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## Chapter 1 : Frege and Husserl: The ontology of reference | Barry Smith - [www.nxgvision.com](http://www.nxgvision.com)

*Hamilton, W.R. (): On conjugate functions, or algebraic couples, as tending to illustrate generally the doctrine of imaginary quantities, and as confirming the results of Mr. Graves respecting the existence of two independent integers in the complete expression of an imaginary logarithm.*

Edmund Husserl of Franz Brentano on philosophy and philosophical psychology. Stuart Mill, and David Hume. Husserl was so impressed by Brentano that he decided to dedicate his life to philosophy; indeed, Franz Brentano is often credited as being his most important influence, e. Following academic advice, two years later in Husserl followed Carl Stumpf, a former student of Brentano, to the University of Halle, seeking to obtain his Habilitation which would qualify him to teach at the university level. In their daughter Elizabeth was born, in their son Gerhard, and in their son Wolfgang. Elizabeth would marry in, and Gerhard in; Wolfgang, however, became a casualty of the First World War. Professor of philosophy Following his marriage Husserl began his long teaching career in philosophy. In he published his *Philosophie der Arithmetik. Psychologische und logische Untersuchungen* which, drawing on his prior studies in mathematics and philosophy, proposed a psychological context as the basis of mathematics. It drew the adverse notice of Gottlob Frege, who criticized its psychologism. Kant and Descartes were also now influencing his thought. In he became joint editor of the journal *Logos*. During this period Husserl had delivered lectures on internal time consciousness, which several decades later his former student Heidegger edited for publication. His important work *Ideen*[15] was published in its first issue. In October both his sons were sent to fight on the Western Front of World War I and the following year one of them, Wolfgang Husserl, was badly injured. On March 8, , on the battlefield of Verdun, Wolfgang was killed in action. The next year his other son Gerhard Husserl was wounded in the war but survived. His own mother Julia died. In November one of his outstanding students and later a noted philosophy professor in his own right, Adolf Reinach, was killed in the war while serving in Flanders. The mathematician Hermann Weyl began corresponding with him in Husserl gave four lectures on Phenomenological method at University College, London in The University of Berlin in called on him to relocate there, but he declined the offer. In Heidegger dedicated his book *Sein und Zeit* "Being and Time" to him "in grateful respect and friendship. A Festschrift to celebrate his seventieth birthday was presented to him on April 8, For Husserl was an ugly year, when the racial laws of the new Nazi regime were enacted. On April 6 Husserl was suspended from the University of Freiburg by the Badische Ministry of Culture; the following week he was disallowed any university activities. Yet his colleague Heidegger was elected Rektor of the university on April 21<sup>st</sup> 1933, and joined the Nazi party. By contrast, in July Husserl resigned from the Deutsche Akademie. It remains, however, alone unconnected. *Die Krisis* Belgrade The apolitical Husserl before had specifically avoided such historical discussions, pointedly preferring to go directly to an investigation of consciousness. Merleau-Ponty and others question whether Husserl here does not undercut his own position, in that Husserl had attacked in principle historicism, while specifically designing his phenomenology to be rigorous enough to transcend the limits of history. Does the life world contextualize and thus compromise the gaze of the pure ego, or does the phenomenological method nonetheless raise the ego up transcendent? Since his university retirement Husserl had "worked at a tremendous pace, producing several major works. Edmund Husserl died at Freiburg on April 27, , having just turned His wife Malvine survived him. Eugen Fink, his research assistant, delivered his eulogy. Heidegger and the Nazi era Husserl was incorrectly rumoured to have been denied the use of the library at Freiburg as a result of the anti-Jewish legislation of April It was also rumoured that his former pupil and Nazi Party member, Martin Heidegger, informed Husserl that he was discharged, but it was actually the former rector. In the summer of Husserl had studied carefully selected writings of Heidegger, coming to the conclusion that on several of their key positions they differed, e. Husserl, of course, had died several years earlier. In post-war editions of *Sein und Zeit* the dedication to Husserl is restored. The complex, troubled, and sundered philosophical relationship

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between Husserl and Heidegger has been widely discussed. He analyzes the psychological process needed to obtain the concept of number and then tries to build up a systematical theory on this analysis. To achieve this he uses several methods and concepts taken from his teachers. From Weierstrass he derives the idea that we generate the concept of number by counting a certain collection of objects. From Brentano and Stumpf he takes over the distinction between proper and improper presenting. In an example Husserl explains this in the following way: In other words, you can have a proper presentation of an object if it is actually present, and an improper or symbolic as he also calls it if you only can indicate that object through signs, symbols, etc. While often simplistically summarised as "aboutness" or the relationship between mental acts and the external world, Brentano defined it as the main characteristic of mental phenomena, by which they could be distinguished from physical phenomena. Every mental phenomenon, every psychological act, has a content, is directed at an object the intentional object. Every belief, desire, etc. Brentano used the expression "intentional inexistence" to indicate the status of the objects of thought in the mind. The property of being intentional, of having an intentional object, was the key feature to distinguish mental phenomena and physical phenomena, because physical phenomena lack intentionality altogether. Knowledge of essences would only be possible by "bracketing" all assumptions about the existence of an external world. These new concepts prompted the publication of the *Ideen* Ideas in , in which they were at first incorporated, and a plan for a second edition of the *Logische Untersuchungen*. From the *Ideen* onward, Husserl concentrated on the ideal, essential structures of consciousness. The metaphysical problem of establishing the reality of what we perceive, as distinct from the perceiving subject, was of little interest to Husserl in spite of his being a transcendental idealist. Husserl proposed that the world of objects and ways in which we direct ourselves toward and perceive those objects is normally conceived of in what he called the "natural standpoint", which is characterized by a belief that objects exist distinct from the perceiving subject and exhibit properties that we see as emanating from them. Husserl proposed a radical new phenomenological way of looking at objects by examining how we, in our many ways of being intentionally directed toward them, actually "constitute" them to be distinguished from materially creating objects or objects merely being figments of the imagination ; in the Phenomenological standpoint, the object ceases to be something simply "external" and ceases to be seen as providing indicators about what it is, and becomes a grouping of perceptual and functional aspects that imply one another under the idea of a particular object or "type". In order to better understand the world of appearances and objects, phenomenology attempts to identify the invariant features of how objects are perceived and pushes attributions of reality into their role as an attribution about the things we perceive or an assumption underlying how we perceive objects. Husserl tries new methods of bringing his readers to understand the importance of phenomenology to scientific inquiry and specifically to psychology and what it means to "bracket" the natural attitude. In it, Husserl for the first time attempts a historical overview of the development of Western philosophy and science , emphasizing the challenges presented by their increasingly one-sidedly empirical and naturalistic orientation. He identified several different kinds of names. For example, there are names that have the role of properties that uniquely identify an object. Each of these names expresses a meaning and designates the same object. Examples of this are "the victor in Jena" and "the loser in Waterloo", or "the equilateral triangle" and "the equiangular triangle"; in both cases, both names express different meanings, but designate the same object. There are names which have no meaning, but have the role of designating an object: Finally, there are names which designate a variety of objects. These are called "universal names"; their meaning is a "concept" and refers to a series of objects the extension of the concept. The way we know sensible objects is called "sensible intuition". Husserl also identifies a series of "formal words" which are necessary to form sentences and have no sensible correlates. Examples of formal words are "a", "the", "more than", "over", "under", "two", "group", and so on. Every sentence must contain formal words to designate what Husserl calls "formal categories". There are two kinds of categories: Meaning categories relate judgments; they include forms of conjunction , disjunction , forms of plural , among others. Formal-ontological categories relate objects and include notions such as set, cardinal number , ordinal number , part and whole, relation, and so on.

