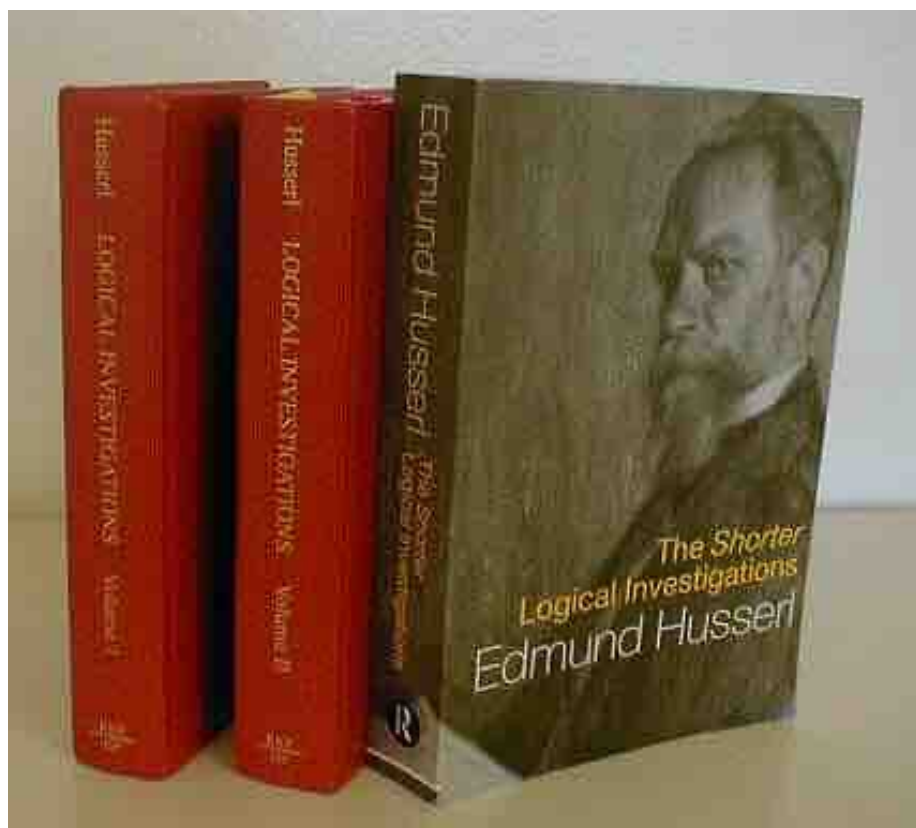


Husserl's Logical Investigations



In this work Husserl makes the distinction between expressions and indications that Derrida will later plant the bomb of Husserl's own Phenomenology of Internal Time Consciousness underneath it in order to undermine the dream for presence and inaugurate Deconstruction.

Logic, as Husserl sees it, is concerned in the first place with meanings (propositions, concepts) and with associated meaning-instantiating acts. Most importantly, it is concerned with that sort of deductively closed collection of meanings which constitutes a scientific theory. For Husserl, as for Bolzano, logic is a theory of science. Only where we have an appropriate unity and organization also on the side of the objects (states of affairs, properties) to which the relevant acts refer, however, will we have a scientific theory, so that the unity which is characteristic of the latter must involve both (1) an interconnection of truths (or of propositional meanings in general), and (2) an interconnection of the things to which these truths (and the associated cognitive acts) are directed.

Where formal logic relates in the first place to meaning categories such as proposition, concept, subject and predicate, its sister discipline of formal ontology relates to object categories such as object and property, relation and relatum, manifold, part, whole, state of affairs, existence and so on. Logic in a broader sense therefore seeks to delimit the concepts which belong to the idea of a unity of theory in relation to both meanings and objects, and the truths of logic are all the necessary truths relating to those categories of constituents, on the side of both meanings and objects, from out of which science as such is necessarily constituted (including what we might think of as bridge-categories such as identity and truth which span the division between meanings and objects).

The best way to deal with Husserl's theory of formal ontology, therefore, is to explicate both the connections between the formal and material, and those between the ontological and the logical.

In introducing his distinction between formal and material ontology, Husserl asserts that the former is descriptive and involves analytic a priori judgements, and that the latter involves synthetic a priori judgements. In its most general sense formal ontology concerns itself with characterizing the simple 'something'.

The sphere of material ontology in this sense are the laws of non-independence (2) which delimit the ontological regions. For the genetic interpretation, material ontology precedes formal ontology; for the descriptive interpretation it is the other way round (1913, art. 10). Here emerges 'the fundamental distinction between formal and material ontology': namely, the distinction between analytic a priori and synthetic a priori (Introduction to Formale und transzendente Logik, 1929).

While his positive aim is to find out what makes science science. Here, Husserl argues that logical laws are ideal and general — they can be applied to everything, and are not subjected to contingency. Science requires a regulated interconnection of ideal truths expressed in propositions. In other words, pure logic (not applied) is essential to science as an a priori science — what makes science possible in the first place.

