careful analysis of one's situation, which leads to an understanding of the structure of one's being but is itself based on one's own prejudices and presuppositions that were developed over one's life and from one's history and tradition. Thus, it seems that, as Greg Shirley claims "the universality of any logical, mathematical, or natural law is thus relativized" (2010, 73). How, then, can Heidegger make claims about the nature of human existence and the structure of Dasein when any claim he makes will be tied to his own situation? Are universal claims impossible? Would this not render any theory of logic nonsensical?

If we were to hold to another standard of truth, such as representation or an idealistic conception, where truth is determined by the relationship between independent beings in a third realm, then logic would become nonsensical and universal claims impossible. Recall, though, that Dasein and the entities it uncovers are not independent of each other. Rather, they are part of a unitary structure, which means that the study of the being of the entities is not the study of entities-in-themselves but rather the way they show themselves as themselves to us. There is not any substance beyond our grasp here (Braver 2007, 206). The universal claims that Heidegger

makes (for example, Dasein is being-in-the-world) are about how beings show themselves to us as intelligible.

The justification of the universal, here, is often compared to Husserl's justification of self-evidence (see Käufer 2001, 471, for example). Recall how Husserl understood true universal judgments to be those about the essential features of an intentional object. When I claim "all men are mortal," for Husserl, I am not claiming that there is a metaphysical category "man" and that all of them that exist have the property "mortal," but rather that insofar as I experience some objects of experience as human beings, I understand that they will die one day. When I make the claim that all men are mortal, I am saying that if an intentional object were to show itself as non-mortal, it would cease to be grasped as a human being. The category of "human" would no longer be given with it. To fulfill the category of "human" in my experience of an entity, it must fulfill the category of mortal, among other things.

For Heidegger, ontic truths, such as mathematical or scientific truths, are derived from disclosure of entities to Dasein, which itself is based on Dasein being constituted by the world, disclosedness, and the as-structure. It primordially arises from Dasein's constitution as engagement with the world. Judgments that arise from beings showing themselves to Dasein are, in a similar way to what we saw with Husserl, about the way that they show themselves to us and the way that we make sense of them. When I say "all men are mortal" I am not saying anything about a transcendent metaphysical category, but rather that Dasein shows itself to me as finite and moving toward its own death. It is part of how my own being and those beings that show themselves as like me are structured. If I engaged with an entity that was not capable of death, it would show itself as a being distinct from my own existence as a human.

It is important to note that the possibilities for beings to show themselves as themselves within my own horizons are constituted by my own situation, history, and tradition. This is not accidental either, but instead, as Daniel Dahlstrom points out, essential to the possibility of interpreting and understanding (2010, 410). Universal claims are still bound to the context in which they are made because the context helps constitute the way that the beings show themselves as themselves. Universal claims are thus not timeless and from nowhere, but situated in a context. As the context changes, the ways that beings show themselves can change as well.

Judgments, both about particulars and universals, are central to the study of logic. If we want to come to an understanding of logic within a Heideggerian paradigm, we then need to understand how we make judgments, how they interact with their context, and how they uncover being. To do, so we need to look at *logos*, which we will do in the next two sections.

10.4 Logos and the Disclosure of Being

One way that entities are disclosed to us is through discourse or speech, the primordial form of which Heidegger calls *logos*, which is a speech that makes things visible (Heidegger 2007h, 261). Heidegger casts *logos* "as a basic possibility of existence: as a process of addressing and discussing the world encountered" (Heidegger 2005, 80). What does this mean? To start, a fundamental aspect of how we encounter the world is through discourse, where "insofar as [*logos*] can characterize a human being's existence, it pervades a human being's entire dealings with his world, all seeing, interpreting, articulating" (Heidegger 2005, 28-29). The way I encounter my world is shaped by *logos*. One way that *logos* pervades my existence is in the fore-structure of interpretation. As seen above, when I engage with an entity, the way that

it shows itself is already shaped by a conception of it that I already have, which itself is informed by my tradition and previous understanding, which themselves are handed down through discourse. I did not come to view my coffee mug as a good way of drinking coffee on my own, but rather, by the time I bought it and started using it, it was already presented as such to me in discourse throughout my personal history. Furthermore, when I engage with an entity, such as my coffee mug, I am setting it apart from other entities and other ways of use. I perceive my mug as part of the horizon of my desk and that it is used to drink coffee rather than as a paperweight. These distinctions go ahead of me in my dealings with the coffee mug as my coffee mug because I am already engaged in discourse,

Discourse itself can also disclose entities. In speech about beings, I can reveal aspects of those beings to myself and others (Keller and Weberman 1998, 372). For example, the constant use of my coffee mug as an example will have disclosed many aspects of its being to readers who have never directly encountered it, such as its use, its coloration, the fact that it has sentimental value to me, and its being situated well to be a convenient example. These are all disclosures of the coffee mug to the reader through (written) discourse. If I were to tell a friend about my project of making a bookshelf, it would disclose the bookshelf to him in some way, as well as give them a new understanding of me, as someone who has too many books or has at least a marginal set of assembly skills. Furthermore, what is revealed in discourse will be pregiven in any engagement with the thing (Heidegger 2003, 347).

The fact that *Logos* is a pervasive and basic aspect of our engagement with the world and others accords well with the structures of Dasein laid out above. We are not only always already engaged with the entities of the world as being-in-the-world, but with other Dasein, being "born

into a language community of other interlocutors" (Warfield 2016, 23). Thus, we are always already engaged in discourse.