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The way we know these categories is through a faculty of understanding called "categorical intuition". Through sensible intuition our consciousness constitutes what Husserl calls a "situation of affairs" Sachlage. It is a passive constitution where objects themselves are presented to us. To this situation of affairs, through categorical intuition, we are able to constitute a "state of affairs" Sachverhalt. One situation of affairs through objective acts of consciousness acts of constituting categorially can serve as the basis for constituting multiple states of affairs. For example, suppose a and b are two sensible objects in a certain situation of affairs. For Husserl a sentence has a proposition or judgment as its meaning, and refers to a state of affairs which has a situation of affairs as a reference base. Philosophy of logic and mathematics Husserl believed that truth-in-itself has as ontological correlate being-in-itself, just as meaning categories have formal-ontological categories as correlates. Logic is a formal theory of judgment, that studies the formal a priori relations among judgments using meaning categories. Mathematics, on the other hand, is formal ontology; it studies all the possible forms of being of objects. Hence for both logic and mathematics, the different formal categories are the objects of study, not the sensible objects themselves. The problem with the psychological approach to mathematics and logic is that it fails to account for the fact that this approach is about formal categories, and not simply about abstractions from sensibility alone. The reason why we do not deal with sensible objects in mathematics is because of another faculty of understanding called "categorical abstraction. Thanks to "eidetic intuition" or "essential intuition", we are able to grasp the possibility, impossibility, necessity and contingency among concepts and among formal categories. Categorical intuition, along with categorical abstraction and eidetic intuition, are the basis for logical and mathematical knowledge. Husserl criticized the logicians of his day for not focusing on the relation between subjective processes that give us objective knowledge of pure logic. All subjective activities of consciousness need an ideal correlate, and objective logic constituted noematically as it is constituted by consciousness needs a noetic correlate the subjective activities of consciousness. Husserl stated that logic has three strata, each further away from consciousness and psychology than those that precede it. The first stratum is what Husserl called a "morphology of meanings" concerning a priori ways to relate judgments to make them meaningful. In this stratum we elaborate a "pure grammar" or a logical syntax, and he would call its rules "laws to prevent non-sense", which would be similar to what logic calls today "formation rules". The second stratum would be called by Husserl "logic of consequence" or the "logic of non-contradiction" which explores all possible forms of true judgments. He includes here syllogistic classic logic, propositional logic and that of predicates.

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## Chapter 2 : Project MUSE - A Primer on Ernst Abbe for Frege Readers

*This is a preprint version of the paper that appeared in definitive form in The Monist, July , vol. 77, no. 3, pp. and in Husserl or Frege? by Claire Ortiz Hill and Guillermo Rosado Haddock.*

Prossnitz , a town in the Bohemian province of Moravia , that was then in the Austrian Empire , after in Czechoslovakia , and since in the Czech Republic. He was born into a Jewish family, the second of four children boy, boy, girl, boy. Then Husserl traveled to Vienna to study at the Realgymnasium there, followed next by the Staatsgymnasium in Olomouc Ger: At Leipzig he was inspired by philosophy lectures given by Wilhelm Wundt , one of the founders of modern psychology. Then he moved to the Humboldt University of Berlin then called the Friedrich William University in where he continued his study of mathematics under Leopold Kronecker and the renowned Karl Weierstrass. In Berlin he found a mentor in Thomas Masaryk , then a former philosophy student of Franz Brentano and later the first president of Czechoslovakia. At Vienna in he obtained his Ph. Spiegelberg writes, "While outward religious practice never entered his life any more than it did that of most academic scholars of the time, his mind remained open for the religious phenomenon as for any other genuine experience. Yet already Husserl had felt the desire to pursue philosophy. Then professor Weierstrass became very ill. Husserl became free to return to Vienna where, after serving a short military duty, he devoted his attention to philosophy. In at the University of Vienna he attended the lectures of Franz Brentano on philosophy and philosophical psychology. Stuart Mill , and David Hume. Husserl was so impressed by Brentano that he decided to dedicate his life to philosophy. Indeed, Franz Brentano is often credited as being his most important influence, e. Following academic advice, two years later in Husserl followed Carl Stumpf , a former student of Brentano, to the University of Halle , seeking to obtain his Habilitation which would qualify him to teach at the university level. In their daughter Elizabeth was born, in their son Gerhard, and in their son Wolfgang. Elizabeth would marry in , and Gerhard in ; Wolfgang, however, became a casualty of the First World War. In he published his Philosophie der Arithmetik. Psychologische und logische Untersuchungen which, drawing on his prior studies in mathematics and philosophy, proposed a psychological context as the basis of mathematics. It drew the adverse notice of Gottlob Frege , who criticized its psychologism. Just prior a major work of his was published: Logische Untersuchungen Halle Volume one contains seasoned reflections on "pure logic" in which he carefully refutes "psychologism". Kant and Descartes were also now influencing his thought. In he became joint editor of the journal Logos. During this period Husserl had delivered lectures on internal time consciousness, which several decades later his former student Heidegger edited for publication. His important work Ideen [10] was published in its first issue. The next year his son Wolfgang was badly injured at the front. On March 8, , on the battlefield of Verdun , Wolfgang Husserl was killed in action. The next year his son Gerhard was wounded in the war but survived, and his mother Julia died. In November, , one of his outstanding students and later a noted philosophy professor in his own right, Adolf Reinach , was killed in the war while serving in Flanders. The mathematician Hermann Weyl began corresponding with him in Husserl gave four lectures on Phenomenological method at University College, London , in The University of Berlin in called on him to relocate there, but he declined the offer. In Heidegger dedicated his book Sein und Zeit to him "in grateful respect and friendship. A festschrift to celebrate his seventieth birthday was presented to him on April 8, Nineteen thirty-three was an ugly year in Germany when the racial laws of the new Nazi regime were enacted. On April 6 Husserl was suspended from the University of Freiburg by the Badische Ministry of Culture; the following week he was disallowed any university activities. Yet his colleague Heidegger was elected Rektor of the university on April 21â€”22, and joined the Nazi party. By contrast, in July Husserl resigned from the Deutsche Akademie. It remains, however, alone unconnected. Later Husserl lectured at Prague in and Vienna in , which resulted in a very differently styled work that while innovative is no less problematic: Die Krisis Belgrade The apolitical Husserl before had specifically avoided such historical discussions, pointedly preferring to go directly to an