... the scientific system of ideal laws and theories which are purely grounded in the sense of the ideal categories of meaning; that is, in the fundamental concepts which are common to all sciences because they determine in the most universal way which makes sciences objective sciences at all: namely, unity of theory.

There are six Investigations in the entire Logical investigations. In sequence, Husserl wants to investigate these six aspects of logic:

- 1. General structure of signs and expressive statements*
- 2. The status of universals (which he refers as species — this is particularly helpful to note while reading) and nature of abstractions*
- 3. Laws governing the relations of parts and wholes (mereology)*
- 4. Laws of logic and grammar as a priori disciplines*
- 5. The nature of consciousness, viz. intentionality, associated contents of concepts, objects, and presentation*
- 6. The nature of identifying syntheses in judgement and its relation to truth*

The first involves Husserl's famous distinction of meaning-fulfilling and meaning-intending acts. There are two functions of expression: to intimate something to someone, or to express an ideal sense. Normally, expressions go beyond its meaning and is intended on an object by intentional reference. I will not dwell on the content here, but the significance in this section is that it attempts to distinguish the logical content of meaning from its psychological content.

The second is a defence of empiricism by appealing to the necessity of universal meanings. Meaning is a kind of universal (or species) that is instantiated by particular expressions or acts. When we refer to a universal, we are not addressing the properties of the object, for example, but we are simply referring to the content or idea of the universal. In logic, he distinguishes between individual universal judgements ('all men are mortal') and specific universal judgements ('all logical propositions are a priori').

In the third Husserl lays down six laws of mereology, which is the study of how parts can become whole, and how wholes can become parts.

The fourth focuses on grammar, which provides possible forms of logical judgements, which objective validity is the focus of formal logic proper. The idea of logical grammar goes against the psychological notion of grammar. Using the mereological laws from the previous parts, Husserl shows that we can form complex meanings using simpler meaning-parts. Here, his aim is to produce laws such that there is least amount of independent elements and non-sense (not counter-sense, which are expressions such as 'square circle'). Formal grammar can only eliminate non-sense but not counter-sense, thus is not the same as pure logic.

The fifth does not have much to do with the nature of logical studies, since it is a discussion of Brentano's notion of intentionality and presentation. This section forms the basis of his noema and noesis account in Ideas.

The sixth attempts to connect the act of meaning and the notion of truth. This is by far one of the most torturous passages to read, and I suggest not doing so unless you're guided in safe hands. Roughly speaking, Husserl explores the acts of categorial intuition (sounds familiar, maybe Kant?), and the relation of sensory matter to the content of the act as a whole. A successful intentional act is an act where the meaning is fulfilled by presence in intuition of the intended object with full bodily presence. I can call this from my memory using 'representation', thus having the intuition but not bodily presence. Hence, the sense of a statement can survive without perception, which merely anchors meaning.

Categorial intuition is somewhat like an intuition of the 'state of affairs'. Contra Kant, Husserl does not require any synthesis of sensuous content using subjective rules of judgement. We simply apprehend the state of affairs of which the non-sensuous categorial elements are necessary constituents. Thus, the significance here is that there is no need for psychological laws of judgement or understanding. For Husserl, categorial acts yield to the categorial concepts of the object. They are founded on the acts of perceiving.

Husserl was part of the discussion that was going on when this split began, a discussion which also involved Frege, Cassirer, Couturat, Russel, Carnap, Wittgenstein ... (The analytical philosopher Michael Friedman recounts that the logical positivist Carnap mentions in his diary that he had interesting conversations with what become his complete opposite, Martin Heidegger.)

After the split had taken place and was consolidated, Husserl was classified as rational by the students (Heidegger, Derrida ...) which reacted against him and thereby created what we now call continental philosophy. At the same time analytical philosophers, who developed logic and applied it to philosophical problems, associated Husserl with Heidegger and Derrida and those people.

So Derrida and co. did not study Husserl's thoughts on logic because that is not the kind of philosophy they wanted to do, and the people who liked logic did not study Husserl because they believed that he typically would not have

anything interesting to say about logic.

In Logical Investigations (vol.1), Husserl's initial impulse was to distance himself from what he saw as the illogic of psychologism. One of the problems that he faced was the widespread belief that at bottom phenomenology was relativistic and thus useless as a philosophical tool. It became crucial for Husserl to ground phenomenology in the equally widespread notion of the objectivity of the natural sciences. Husserl viewed logic as a helpmate to psychology in a mereological (the relationship of part to whole) context such that specific subcomponents of intellectualized activities would interact with other specific subcomponents in strictly predetermined ways. The function of logic would have little to do with the physicality of action such as gauging or asserting but everything to do with fixing the underlying and optimal conceptual guidelines such as falsehood and interiority. Husserl had little use for relativistic truth. If one were to use "truth" as it is commonly used, then one must also refrain from setting up contrarian situations in which truth becomes infinitely elastic. One of the reasons that Husserl distanced himself from his earlier support of psychologism was his new belief concerning mathematics. A mathematician would certainly be busy with adding, subtracting, and the like but would have no reason to consider how one might involve psychology in these computations. Similarly, a logician would be equally busy confronting the most profound of logical conundrums but as with the mathematician would see no reason to infuse psychology into these conundrums. A key element in this book is Husserl's "eidetic phenomenology" which states that the eidos(forms/essences) are what a phenomenologist uncovers after bracketing objects from the natural world. When one seeks an abstraction like "honor," one brackets the term to remove any impurities or presuppositions, an act which leaves the form or the "meaning" of the word. This meaning arises in the paradox of setting the term's objective meaning using a totally subjective means of knowing. This paradox remains unresolved since the subjective means of knowing does not permit one subject's intentionality to operate under differing laws of understanding that might otherwise connect to the intentionality of a second subject.