Discourse, as a mode of disclosure, is fundamental to how we engage with the world. This, of course, leads to the question: What is the nature of *logos*? Heidegger claims that "[*logos*] for its part has the character of... 'revealing'" (Heidegger 2003, 198). First and foremost, speech reveals something. It shows entities. Furthermore, "speaking is speaking about something" (Heidegger 2003, 293) and "all discourse, according to its most proper sense, is a disclosure of something" (Heidegger 2003, 414). Thus, discourse is always discourse about things and is always acting as a disclosure of something to Dasein.

Logos discloses the world as a unitary phenomenon. Heidegger claims that "by means of it, the world becomes accessible in its unitary articulation. That is the primordial function that the [logos] has insofar as it communicates" (Heidegger 2005, 21). Through discourse we are able to understand the structure of the world and make our modes of engagement with it explicit. Since the world discloses itself in discourse, we can use our speech to better understand the world. In speech, we make the world accessible in a way it would not have otherwise been.

It is important to note, here, that speech is characterized by disclosure and our interactions with others rather than any particular phonetic or grammatical characteristic. In speaking, we do not first hear a series of noises and then assign meaning to them, but instead apprehend them as a meaningful whole. For Heidegger, "the phonetic character is not apprehended as noise…but primarily as speaking with others about something" (Heidegger 2003, 404). In other words, speech is not first sounds that we make sense of as words with meaning, but rather discourse is the communication about something. An essential feature of speech is that it orients us towards a thing and reveals that thing to us in a certain way. Discourse does not start

an internal thought that we say out loud to others, but rather speech starts as an engagement with others. Even speech to ourselves is structured as discourse towards others. When I talk to myself alone in my apartment, I am speaking as if there were another that I can engage with and use the speech to shape my thoughts or engagement with the world in a way that would make it sensible to another. When I am making my bookshelf and I say my plan aloud, I am making my plans clear and explicit through speech, structured as an engagement with a critic, though he is not, in fact, there.

The final structural element of discourse is that it not only discloses beings to Dasein but discloses them as something (Heidegger 2010, 131). Heidegger claims that the *logos* is structurally made up of a name and a verb (Heidegger 2003, 402). Not only is the being disclosed, this disclosure is fundamentally as something. It does things and is related to other entities in the world. When I say "the hammer is hard enough to drive the nails" I am disclosing the hammer as useful in driving nails and having a certain hardness. When I say "I ran this afternoon," I am showing myself as someone who runs.

Discourse then goes on to shape how we engage with the world. As seen above, the terms of how we grasp things are set by our fore-conceptions; the possibilities of our engagement with the world are determined, in part, by how we conceptualize them, which itself is made explicit in, and influenced by, how we engage with them through *logos*. Tradition is handed down in speech, or in ways derivative of and signifying speech, such as writing. I learn things about entities through conversation and then take them into my pre-ontological field of understanding. For example, when I am building my bookshelf, I do not look around for something hard to drive nails, but for a hammer. I specifically look for, and use, the hammer. It shows itself as the entity to use to drive nails. Why? At some point, I was told that hammers are used to drive nails and I

was taught how to drive nails with the hammer. Prior speech and engagement with others set the stage for me to use a hammer to build my bookshelf.

10.5 The Foundation of Logic: The Dialectic Level of the Logos

While Heidegger rejects the terms of the psychologism debate and both modern and scholastic formulations of logic, he does not reject the idea of judgments and inferences leading to truth. We need to keep in mind, though, that Heidegger's conception of truth is different than those of the psychologism debate and that he finds the root of logical enterprises in logos. Truth is the uncovering of being and can be disclosed and made clear in speech. A Heideggerian conception of logic, then, must be built on speech, but not simply on any speech, on logos that relates to truth, which discloses beings in their being. Heidegger claims that an understanding of being "first shows itself in the statement about things" (Heidegger 2007b, 285) and thus "in philosophy the [logos], speech, comes to be regarded as the bearer of truth" (Heidegger 2007b 285). Discourse discloses the truth of being. It shows not only beings as themselves, but being itself. Speech, then, uncovers the beings, which in turn is possible because of the structure of disclosure itself. Logic, as understood in the psychologism debate, is the laws of *just-as* truth, and is based on the structure of *logos* as it is oriented toward uncovering beings (Dastur 2022, 115). This section will lay out the form of speech that is the basis of the *just-as* structure of ontic logic.

To see what this truth oriented, original *logos* looks like, Heidegger looks to the philosophical tradition to see what is revealed in it. 40 He claims that, according to tradition, "logic has as its theme: concepts, judgments, inferences. They are something meaning-compliant [*Bedeutungsmassiges*] that stand in some connection with the linguistic expression, a connection that is not something contingent" (Heidegger 2005, 40). Logic, traditionally, is understood as the laws of judgment that show how concepts and inferences relate such that they come to true judgments. To tie this parsing of logic to the psychologism debate: Psychologicists treat the judgment as founded in the processes and structures of the mind, while the logicists treat the judgments as about ideal entities to be grasped by the subject. Heidegger maintains that the connection to language is essential to the nature of logic. Judgments themselves are matters of speech.