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investigation of consciousness. Merleau-Ponty and others question whether Husserl here does not undercut his own position, in that Husserl had attacked in principle historicism, while specifically designing his phenomenology to be rigorous enough to transcend the limits of history. Does the life world contextualize and thus compromise the gaze of the pure ego, or does the phenomenological method nonetheless raise the ego up transcendent? Since his university retirement Husserl had "worked at a tremendous pace, producing several major works. Edmund Husserl died at Freiburg on April 27, 1959, having just turned 88. His wife Malvine survived him. Eugen Fink, his research assistant, delivered his eulogy. Heidegger and the Nazi era Professor Husserl was denied the use of the library at Freiburg as a result of the anti-Jewish legislation the Nazis passed in April 1938. In the summer of 1938 Husserl had studied carefully selected writings of Heidegger, coming to the conclusion that on several of their key positions they differed, e. Husserl, of course, had died several years earlier. In post-war editions of *Sein und Zeit* the dedication to Husserl is restored. The complex, troubled, and sundered philosophical relationship between Husserl and Heidegger has been widely discussed. He analyzes the psychological process needed to obtain the concept of number and then tries to build up a systematical theory on this analysis. To achieve this he uses several methods and concepts taken from his teachers. From Weierstrass he derives the idea that we generate the concept of number by counting a certain collection of objects. From Brentano and Stumpf he takes over the distinction between proper and improper presenting. 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The elaboration of phenomenology Some years after the publication of his main work, the *Logische Untersuchungen* Logical Investigations, Husserl made some key conceptual elaborations which led him to assert that in order to study the structure of consciousness, one would have to distinguish between the act of consciousness and the phenomena at which it is directed the objects as intended. Knowledge of essences would only be possible by "bracketing" all assumptions about the existence of an external world. These new concepts prompted the publication of the *Ideen* Ideas in 1936, in which they were at first incorporated, and a plan for a second edition of the *Logische Untersuchungen*. From the *Ideen* onward, Husserl concentrated on the ideal, essential structures of consciousness. The metaphysical problem of establishing the material reality of what we perceive was of little interest to Husserl in spite of his being a transcendental idealist. Husserl proposed that the world of objects and ways in which we direct ourselves toward and perceive those objects is normally conceived of in what he called the "natural standpoint", which is characterized by a belief that objects materially exist and exhibit properties that we see as emanating from them. Husserl proposed a radical new phenomenological way of looking at objects by examining how we, in our many ways of being intentionally directed toward them, actually "constitute" them to be distinguished from materially creating objects or objects merely being figments of the imagination; in the Phenomenological standpoint, the object ceases to be something simply "external" and ceases to be seen as providing indicators about what it is, and becomes a grouping of perceptual and functional aspects that imply one another under the idea of a particular object or "type". In order to better understand the world of appearances and objects, phenomenology attempts to identify the invariant features of how objects are perceived and pushes attributions of reality into their role as an attribution about the things we perceive or an assumption underlying how we perceive objects. In a later period, Husserl began to wrestle with the complicated issues of intersubjectivity, specifically, how communication about an object can be assumed to refer to the same ideal entity *Cartesian Meditations*,

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Meditation V. Husserl tries new methods of bringing his readers to understand the importance of phenomenology to scientific inquiry and specifically to psychology and what it means to "bracket" the natural attitude. In it, Husserl for the first time attempts a historical overview of the development of Western philosophy and science, emphasizing the challenges presented by their increasingly one-sidedly empirical and naturalistic orientation. He identified several different kinds of names. For example, there are names that have the role of properties that uniquely identify an object. Each of these names express a meaning and designate the same object. Examples of this are "the victor in Jena" and "the loser in Waterloo", or "the equilateral triangle" and "the equiangular triangle"; in both cases, both names express different meanings, but designate the same object. There are names which have no meaning, but have the role of designating an object: Finally, there are names which designate a variety of objects. These are called "universal names"; their meaning is a "concept" and refers to a series of objects the extension of the concept. The way we know sensible objects is called "sensible intuition". Husserl also identifies a series of "formal words" which are necessary to form sentences and have no sensible correlates. Examples of formal words are "a", "the", "more than", "over", "under", "two", "group", and so on. Every sentence must contain formal words to designate what Husserl calls "formal categories". There are two kinds of categories: Meaning categories relate judgments; they include forms of conjunction, disjunction, forms of plural, among others. Formal-ontological categories relate objects and include notions such as set, cardinal number, ordinal number, part and whole, relation, and so on. The way we know these categories is through a faculty of understanding called "categorial intuition". Through sensible intuition our consciousness constitutes what Husserl calls a "situation of affairs" *Sachlage*. It is a passive constitution where objects themselves are presented to us. To this situation of affairs, through categorial intuition, we are able to constitute a "state of affairs" *Sachverhalt*. One situation of affairs through objective acts of consciousness acts of constituting categorially can serve as the basis for constituting multiple states of affairs. For example, suppose a and b are two sensible objects in a certain situation of affairs. For Husserl a sentence has a proposition or judgment as its meaning, and refers to a state of affairs which has a situation of affairs as a reference base.

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### Chapter 3 : Edmund Husserl | Project Gutenberg Self-Publishing - eBooks | Read eBooks online

*A primary source is a work that is being studied, or that provides first-hand or direct evidence on a topic. Common types of primary sources include works of literature, historical documents, original philosophical writings, and religious texts.*