In Logical Investigations (vol. 2), Husserl further refined his growing preoccupation with phenomenology. This second volume was published in German in 1900 but was not available in English until J. N. Findlay translated it in 1970. In both volumes, Husserl distances himself from the notion that mathematics and psychology are closely bound. His new interest lay in the relationship between logic and epistemology, a union which contributed greatly to the spread of phenomenology in the first half of the twentieth century. The general thrust of both volumes is that disciplines like mathematics are not rooted in the mysterious workings of the human mind but are entirely based on the recognition of laws that connect a viewing subject to a viewed object. Not everyone, however, was convinced that this second volume was a complete break with psychologism. Husserl's pupil, Martin Heidegger, after a thorough reading of both volumes claimed that Husserl's nesting of various mathematical and logical activities within the mind continued to place psychologism as an integral component of mathematics and other "hard" natural disciplines.

The structure of Logical Investigations is hinted at in his division of the book. He uses "investigations" as roughly synonymous with "chapters" or "parts." He spends much time refuting his earlier connection of mathematics with psychology; now he asserts that any relation between a viewing subject and what he sees (such as mathematics) cannot be based on the vagaries of human psychology. Rather, one must try insofar as possible to use the objectivities of science to co-relate that science with human consciousness. Husserl addresses numerous concepts that relate to human learning and apperception: independent and non-independent objects, parts to wholes, intentionality, consciousness, presentation, syntheses of knowledge, levels of knowledge, consistency versus inconsistency, self-evidence, truth, intuition, representation, authenticity versus inauthenticity, and physical versus psychical phenomena. In the first volume, Husserl tended to focus on a subject's consciousness of mathematical objects. In this second volume, he widened his critical sphere to include all object of human consciousness. Husserl introduces a new category of knowledge that connects a human subject to its perceived objects. Unsurprisingly enough, he refers to this as a "categorical object." When one views the contents of a grouping of categorical objects, one then has a tendency to link their structural underpinnings to a grammatical means by which human beings can articulate them. As soon as a viewing subject becomes aware of a perceived object, that subject can now direct his thoughts and intentions to or about that object, a process called intentionality. Intentionality can be expressed in two ways. First, one can "intuit" its presence in the sense that one immediately recognizes and acknowledges its presence. Second, one can direct one's recognition in an "empty" fashion in that one does so only in the most limited of ways almost as if this recognition were empty of recognition. Intentionality then is a free-floating mixture of objects perceived as intuited or empty. Final recognition by a subject toward an object has little meaning until all empty intentionalities become intuited. At this point, an object's identity is verified and fixed. Phenomenology as posited in both volumes can now be viewed as a nexus around which swirl previously unconnected concepts like subject and object and consciousness and unconsciousness. The result was that phenomenology was now a "whole" into which various "parts" like subject, object, and psychology could inhere.

One is a distinction between meaning-intending acts and meaning-fulfilling acts, the other is a distinction between

sensuous intuitions and categorial intuitions. Neither, on the face of it, looks particularly logical. But the distinctions at the conclusion of the Investigations are, for Husserl, logically relevant material. One reason is that the Husserlian account of consciousness was meant to answer a basic question about the normativity of the sciences. In a variety of places Husserl claimed that the theory of mental acts, the new phenomenology, is the foundation for higher-order normative sciences, including ethics and aesthetics, but especially logic. Insofar as logic is not merely a matter of minding one's P's and Q's, but also encompasses the norms governing belief acquisition, and insofar as the conclusion of the Logical Investigations provides an account of judgment as a central part of its theory of consciousness, then the Investigations provides an answer to why we ought to believe logically. This is one way that the Logical Investigations may be read as logical investigations: they are investigations into the theoretical foundations of logic as a normative science.

Those who read the Investigations seriously, as a unified piece of philosophy, confront a basic textual question: by what rights is anything but the Prolegomena an investigation into logic? Why isn't the Logical Investigations an utterly misnamed work? Roughly, the first of the Investigations is a semantics, the second an account of universals, the third a mereology, the fourth a return to semantics, the fifth and sixth a theory of consciousness. The motley lot are prefaced by the Prolegomena, Husserl's famed critique of psychologism. Husserl began the Investigations by announcing logic as the work's dominant theme; the Prolegomena touts logic as \"the theory of science\" itself.