For Heidegger, as Stuart Elden points out, disclosing speech precedes the judgment (2005, 287). For there to be a judgment, there must be *logos apophantikos*, or speech that lets something be seen. He describes it as "the sort of talking with the world, by means of which the existing world is pointed out as existing" (Heidegger 2005, 15). Recall from the preceding chapter, truth is not the tying together of separate realms, be they mental representations with the material world or an ideal realm. The world cannot be separated from the being of Dasein. Similarly, the *logos apophantikos* does not occur in a separate, linguistic realm, but instead is a direct engagement with beings through speech. When I say "my coffee mug is warm" I am disclosing an entity in my world to myself and others in a specific way. It is being revealed as something, specifically as a coffee mug and as warm. I am not creating a representation of the

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⁴⁰ This can be seen with Descartes and Husserl ins *Introduction to Phenomenological Research* (Heidegger 2005), with Aristotle in *Logic: The Question of Truth* (Heidegger 2010), and with Aristotle and Plato in *Plato's Sophist* (Heidegger 2003).

mug and attributing a property to it that may or may not refer, but rather I am directly engaging with the mug. I am disclosing its warmth such that someone would know what to expect when they touch it, would know to be careful with its contents, and, in general, engage with in it in such a way that is appropriate to a warm mug. Judgments are then possible because of this prior disclosure in speech.

In this conversation with the world, speech oriented towards truth "discloses the thing addressed for what it is" (Heidegger 2003, 353). My coffee mug *is* warm. It is the sort of thing that can warm me up when my roommate has the AC turned up too high or make me uncomfortably hot on a summer day. It is the sort of thing with which one has to be careful while handling. My speech shows something about the world that shapes how I see it and engage with it. *Logos*, in its apophantic sense, concerns judgments that disclose the truth of the world via our engagement with the world in speech.

The *logos apophantikos* is the speech that discloses these aspects of entities. In Heidegger's words, it is "discourse that points out" (Heidegger 1995, 309). It does so in acts of *synthesis* and *diaeresis*, as seen previously, which are the backbone of the *just-as* structure of both classical and modern logic. These acts, as Rayman points out, either pull together and connect beings in *synthesis* or separate them in *diaeresis* (2013, 98). For example, claiming "my coffee mug is black" connects my coffee mug with blackness (an act of *synthesis*) or "my coffee mug is not blue," separates my coffee mug from blueness (an act of *diaeresis*). These propositional statements, though, are limited. They extract one aspect out from the whole of an experience, treat it as a present property, and then posit it as a general claim. I am no longer treating my coffee mug as a part of the broader horizon of my desk or as a tool in combatting

exhaustion, but instead as an entity with the property of blackness. It is only possible, then, because of how we apprehend and engage with the world.

Heidegger turns to origins of our understandings of dialectic in Aristotle and Plato to show the foundation of our conversation with the world as *logos apophantikos*. He claims that *logos* "in its genuine function, is founded on dialectic" (Heidegger 2003, 240). In other words, speech and judgments in discourse are founded on our dialectical engagement with the world. Over the course of the history of philosophy, this dialectical engagement is appropriated into what becomes known as logic. The change from primordial dialectic to logic follows the changes in the study of being, where it is transformed from how things show themselves into claims about objects and our knowledge of them, or as Heidegger claims "the transformation of the idea of dialectic, in the later sense of logic, is motivated by the transformation of the concept of Being and the idea of ontological constitution in general" (Heidegger 2008, 242).

The *logos* is founded on our way of engaging with the world being dialectical, which eventually is taken up as logic, albeit in a derivative sense that covers over the phenomena. What then is the dialectic for Heidegger, in its primordial sense? According to Heidegger, "the genuine sense of [dialectic] is [apophantikos] to let be seen what is properly visible...of beings themselves" (Heidegger 2003, 394) and furthermore, "taking apart beings in regard to what is most properly visible in them" (Heidegger 2003, 394), which then allows us to pursue what is said (Heidegger 2003, 394). Dialectical engagement with the world is an engagement where we see beings as they show themselves to us, or as they are visible to us, and understand them in terms of how they are visible to us. Then, because we are beings capable of engaging with entities and capable of seeing them as they show themselves, we can disclose them in speech. It is not merely an engagement with the world, but an engagement that lends itself to speech. I can

use my coffee mug to drink coffee and also engage with the coffee mug such that I can speak about using it to drink coffee. My engagement with the coffee mug is such that its use in drinking coffee is disclosed and can be further disclosed in discourse.

Our dialectic with the world has two main structural moments, according to Heidegger, taking together and extractive seeing (Heidegger 2003, 342). I will deal with each of them in turn. Taking together, as the first moment, describes how we do not engage with entities in a vacuum. Instead, we run into them within a whole of goals, history, the horizon of the world (Heidegger 2008, H. 365). When I use my coffee mug to drink coffee, I do not only take it as a vehicle for carrying coffee, but within the horizon of my desk. It is among other things that I am using for writing this chapter. Additionally, I take the drinking of coffee as part of a wider structure of my goals. It helps me write. When I use my coffee mug, I understand it within these broader contexts.

The second moment of the dialectic is to "extract in seeing, from what is pregiven and to pursue what is extracted in the extractive seeing" (Heidegger 2003, 342). Recall how, in our engagement with the world, entities are pre-given to us, or the possibilities for us to engage with them are made available through our network of goals, our previous understanding of the entity, the horizon in which the entity shows itself, and so on. We are already with the entity before we make use of it or analyze it. In engaging with the entity, we engage with it in a particular way based on how it is pre-given, on how we are already with it. I use my coffee mug to drink coffee, as a paperweight, as an example in a philosophy text, or as a keepsake based on the goals I am pursuing and how it shows up to me at the time. In my dialectical engagement with the world, I can understand the particular way that I am engaging with it, based on how it is pre-given, and speak to this engagement. In using my coffee mug, I pull the fact that I can use it to drink coffee

from the rest of the possibilities presented with it and the wider whole of which it is a part. Furthermore, in extractive seeing, I understand the coffee mug in terms of my use of it to drink coffee. Finally, in extracting the use of drinking coffee, I, as a Dasein among other Dasein, understand it also in terms of how I can relate to other Dasein through it, or in terms of speech. In my engagement with the coffee mug, I pull its use out of its whole in such a way that I can speak to that use. I can disclose the coffee mug as a tool for drinking coffee in speech.