He was born into a Jewish family, the second of four children boy, boy, girl, boy. His father was a milliner. Then Husserl traveled to Vienna to study at the Realgymnasium there, followed next by the Staatsgymnasium in Olomouc Ger.: At Leipzig he was inspired by philosophy lectures given by Wilhelm Wundt , one of the founders of modern psychology. Then he moved to the Frederick William University of Berlin the present-day Humboldt University of Berlin in where he continued his study of mathematics under Leopold Kronecker and the renowned Karl Weierstrass. In Berlin he found a mentor in Thomas Masaryk , then a former philosophy student of Franz Brentano and later the first president of Czechoslovakia. Herbert Spiegelberg writes, "While outward religious practice never entered his life any more than it did that of most academic scholars of the time, his mind remained open for the religious phenomenon as for any other genuine experience. Yet already Husserl had felt the desire to pursue philosophy. Then professor Weierstrass became very ill. Husserl became free to return to Vienna where, after serving a short military duty, he devoted his attention to philosophy. In at the University of Vienna he attended the lectures of Franz Brentano on philosophy and philosophical psychology. Stuart Mill , and David Hume. Husserl was so impressed by Brentano that he decided to dedicate his life to philosophy; indeed, Franz Brentano is often credited as being his most important influence, e. In their daughter Elizabeth was born, in their son Gerhart , and in their son Wolfgang. Elizabeth would marry in , and Gerhart in ; Wolfgang, however, became a casualty of the First World War. He started where he was in as a Privatdozent at the University of Halle. In he published his Philosophie der Arithmetik. Psychologische und logische Untersuchungen which, drawing on his prior studies in mathematics and philosophy, proposed a psychological context as the basis of mathematics. It drew the adverse notice of Gottlob Frege , who criticized its psychologism. Just prior to this a major work of his, Logische Untersuchungen Halle, " , was published. Volume One contains seasoned reflections on "pure logic" in which he carefully refutes "psychologism". Kant and Descartes were also now influencing his thought. In he became joint editor of the journal Logos. During this period Husserl had delivered lectures on internal time consciousness, which several decades later his former student Heidegger edited for publication. His important work Ideen [37] was published in its first issue. In October both his sons were sent to fight on the Western Front of World War I and the following year one of them, Wolfgang Husserl, was badly injured. On 8 March , on the battlefield of Verdun , Wolfgang was killed in action. The next year his other son Gerhart Husserl was wounded in the war but survived. His own mother Julia died. In November one of his outstanding students and later a noted philosophy professor in his own right, Adolf Reinach , was killed in the war while serving in Flanders. The mathematician Hermann Weyl began corresponding with him in Husserl gave four lectures on Phenomenological method at University College, London in The University of Berlin in called on him to relocate there, but he declined the offer. In Heidegger dedicated his book Sein und Zeit Being and Time to him "in grateful respect and friendship. A Festschrift to celebrate his seventieth birthday was presented to him on 8 April Despite retirement, Husserl gave several notable lectures. It remains, however, alone unconnected. On 6 April Husserl was suspended from the University of Freiburg by the Badische Ministry of Culture; the following week he was disallowed any university activities. Yet his colleague Heidegger was elected Rector of the university on 21-22 April, and joined the Nazi Party. By contrast, in July Husserl resigned from the Deutsche Akademie. Die Krisis Belgrade The apolitical Husserl before had specifically avoided such historical discussions, pointedly preferring to go directly to an investigation of consciousness. Merleau-Ponty and others question whether Husserl here does not undercut his own position, in that Husserl had attacked in principle historicism , while specifically designing his phenomenology to be rigorous enough to transcend the limits of history. Does the life world contextualize and thus compromise the gaze of the pure ego, or does the phenomenological method

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The complex, troubled, and sundered philosophical relationship between Husserl and Heidegger has been widely discussed. The future alone will judge which was the true Germany in , and who were the true Germansâ€”those who subscribe to the more or less materialistic-mythical racial prejudices of the day, or those Germans pure in heart and mind, heirs to the great Germans of the past whose tradition they revere and perpetuate. He analyzes the psychological process needed to obtain the concept of number and then tries to build up a systematical theory on this analysis. To achieve this he uses several methods and concepts taken from his teachers. From Weierstrass he derives the idea that we generate the concept of number by counting a certain collection of objects. From Brentano and Stumpf he takes over the distinction between proper and improper presenting. 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material realm constitutes the known reality, and understanding is premised on the accuracy of the perception and the objective knowability of what is called the "real world". He identified several different kinds of names. For example, there are names that have the role of properties that uniquely identify an object. Each of these names expresses a meaning and designates the same object. There are names which have no meaning, but have the role of designating an object: Finally, there are names which designate a variety of objects. These are called "universal names"; their meaning is a "concept" and refers to a series of objects the extension of the concept. The way we know sensible objects is called "sensible intuition". Husserl also identifies a series of "formal words" which are necessary to form sentences and have no sensible correlates. Examples of formal words are "a", "the", "more than", "over", "under", "two", "group", and so on. Every sentence must contain formal words to designate what Husserl calls "formal categories". There are two kinds of categories: Meaning categories relate judgments; they include forms of conjunction, disjunction, forms of plural, among others. Formal-ontological categories relate objects and include notions such as set, cardinal number, ordinal number, part and whole, relation, and so on. The way we know these categories is through a faculty of understanding called "categorical intuition". Through sensible intuition our consciousness constitutes what Husserl calls a "situation of affairs" *Sachlage*. It is a passive constitution where objects themselves are presented to us. To this situation of affairs, through categorical intuition, we are able to constitute a "state of affairs" *Sachverhalt*. One situation of affairs through objective acts of consciousness acts of constituting categorially can serve as the basis for constituting multiple states of affairs. For example, suppose a and b are two sensible objects in a certain situation of affairs. For Husserl a sentence has a proposition or judgment as its meaning, and refers to a state of affairs which has a situation of affairs as a reference base. Philosophy of logic and mathematics[ edit ] Husserl believed that truth-in-itself has as ontological correlate being-in-itself, just as meaning categories have formal-ontological categories as correlates. Logic is a formal theory of judgment, that studies the formal a priori relations among judgments using meaning categories. Mathematics, on the other hand, is formal ontology; it studies all the possible forms of being of objects.

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## Chapter 4 : References for Frege

*Illustrative extracts from Frege's review of Husserl's Philosophie der Arithmetik. A critical elucidation of some points in E. Schroeder's Algebra der Logik.*