As moments, taking together and extractive seeing are part of the unitary phenomenon of the dialectic. When we engage in the world, we are both taking the whole together and extracting aspects of the whole. In these two moments, I am in conversation with the world. The dual moments, extracting aspects while grounding those aspects in the whole, highlight one way of engaging with the entity while hiding other ways of engagement. Using my coffee mug to drink coffee extracts some aspects of the coffee mug from the whole while keeping me from noticing others. Thus, every uncovering is a covering over (Cerbone 2022, 95). We are in a continual state of engagement with the world, where we uncover and cover over the entities we come across.

Due to the fact that one of the moments of our engagement with the world is extractive seeing, we are able to pull away from the engagement and speak about any given entity in the way that we extracted it. I can speak of my coffee mug as a way of drinking coffee because I pulled that aspect of it out of the whole through my engagement with it. It also allows me to abstract away from *this* coffee mug to coffee mugs in general because I can reflect on what I extracted in seeing. I can move from engaging with my coffee mug to speaking about my coffee mug, to discourse on coffee mugs in general. I can use speech about these things in general, these concepts, to disclose things about entities and the world. This is the ground of formal logic (Heidegger 2008, H. 165). I pull away from the act of engagement and instead use generalized

speech to come to new disclosures. Logic, then, is grounded on our fundamental mode of engaging with the world, as a dialectic of taking together and extractive seeing with the world as we engage with it. The terms of the dialectic with the world, though, are set by our fore-structure and by our history and the ways that the world is pregiven to us.

What does this mean for the laws of logic? First, the laws of logic are an abstraction from our more primordial discourse. They are developed by pulling away from how we disclose the world in speech. The laws of logic are formalizations of the ways that we disclose being and the world in discourse, which in turn is grounded, as Mohanty puts it, in our "relationship with [our] world" (1988, 124). Therefore, the laws of logic are grounded in our dialectical relatedness to the world and, specifically, how we relate to the world in speech. Once we develop concepts and ideas through our dialectical engagement and disclosure through speech, the steps to formulating the laws of logic do not seem to be all that different from Husserl's formulation (Crowell 2001, 119). We come up with formal laws that map onto the ways speech and judgments disclose the being of entities and in the way that discourse tends to show entities as themselves. The important difference here is that the grounds for Heidegger are not in the self-evident presentations of the ideal objects themselves, but in how we are related to the objects and show them in discourse. It is not the ideal objects that dictate the laws of logic, but the ways that we uncover entities that we are fundamentally related to and among in our speech.

10.6 How this Precedes the Psychologism Debate

The ontological structure of Dasein (the way that we are fundamentally related to the world, among others, in a dialectic with the world, and disclose it in speech) precedes how logic is understood in the psychologism debate. The psychologism debate is, for Heidegger, a debate about how one ought to ground the laws of truth as they relate to *just-as* conceptions of truth. Unfortunately, neither side realizes that this is a derivative form of truth and thus their attempts to ground it are misguided.

Heidegger provides the grounds for logic in general by providing the grounds for both how truth judgments are possible (in the disclosure of being as beings showing themselves as themselves) and for how we are able to formulate judgments themselves (in the *logos* and our dialectic with the world), based on an understanding of the primordial form of truth (disclosedness as such). What this means, for Heidegger, is that the terms of formal logic and the psychologism debate (such as propositions, concepts, and judgments) come from our engagement with the world, which is itself set down by our ontological structure. Because we are structured to be out within the world and among others and because we disclose the world in speech, we are able to grasp the relationship between ourselves, others, and the world in speech and understand how speech discloses the world for us. It is neither from the particular functions of our mind, nor the nature of things that logic and thought are grounded. Rather it is grounded in our being, in the way that we are structured as engaging with and living in the world and among others.

It is not the case, for Heidegger, that our structural engagement with the world allows us to know the already true laws of logic. There are not eternal laws that govern concepts that we then grasp through our being-in-the-world. Rather, the laws of logic hold *because* of our ontological structure.

While the structure of human existence sets forth the laws of logic, it should not be understood to do so psychologically. The laws of logic are not grounded in the human mind, but in our relatedness to the world and others and the way this relatedness brings about disclosure in speech. They are not grounded on the laws of the mind, what is going on internally to us, but in how we live beyond ourselves. The distinction will be reinforced in the way that Heidegger undermines and precedes the dichotomies between the subject and the object and the real and ideal.

Our ontological structure also precedes the use of the subject-object dichotomy. As seen in the preceding chapters, the members of the psychologism debate tend to find the grounds of logic in one side or the other of the dichotomy. This dichotomy is not ontologically valid, though. For Heidegger, "'Object' means... what stands opposite the mere observer who simply looks at it, what is present, after being thematically selected and had as such" (Heidegger 2005, 10). By the time we view an entity as an object, we have already engaged with the entity thematically, as present-at-hand, and as a substance with properties. We have to be among entities and engaging with them in order to see them as objects. Furthermore, thinking and speaking about entities as objects is not the only way to understand them. It is actually derivative of our structure as being-in-the-world. Thus, any logical system built on this dichotomy 1) cannot be exhaustive because it is built on a partial understanding of our engagement with things and how we come to truth, and 2) would necessarily rely on the structure that makes looking at entities as objects possible.

Heidegger also claims that the distinction between the real and the ideal is illegitimate. Both sides are abstractions away from our fundamental experience with entities and lose the phenomena as we place them on one side or the other of the dichotomy. Instead, any entity that we take to be real has already been shaped by our fore-conceptions and our horizons of understanding. On the other hand, all ideal entities are based in our engagement with the world. They meet in our being-in-the-world and are then taken as present-at-hand entities to be categorized and sorted within a dichotomy that does not show up until we have already taken things as present-at-hand objects. Nor can the laws of logic be built on the empirically real entity that is the mind, because the mind, as an empirically real entity, is already an abstraction away from the engagement that grounds the laws of logic. At the same time, the laws of logic cannot be the laws of ideal entities because ideal entities are built on the prior disclosure of being in discourse.

Not only do Heidegger's ontological investigations precede and undermine the presuppositions of the psychologism debate, he also solves the problems put forward by the debate, and, by doing so, transforms our understanding of logic. He solves the driving question, what is the grounds of logic, by showing how propositional logic (which is the logic of the psychologism debate) is based on a tertiary understanding of truth, which is the truth of *synthetic* and *diaeretic* speech. This speech is only possible because 1) we are beings who disclose the world through speech and 2) because of the disclosure of the beings themselves. This disclosure of beings, though, is still not fundamental. Instead, it is based on the structure of disclosedness itself. Things can only be disclosed as they are because we are structured such that disclosure can occur. Entities are disclosed as something within the world because of the structure of Dasein.

Our ontological structure, being-in-the-world, makes it possible for us to speak and to uncover entities, which in turn makes it possible for there to be propositional truths.

The logicists might claim, though, that this is just another version of psychologism, but where we just swap out human psychology for human existence. This is not the case, partially for the above reasons. Psychologism founds logic in the particular processes of the human mind, as understood by the natural sciences. As seen previously, this is a flawed understanding of human existence because it reduces us to merely a (theoretical) psychological entity that is separate from the world. Not only does psychologism misunderstand human existence, but it can only do so because we are structured as being-in-the-world. It is only because I am already engaged in the world that I can transform my experience into a theoretical mode and the prioritize the knowledge that comes out of it.

Heidegger's position is also distinct from psychologism because it is not the nature of the mind which founds logic, but our existence beyond ourselves in the world. Psychologism founds logic on the internal workings of the mind, or, in other words, in the properties of the subject. Heidegger rejects the idea of an internal and separate mind. It is our interweaving of ourselves with the world that is the foundational level of truth and thus the ultimate foundation of logic. Thus, logic cannot be founded, even in part, on the properties of the subject because there is no distinct subject.

Furthermore, even though Heidegger grounds logic in our being, he does not make it about mental entities. Heidegger does not do this because 1) there is no internal realm of mental entities for Heidegger and 2) *just-as* logic, as seen previously, is found in speech rather than in minds. First, because we are being-in-the-world, because we exist beyond ourselves among entities, there is no internal realm for mental entities. Heidegger cannot ground logic in mental

entities because there are no mental entities, as understood by the psychologism debate. There are no takings-to-be-true, as Frege put it, but rather disclosures of being within our ontological structure. Even if there were, though, this critique would not stand because Heidegger places the logic of the psychologism debate within the realm of speech (Heidegger 2010, 8). He claims that it is based on the *logos apophantikos* rather than on thought. When we use our speech to take things together and apart, then we can begin to do logic. Frege would at least agree, then, that Heidegger is not grounding logic in mental entities because he does not believe that speech is primarily about mental entities.

The implications of *just-as* logic being grounded in our being-in-the-world and derivative of how beings show themselves to us are that it pertains to the theoretical sphere of experience, that it is dependent on how we are oriented towards the world, and that it is temporal. I will explore each of these in turn.

The first implication of Heidegger's founding logic on our being-in-the-world is that logic, at least as it is understood by the psychologism debate, is primarily theoretical. It pertains to speech that points things out, i.e., propositions. As seen above, this way of dealing with the world is not our primary way of being and is derivative of more fundamental modes of engagement. Theoretical knowledge is not exhaustive and we come to it through our own situations. It is structured by our traditions, goals, and the world we find ourselves in. The laws of logic, as laws of *just-as* truth, are set within the confines of theoretical knowledge. They too are not exhaustive. Instead, they would only be relevant when our experience is oriented towards presence. When I am making a bookshelf or walking my dog, I am not bound by the laws of logic, because my dealings with the world are not the sort of dealings that they have a hold over. I am not seeing the world as presence, then, and thus the laws of *just-as* truth are not relevant.

Only when my experience is transformed into a theoretical mode do they start to matter. If my hammer were to break and I needed to figure out what I should look for in a replacement or if my dog were to start to limp and I needed to figure out what was wrong.