Open Court, and Idealization IV. Historical Studies on Abstraction and Idealization Poznan studies in the philosophy of the sciences and the humanities vol. The published versions should be consulted for all citations. To this end, he espoused a theory of abstraction of the concept of number akin to the one his colleague Georg Cantor was propounding in conjunction with the Platonistic theories about sets he was hard at work developing and defending. However, Husserl rather quickly grew profoundly dissatisfied with the psychological foundations he had begun laying for mathematics in his *On the Concept of Number* Husserl and then in the *Philosophy of Arithmetic* Husserl He even confessed to having experienced doubts about his approach right from the very beginning Husserl , And during years of hard, solitary work in Halle Husserl developed the original interpretation of Platonic idealism which went into the making of the phenomenological method Husserl ; Husserl Any further progress of his work on set theory, he had explained in the beginning of his *Grundlagen einer allgemeinen Mannigfaltigkeitslehre* Cantor , was absolutely dependent upon the expansion of the concept of real whole numbers beyond the present boundaries and in a direction which, as far as he knew, no one had yet searched. He had, he claimed, burst the confines of the conceptual formation of real whole numbers and broken through into a new realm of transfinite numbers. As strange and daring as his ideas might now seem, he was convinced that they would one day be deemed completely simple, appropriate and natural p. Much of the work he would do in the coming years would be aimed at showing they were. Upon discovering the transfinite numbers, Cantor tells readers of the *Mannigfaltigkeitslehre*, he had not been clearly conscious of the fact that these new numbers possessed the same concrete reality the whole numbers did. He was, however, now persuaded that they did p. Through the combined action of two principles, he argued in the *Mannigfaltigkeitslehre*, one might break through any barrier in the conceptual formation of the real, whole numbers pp. By the first principle, the first series of positive real whole numbers 1,2,3, Numbers thus manufactured would be members of the first number class which was infinite and for which there was no greatest number p. By the second principle, whenever there was any definite succession of defined whole numbers for which no greatest one existed, a new number could be created considered as the boundary of those numbers, i. By a third principle, the second number class defined would not only receive a higher power than the first, but precisely the next higher one, hence the second power p. By "power" Cantor meant cardinal number. In a note to the *Mannigfaltigkeitslehre* Cantor also provided a rather inchoate account of his idea of the procedure for the correct formation of concepts: When one has completely finished with this, then all the conditions for awakening the concept A which was slumbering in us are present and it comes into existence The answer, though, was forthcoming. For since , Cantor had begun making his thereafter oft repeated claims that his transfinite numbers could be "produced through abstraction from reality with the same necessity as the ordinary finite whole numbers by which alone all other mathematical conceptual formations thus far been produced" Cantor , ; Kreiser In the posthumously published "Principien" of he had written: The power of a set M is hereupon defined as the presentation of what is common to all of the sets M of equivalent sets and only those and hence also of the set M itself; it is the *representatio generalis* It therefore seems to me to be the most primitive, psychologically, as well as methodologically simplest root concept, arisen through abstraction, from all particular characteristics which a set of a specific class may display, both with respect to the nature of its elements, as well as with regard to the relations and order in which the elements are to each other or can stand to things lying outside the set. The concept of power originates in reflecting only upon what is in common to all of one and the same class of member sets Cantor , Cantor , ; Eccarius Integrated directly into the "Mitteilungen" are parts of letters he had written on the subject during the years prior to the publication of the work pp. Much of the "Mitteilungen" is,

in fact, devoted to explaining exactly how numbers are to be procured from reality by abstraction and, in particular, how the actual infinite number concept is to be formed through appropriate natural abstractions in the way the finite number concepts are won through abstraction from finite sets  $p$ . For Cantor, cardinal numbers were, as he explained to Giulio Vivanti in , the general concepts assigned to sets which one may obtain by abstracting both from the properties of the elements and from the order in which they are given Cantor , In the "Mitteilungen" he repeatedly gave essentially the same recipe for extracting cardinal numbers from reality through abstraction: In abstracting from a given set  $M$ , composed of determinate, completely distinct things or abstract concepts called the elements of the set and thought of as a thing for itself, both the properties of the elements and the order in which they are given, is produced in us a determinate general concept There he also provided this concrete illustration of the procedure he was prescribing: For the formation of the general concept "five" one needs only a set for example all the fingers of my right hand which corresponds to this cardinal number; the act of abstraction with respect to both the properties and the order in which I encounter these wholly distinct things, produces or rather awakens the concept "five" in my mind  $p$ . Cantor believed his theory of abstraction to be the distinctive feature of his number theory and that it represented an entirely different method for providing the foundations of the finite numbers than was to be had in the theories of his contemporaries. As he wrote to Giuseppe Peano: With those conceptions one would have never have come upon the transfinite numbers whose grounding is only possible in the way which I have carved out Cantor , ; Husserl specifically points to two passages of the "Mitteilungen". In the first one, Cantor had written: Calling Cantor a mathematician of genius and referring to the above cited passage concerning the formation of the general concept "five", Husserl further commends Cantor for having written with a great deal of precision in the "Mitteilungen" that for "the formation of the general concept "five" one needs only a set Abstraction, Frege said, would endow mathematicians with the miraculous, supernatural ability Frege , 69, 71 to change things Frege , 70; Frege , , in "the wash-tub of the mind" Frege , ; Chapter 6 of this book. He furthermore believed that the propositions of pure logic could not "come to consciousness in a human mind without any activity of the senses" since "without sensory experience no mental development is possible in the beings known to us" Frege , 5. But it was the "psychological and hence empirical turn" Frege , , he believed Cantor and Husserl had given the matter that particularly irked him Frege , , According to their theories, Couturat explains, the concept of whole cardinal number would originate in experience, in the counting of a concrete set of external objects given in perception  $p$ . The two words "psychologicistic" and "positivistic", he says, sum up and display the inadequacy and vice of such an empirical approach  $pp$ . And, interestingly, he praises Husserl  $p$ . The elements of a collection cannot, Couturat objects, be counted as concrete objects, but only, as Cantor does, as a set of abstract, propertyless units obtained when by "abstracting from the particular nature of the objects given and from their distinctive properties, one considers each one of them as one, meaning one reduces it to a unit, and embraces all those abstract units in a single mental act. For a unit is neither a perception nor anything given in perception  $p$ . In speaking out in the *Mannigfaltigkeitslehre* against the new empiricism, sensualism, skepticism and Kantianism which, he argued, mistakenly located the sources of knowledge and certainty in the senses or in the "supposedly pure forms of intuition of the world of presentation", Cantor had affirmed that sure knowledge could "only be obtained through concepts and ideas which, at most stimulated by external experience, are on the whole formed through inner induction and deduction as something which in a way already lay within us and was only awakened and brought to consciousness"  $p$ . Cantor and Platonic Ideas Cantor surely made no secret of his intention to supply his numbers with adequate philosophical and metaphysical foundations. The *Mannigfaltigkeitslehre* came replete with epistemological and metaphysical reflections aimed at explaining and justifying his novel ideas to a readership chary of such talk  $ex$ . Cantor , , , , , In the beginning of the *Principien*, expressing the high regard he had for metaphysics and his belief in a close alliance between metaphysics and mathematics, he thanked Jules Tannery for having paid him the honor of according philosophical, and even metaphysical, worth to his writings Cantor , In , Mittag-Leffler even felt the need to warn Cantor that his new terminology and