Furthermore, like all theoretical laws, the laws of logic are grounded in our particular situations. They are developed because we engage with things in a particular way. In other words, they are based on the ways that we are oriented towards the world. I think of my coffee mug as the same coffee mug as I use it now, used it yesterday, remembered that I needed to wash it the day before, and hoped that it was not in the sink when it backed up last week. I engaged with the coffee mug as the same coffee mug throughout these interactions. Then when I think of it as a theoretical entity, this aspect of my dealing with it manifests as identity. When I relate propositions about it then, identity carries through these relations and gets set as a principle of logic. The principle itself comes through because of how I relate to the world. It is based on how entities disclose themselves to me, and more fundamentally, how the disclosure itself is structured.

This reverses the traditional relationship of logic and metaphysics. Instead of logic binding the possibilities of how beings are disclosed to us and our structure, our structure makes it possible for beings to disclose themselves to us, and the way they are disclosed sets the stage for the laws of logic (Heidegger 1984, 217).

An implication of this on logic, as the laws of *just-as* truth, seems to be a form of logical pluralism. Because the laws of logic describe *just-as* truth (the tertiary level of truth) which is founded on beings showing themselves to us (the secondary level of truth), the laws of logic would also be dependent on the ways in which we are engaging with beings. I have the principle of identity because, in theoretical engagement, entities show themselves as self-identical. My

coffee mug today and yesterday, in perception and in memory, shows itself as the same coffee mug. They do not show themselves as self-identical because they are bound by a law of logic; rather, the law of logic dictates truth preservation in speech because of how the objects show themselves. This means that if we engage with the world in a different manner, the laws of logic would have to follow the new manner of looking at things, rather than dictate how we must see them. Recall the discussion of regional ontologies in Chapter 7. In it we saw that the sciences draw on pre-delineated spheres of being and investigate entities within those spheres. The entities being investigated show themselves as members of those spheres. The laws of logic, as derived from the secondary level of truth, are founded on how entities show themselves within the regional ontology and, thus, could be relied on within those regions without any problem (Polt 2022, 53). This means that the laws of logic need not be the same across regional ontologies, and there is no reason that, for example, because we see that the law of noncontradiction holds in mechanics that it also must hold in quantum physics. 41,42

Finally, the laws of logic are temporal (Heidegger 2008, H. 329). They cannot be eternal because they are founded on the structure of Dasein, which is itself essentially temporal (Heidegger 1994, 146). Furthermore, as seen above, the laws of logic follow from our situations within the world, which are not static. This can be highlighted by comparing it to Husserl's position. Recall that Husserl thought that the laws of logic were based on the relationships between ideal entities. We come to know these ideal entities through our categorial intuitions.

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⁴¹ See Priest and Routley 1984, 157-158 for an example. Whether it is the case that the law of noncontradiction holds in quantum physics is beyond the scope of this chapter. The point here is that when studying quantum physics (or another field with its own regional ontology) something violating the laws of logic developed for another region (the law of noncontradiction, in this case) is not grounds for rejection of that theory. Instead, the laws of truth follow from the region itself (based on how entities show themselves within its pre-delineated sphere, which is based, in turn, on the structure of disclosedness itself).

⁴² See McManus 2022 and Witherspoon 2022 for more on Heidegger's relationship with dialethic logic.

Within a perceptual experience, for example, I intuit various categories on top of intuiting sensuous data. When I look at my coffee mug, I see that it is black with white writing. I intuit not only the colors' contrast with each other, but that they are black and white and that the white parts are writing. The categories are given in experience. The categories, while given in temporal experience, are themselves timeless, for Husserl. The relationships between them are also timeless.

Heidegger disagrees. Instead, he maintains that the categories are always for us. The entities may appear as a member of a category, but that appearance is in a relationship to me. I see my coffee mug as black, but that is only because I am the sort of being that has things disclosed within the as-structure. Blackness, as a category, only exists for Dasein; it is disclosed as part of the structure of our being. Since it exists within our structure, which is temporal rather than eternal, it is itself temporal. In other words, the categories that Husserl takes to be eternal are in fact grounded on our being, and thus grounded in our temporality. This, of course, does not mean that the categories are arbitrary or that because they are not timeless, they lack validity. Rather, they follow from our engagement with the world and how we deal with things. The category of "black" arises because I use color and shading to differentiate entities, "writing" because I interact with others through speech, and "keepsake" because it spurs fond memories. The categories, then, are motivated by my situation as a being who is immersed in the world and among others.

These three implications reorient the debate around logic. The question is no longer about what the laws of truth are and how are they grounded. Instead, it is transformed into a question of, granting that propositional truths are given in accordance with these laws, how must beings disclose themselves to us, how must we be situated such that theoretical experience yields these

laws, and how must we be structured such that this is possible? The laws of logic no longer are the "eternal boundary stones" that bind our debates and understanding of the world. Instead, they are themselves set by the region of being to which they are applied and dependent on the structure of our own being.

Conclusion

Heidegger criticizes the logic of his time, including the psychologicists and logicists, of losing touch with the role and foundations of logic. He maintains that the subject of logic is speech oriented towards truth and is thus founded on the way that beings who can speak about truth, namely Dasein, are, in fact, able to do so. The capacity to speak about truth is based on our being-in-the-world and being-with-others, where we find ourselves engaged in a dialectic with our world and other people. The dialectic is the basis for beings showing themselves as themselves in speech. Logic, then, is the way that we use speech to disclose entities. It is the way that we have entities show themselves as themselves within discourse.

Founding logic in our engagement with the world moves Heidegger beyond the key presuppositions of the psychologism debate, specifically the subject-object dichotomy and the separation of real and ideal entities. He finds that both of these distinctions are already founded on our more primordial dialectical engagement with the world, where in order to make them, we must already be amongst entities and familiar with them. His findings do not necessarily invalidate formal logic, but rather show its foundations and demonstrate that logic itself is not totalizing. Instead, it is founded on the ontological structure of Dasein.

This movement comes with radical implications. The first is that instead of the traditional relationship where logic is understood to bind metaphysics, the reverse is actually the case. The laws of logic are derivative of the ways that entities show themselves as themselves and further derivative of the structure of our engagement with the world. This seems to imply a radical

pluralism when it comes to *just-as* logics, because they follow from the beings involved and the ways that the investigations are being carried out. Furthermore, the laws of logic are temporal and bound by the ways in which we are situated in the world. Since they are ultimately founded in our structure and we are (structurally) temporal, they too must be temporal. Furthermore, since they are influenced by how beings show themselves to us and how we explore the world, which is itself based on our situation, they too must be based on our current orientation towards the world.

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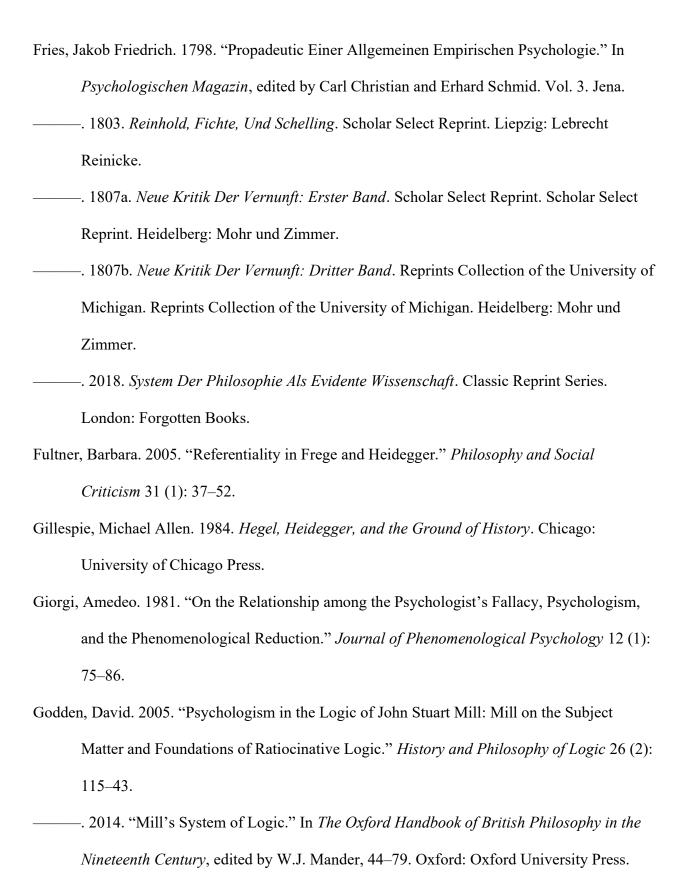
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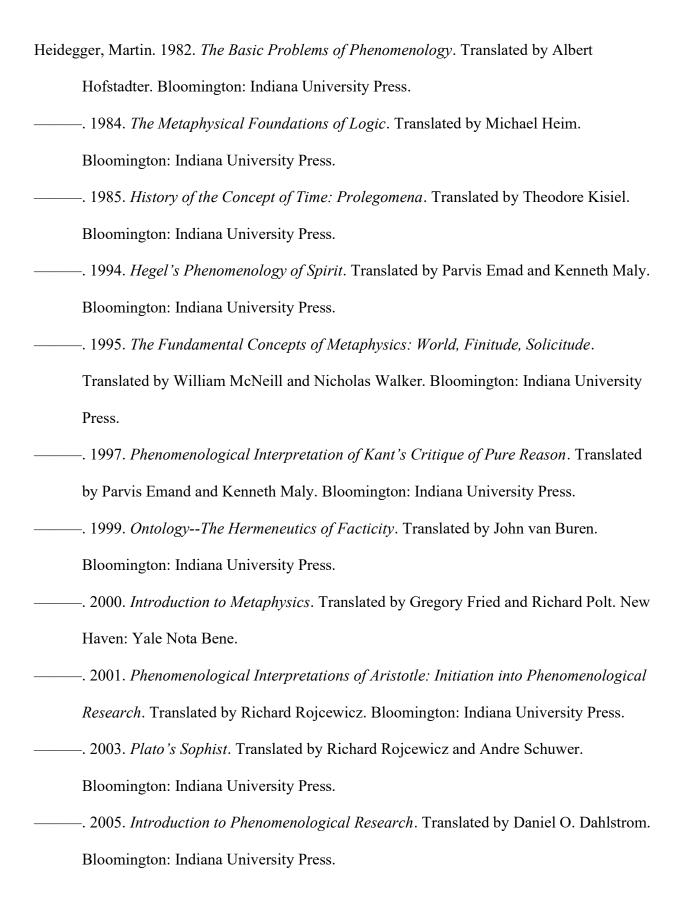
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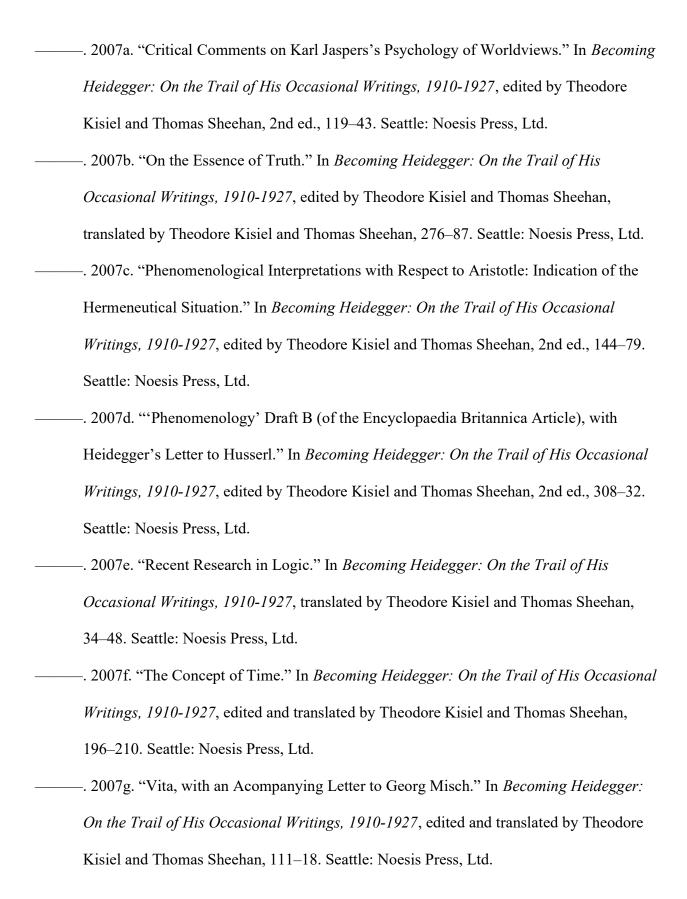