philosophical way of expressing himself might be so frightening to mathematicians as to seriously damage his reputation among them Cantor , Cantor was also most explicit about the precise nature of the metaphysical underpinnings he was proposing for his numbers. His talk of awakening and bringing to consciousness the knowledge, concepts and numbers slumbering in us Cantor , n. To Giuseppe Peano he wrote: In essentials this is the conception of the ancient geometry of Plato, Aristotle, Euclid etc. By manifold or a set, he wrote in the *Mannigfaltigkeitslehre*, he was defining something related to the Platonic eidos or idea, as also to what Plato called a *mikton* in the *Philebus* Cantor , n. I am just as much a realist as an idealist" Cantor , He did, though, refer them ex. For the formation of concepts through abstraction is a process generally associated with Aristotelian and empiricist philosophy and is generally considered to be incompatible with the basic principles underlying a strictly Platonic theory of forms or Ideas known through recollection Weinberg , 1. Given these facts any attempt to marry abstraction and Platonic Ideas might be viewed as crude and uncouth. Knowledge, he maintained, could "only be obtained through concepts and ideas which, at most stimulated by external experience, are on the whole formed through inner induction and deduction as something which in a way already lay within us and was only awakened and brought to consciousness" Cantor , note 6. By engaging in the process of concept formation prescribed in the *Mannigfaltigkeitslehre*, Cantor maintained one fulfilled the conditions for "awakening" a concept which "slumbering in us" "comes into existence" Cantor , notes 7, 8. And it was his theory of abstraction that was going to yield those concepts and ideas. Zeller, however, actually attributed a theory of abstraction to Plato, giving some clue as to how Cantor might have justified his own interpretation. Plato, Zeller contended, was "not aiming for a pure a priori construction, but only for a complete logical ordering of the Ideas, which he himself found through induction, or if we prefer: In so interpreting Plato, Zeller was certainly thinking of passages from the *Dialogues* in which there is talk of passing from a plurality of perceptions to a unity gathered together by reasoning ex. *Phaedrus B-C* , or in which Plato wrote of using of our senses in connection with objects to recover or recollect previously acquired knowledge ex. This freedom, Cantor maintained, was a consequence Cantor , of the connection between the two kinds of reality or existence which both finite and infinite whole numbers enjoy and which, strictly speaking, they share with any concepts or Ideas whatsoever. First, Cantor maintained, these numbers have intrasubjective or immanent reality "inasmuch as on the basis of definitions they occupy a fully determinate place in our understanding, are as distinct as possible from all other components of our thought, stand in determinate relations to them and consequently modify the substance of our mind in determinate ways" Cantor , A second kind of reality may, Cantor believed, also be ascribed to these numbers. They may have transsubjective or transient reality inasmuch as "they must be regarded as an expression or image of processes of the external world lying outside of the intellect, as further the different number classes The "thoroughly realistic, but no less idealistic, foundation" of these reflections, Cantor explains, leaves no doubt in his mind "that these two kinds of reality come together constantly in the sense that a concept existing in the first sense always also possesses transient reality in certain, even infinitely many respects The nearer, however, our presentations come to the truth What is knowable, is; what is not knowable, is not, and to the same extent something is, it is also knowable Cantor , note 6; Zeller , As a consequence, Cantor concludes, mathematics has "purely and simply to take into consideration the immanent reality of her concepts and hence no obligation whatsoever to investigate their transient reality". As soon as a number meets these conditions, it can and must be considered as existent and real in mathematics". This is the reason, Cantor maintains, "why one is to regard the rational, irrational, and complex numbers as altogether just as existent as the finite positive whole numbers". The actual basis of the connection between these two kinds of reality, he tells us, lies "in the unity of the universe, to which we ourselves belong" Cantor , Two and three, he reasoned, are not contained in the concept five. Were they, he asked, what would that mean of one and four? It is thus, he concludes, five in and for itself independent from four or three and from any other number. A good measure of the freedom Cantor felt he enjoyed in fact came from his adoption of the Platonic *eidetikoi* or ideal numbers alluded to in the above paragraph. According to Zeller, Plato expressed the combining of the One and the Many by referring to

Ideas as numbers, thus distinguishing between an empirical treatment of numbers and pure, ideal arithmoi eidetikoi which by their very nature are detached from things perceptible by the senses and which unlike the other, mathematical, numbers stand in a before and after relationship to one another. The essential thing for Plato, Zeller maintains, was only the thought, which underlies his number theory, that "in what is real the One and the Many must be organically combined" Zeller , In such a theory, he explains, numbers become the connecting link between Ideas and appearance. And this, then, gave him the right to set forth a multiplicity Vielheit of logically interrelated Ideas, a world of Ideas Zeller , ; ; Zeller , ; see also Aristotle Metaphysics Books M-N. The elements of a set, he explains, are to be thought of as separate. In the intellectual image intellektualen Abbild , which he calls the order type or ideal number, the ones Einsen are, however, united into a single organism. In a certain sense, he explains, each ideal number can be looked upon as something composed of matter and form. In finite sets, Cantor tells us, these two kinds of numbers coincide. In the Mannigfaltigkeitslehre, he describes his real delight in seeing how when we proceed up into the infinite, the concept of whole number, which in the finite only serves as a backdrop for ideal numbers, splits into two concepts. And how in proceeding back down from the infinite to the finite he sees how beautifully and clearly the two concepts become one again and flow together into the concept of finite whole number. Taken absolutely", he explained, "the smaller numbers are only virtually contained in the bigger ones. They are, taken absolutely, all independent one from the other, all equally good and all equally necessary metaphysically" Cantor , In he wrote to Charles Hermite that "the reality and absolute uniformity of the whole numbers seems to be much stronger than that of the world of sense.

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## Chapter 5 : WikiZero - Edmund Husserl

-- Illustrative extracts from Frege's review of Husserl's 'Philosophie der Arithmetik.' -- A critical elucidation of some points in E. Schroeder's *Algebra der Logik*. -- What is a function?

He was born into a Jewish family, the second of four children boy, boy, girl, boy. His father was a milliner. Then Husserl traveled to Vienna to study at the Realgymnasium there, followed next by the Staatsgymnasium in Olomouc Ger.: At Leipzig he was inspired by philosophy lectures given by Wilhelm Wundt , one of the founders of modern psychology. Then he moved to the Frederick William University of Berlin the present-day Humboldt University of Berlin in where he continued his study of mathematics under Leopold Kronecker and the renowned Karl Weierstrass. In Berlin he found a mentor in Thomas Masaryk , then a former philosophy student of Franz Brentano and later the first president of Czechoslovakia. Herbert Spiegelberg writes, "While outward religious practice never entered his life any more than it did that of most academic scholars of the time, his mind remained open for the religious phenomenon as for any other genuine experience. Yet already Husserl had felt the desire to pursue philosophy. Then professor Weierstrass became very ill. Husserl became free to return to Vienna where, after serving a short military duty, he devoted his attention to philosophy. In at the University of Vienna he attended the lectures of Franz Brentano on philosophy and philosophical psychology. Stuart Mill , and David Hume. Husserl was so impressed by Brentano that he decided to dedicate his life to philosophy; indeed, Franz Brentano is often credited as being his most important influence, e. In their daughter Elizabeth was born, in their son Gerhart , and in their son Wolfgang. Elizabeth would marry in , and Gerhart in ; Wolfgang, however, became a casualty of the First World War. He started where he was in as a Privatdozent at the University of Halle. In he published his *Philosophie der Arithmetik. Psychologische und logische Untersuchungen* which, drawing on his prior studies in mathematics and philosophy, proposed a psychological context as the basis of mathematics. It drew the adverse notice of Gottlob Frege , who criticized its psychologism. Just prior to this a major work of his, *Logische Untersuchungen* Halle, " , was published. Volume One contains seasoned reflections on "pure logic" in which he carefully refutes "psychologism". Kant and Descartes were also now influencing his thought. In he became joint editor of the journal *Logos*. During this period Husserl had delivered lectures on internal time consciousness, which several decades later his former student Heidegger edited for publication. His important work *Ideen* [37] was published in its first issue. In October both his sons were sent to fight on the Western Front of World War I and the following year one of them, Wolfgang Husserl, was badly injured. On 8 March , on the battlefield of Verdun , Wolfgang was killed in action. The next year his other son Gerhart Husserl was wounded in the war but survived. His own mother Julia died. In November one of his outstanding students and later a noted philosophy professor in his own right, Adolf Reinach , was killed in the war while serving in Flanders. The mathematician Hermann Weyl began corresponding with him in Husserl gave four lectures on Phenomenological method at University College, London in The University of Berlin in called on him to relocate there, but he declined the offer. In Heidegger dedicated his book *Sein und Zeit* Being and Time to him "in grateful respect and friendship. A Festschrift to celebrate his seventieth birthday was presented to him on 8 April Despite retirement, Husserl gave several notable lectures. It remains, however, alone unconnected. On 6 April Husserl was suspended from the University of Freiburg by the Badische Ministry of Culture; the following week he was disallowed any university activities. Yet his colleague Heidegger was elected Rector of the university on 21-22 April, and joined the Nazi Party. By contrast, in July Husserl resigned from the Deutsche Akademie. Die Krisis Belgrade The apolitical Husserl before had specifically avoided such historical discussions, pointedly preferring to go directly to an investigation of consciousness. Merleau-Ponty and others question whether Husserl here does not undercut his own position, in that Husserl had attacked in principle historicism , while specifically designing his phenomenology to be rigorous enough to transcend the limits of history. Does the life world contextualize and thus compromise the gaze of the pure ego, or does the phenomenological method

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nonetheless raise the ego up transcendent? Since his university retirement Husserl had "worked at a tremendous pace, producing several major works. Edmund Husserl died at Freiburg on 27 April , having just turned His wife Malvine survived him. Eugen Fink , his research assistant, delivered his eulogy. Heidegger and the Nazi era[ edit ] Husserl was incorrectly rumoured to have been denied the use of the library at Freiburg as a result of the anti-Jewish legislation of April It was also rumoured that his former pupil Martin Heidegger , informed Husserl that he was discharged, but it was actually the former rector. In the summer of Husserl had studied carefully selected writings of Heidegger, coming to the conclusion that on several of their key positions they differed, e. Husserl, of course, had died several years earlier. In post-war editions of *Sein und Zeit* the dedication to Husserl is restored. The complex, troubled, and sundered philosophical relationship between Husserl and Heidegger has been widely discussed. The future alone will judge which was the true Germany in , and who were the true Germansâ€”those who subscribe to the more or less materialistic-mythical racial prejudices of the day, or those Germans pure in heart and mind, heirs to the great Germans of the past whose tradition they revere and perpetuate. He analyzes the psychological process needed to obtain the concept of number and then tries to build up a systematical theory on this analysis. To achieve this he uses several methods and concepts taken from his teachers. From Weierstrass he derives the idea that we generate the concept of number by counting a certain collection of objects. From Brentano and Stumpf he takes over the distinction between proper and improper presenting. In an example Husserl explains this in the following way: In other words, you can have a proper presentation of an object if it is actually present, and an improper or symbolic as he also calls it if you only can indicate that object through signs, symbols, etc. While often simplistically summarised as "aboutness" or the relationship between mental acts and the external world, Brentano defined it as the main characteristic of mental phenomena, by which they could be distinguished from physical phenomena. Every mental phenomenon, every psychological act, has a content, is directed at an object the intentional object. Every belief, desire, etc. Brentano used the expression "intentional inexistence" to indicate the status of the objects of thought in the mind. The property of being intentional, of having an intentional object, was the key feature to distinguish mental phenomena and physical phenomena, because physical phenomena lack intentionality altogether. Knowledge of essences would only be possible by "bracketing " all assumptions about the existence of an external world. These new concepts prompted the publication of the *Ideen* Ideas in , in which they were at first incorporated, and a plan for a second edition of the *Logische Untersuchungen*. From the *Ideen* onward, Husserl concentrated on the ideal, essential structures of consciousness. The metaphysical problem of establishing the reality of what we perceive, as distinct from the perceiving subject, was of little interest to Husserl in spite of his being a transcendental idealist. Husserl proposed that the world of objectsâ€”and of ways in which we direct ourselves toward and perceive those objectsâ€”is normally conceived of in what he called the "natural standpoint", which is characterized by a belief that objects exist distinct from the perceiving subject and exhibit properties that we see as emanating from them. Husserl proposed a radical new phenomenological way of looking at objects by examining how we, in our many ways of being intentionally directed toward them, actually "constitute" them to be distinguished from materially creating objects or objects merely being figments of the imagination ; in the Phenomenological standpoint, the object ceases to be something simply "external" and ceases to be seen as providing indicators about what it is, and becomes a grouping of perceptual and functional aspects that imply one another under the idea of a particular object or "type". In order to better understand the world of appearances and objects, phenomenology attempts to identify the invariant features of how objects are perceived and pushes attributions of reality into their role as an attribution about the things we perceive or an assumption underlying how we perceive objects. Husserl tries new methods of bringing his readers to understand the importance of phenomenology to scientific inquiry and specifically to psychology and what it means to "bracket" the natural attitude. In it, Husserl for the first time attempts a historical overview of the development of Western philosophy and science , emphasizing the challenges presented by their increasingly one-sidedly empirical and naturalistic orientation. In the former, sense-perception in correspondence with the