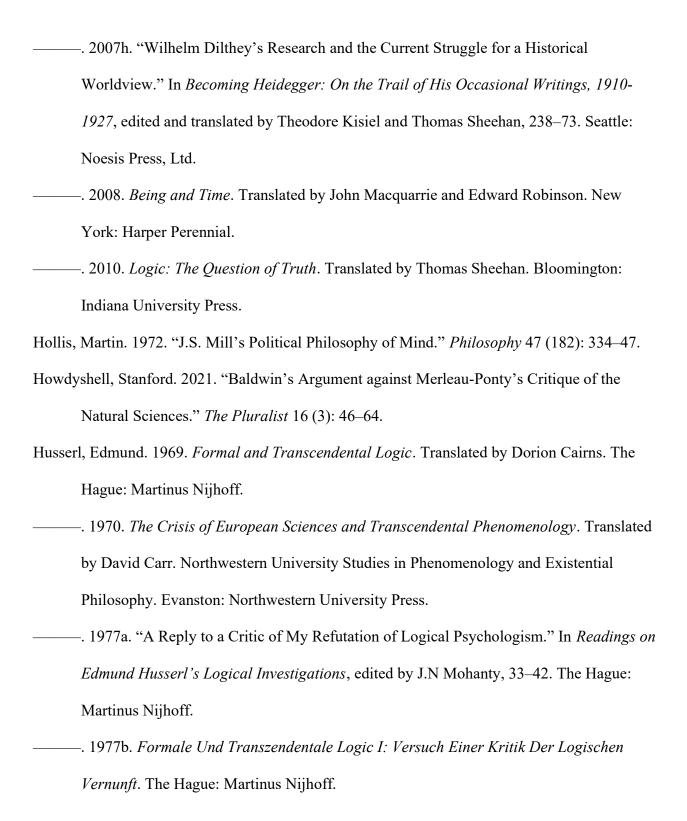
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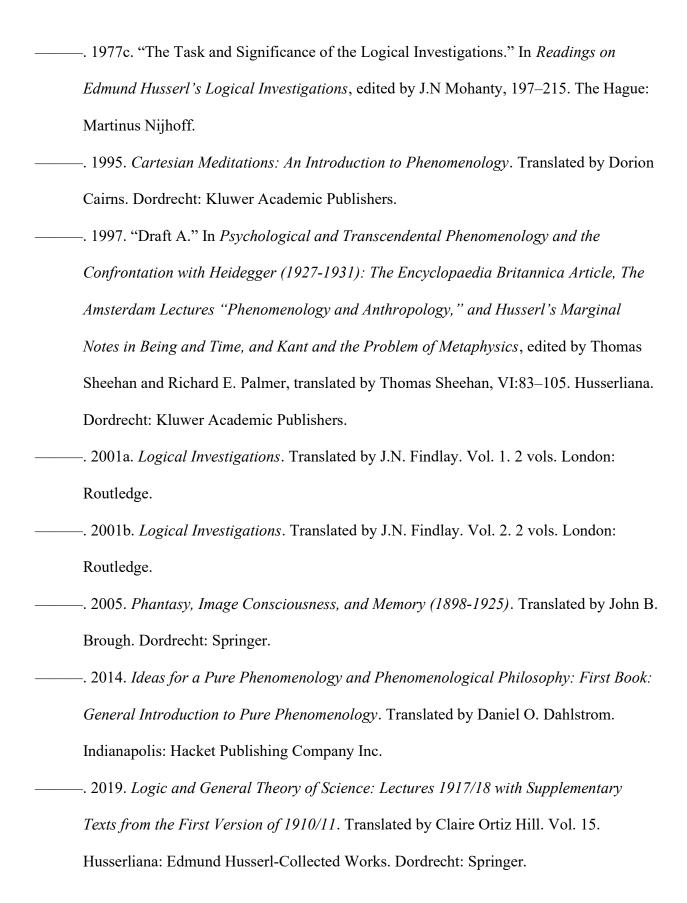
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