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material realm constitutes the known reality, and understanding is premised on the accuracy of the perception and the objective knowability of what is called the "real world". He identified several different kinds of names. For example, there are names that have the role of properties that uniquely identify an object. Each of these names expresses a meaning and designates the same object. There are names which have no meaning, but have the role of designating an object: Finally, there are names which designate a variety of objects. These are called "universal names"; their meaning is a "concept" and refers to a series of objects the extension of the concept. The way we know sensible objects is called "sensible intuition". Husserl also identifies a series of "formal words" which are necessary to form sentences and have no sensible correlates. Examples of formal words are "a", "the", "more than", "over", "under", "two", "group", and so on. Every sentence must contain formal words to designate what Husserl calls "formal categories". There are two kinds of categories: Meaning categories relate judgments; they include forms of conjunction, disjunction, forms of plural, among others. Formal-ontological categories relate objects and include notions such as set, cardinal number, ordinal number, part and whole, relation, and so on. The way we know these categories is through a faculty of understanding called "categorical intuition". Through sensible intuition our consciousness constitutes what Husserl calls a "situation of affairs" *Sachlage*. It is a passive constitution where objects themselves are presented to us. To this situation of affairs, through categorical intuition, we are able to constitute a "state of affairs" *Sachverhalt*. One situation of affairs through objective acts of consciousness acts of constituting categorially can serve as the basis for constituting multiple states of affairs. For example, suppose a and b are two sensible objects in a certain situation of affairs. For Husserl a sentence has a proposition or judgment as its meaning, and refers to a state of affairs which has a situation of affairs as a reference base. Philosophy of logic and mathematics[ edit ] Husserl believed that truth-in-itself has as ontological correlate being-in-itself, just as meaning categories have formal-ontological categories as correlates. Logic is a formal theory of judgment, that studies the formal a priori relations among judgments using meaning categories. Mathematics, on the other hand, is formal ontology; it studies all the possible forms of being of objects.

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Chapter 6 : [www.nxgvision.com](http://www.nxgvision.com): Sitemap

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He was born into a Jewish family, the second of four children boy, boy, girl, boy. His father was a milliner. Then Husserl traveled to Vienna to study at the Realgymnasium there, followed next by the Staatsgymnasium in Olomouc Ger.: At Leipzig he was inspired by philosophy lectures given by Wilhelm Wundt , one of the founders of modern psychology. Then he moved to the Frederick William University of Berlin the present-day Humboldt University of Berlin in where he continued his study of mathematics under Leopold Kronecker and the renowned Karl Weierstrass. In Berlin he found a mentor in Thomas Masaryk , then a former philosophy student of Franz Brentano and later the first president of Czechoslovakia. Herbert Spiegelberg writes, "While outward religious practice never entered his life any more than it did that of most academic scholars of the time, his mind remained open for the religious phenomenon as for any other genuine experience. Yet already Husserl had felt the desire to pursue philosophy. Then professor Weierstrass became very ill. Husserl became free to return to Vienna where, after serving a short military duty, he devoted his attention to philosophy. In at the University of Vienna he attended the lectures of Franz Brentano on philosophy and philosophical psychology. Stuart Mill , and David Hume. Husserl was so impressed by Brentano that he decided to dedicate his life to philosophy; indeed, Franz Brentano is often credited as being his most important influence, e. In their daughter Elizabeth was born, in their son Gerhart , and in their son Wolfgang. Elizabeth would marry in , and Gerhart in ; Wolfgang, however, became a casualty of the First World War. He started where he was in as a Privatdozent at the University of Halle. In he published his *Philosophie der Arithmetik. Psychologische und logische Untersuchungen* which, drawing on his prior studies in mathematics and philosophy, proposed a psychological context as the basis of mathematics. It drew the adverse notice of Gottlob Frege , who criticized its psychologism. Just prior to this a major work of his, *Logische Untersuchungen Halle, 1901* , was published. Volume One contains seasoned reflections on "pure logic" in which he carefully refutes "psychologism". Kant and Descartes were also now influencing his thought. In he became joint editor of the journal *Logos*. During this period Husserl had delivered lectures on internal time consciousness, which several decades later his former student Heidegger edited for publication. His important work *Ideen* [36] was published in its first issue. In October both his sons were sent to fight on the Western Front of World War I and the following year one of them, Wolfgang Husserl, was badly injured. On 8 March , on the battlefield of Verdun , Wolfgang was killed in action. The next year his other son Gerhart Husserl was wounded in the war but survived. His own mother Julia died. In November one of his outstanding students and later a noted philosophy professor in his own right, Adolf Reinach , was killed in the war while serving in Flanders. The mathematician Hermann Weyl began corresponding with him in Husserl gave four lectures on Phenomenological method at University College, London in The University of Berlin in called on him to relocate there, but he declined the offer. In Heidegger dedicated his book *Sein und Zeit* Being and Time to him "in grateful respect and friendship. A Festschrift to celebrate his seventieth birthday was presented to him on 8 April Despite retirement, Husserl gave several notable lectures. It remains, however, alone unconnected. On 6 April Husserl was suspended from the University of Freiburg by the Badische Ministry of Culture; the following week he was disallowed any university activities. Yet his colleague Heidegger was elected Rector of the university on 21â€”22 April, and joined the Nazi Party. By contrast, in July Husserl resigned from the *Deutsche Akademie. Die Krisis Belgrade* The apolitical Husserl before had specifically avoided such historical discussions, pointedly preferring to go directly to an investigation of consciousness. Merleau-Ponty and others question whether Husserl here does not undercut his own position, in that Husserl had attacked in principle historicism , while specifically designing his phenomenology to be rigorous enough to transcend the limits of history. Does the life world contextualize and thus compromise the gaze of the pure ego, or does the phenomenological method nonetheless raise the ego up transcendent? Since his university retirement Husserl had "worked at a

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In an example Husserl explains this in the following way: In other words, you can have a proper presentation of an object if it is actually present, and an improper or symbolic as he also calls it if you only can indicate that object through signs, symbols, etc. While often simplistically summarised as "aboutness" or the relationship between mental acts and the external world, Brentano defined it as the main characteristic of mental phenomena, by which they could be distinguished from physical phenomena. Every mental phenomenon, every psychological act, has a content, is directed at an object the intentional object. Every belief, desire, etc. Brentano used the expression "intentional inexistence" to indicate the status of the objects of thought in the mind. The property of being intentional, of having an intentional object, was the key feature to distinguish mental phenomena and physical phenomena, because physical phenomena lack intentionality altogether. Knowledge of essences would only be possible by "bracketing" all assumptions about the existence of an external world. These new concepts prompted the publication of the *Ideen* *Ideas* in 1913, in which they were at first incorporated, and a plan for a second edition of the *Logische Untersuchungen*. From the *Ideen* onward, Husserl concentrated on the ideal, essential structures of consciousness. The metaphysical problem of establishing the reality of what we perceive, as distinct from the perceiving subject, was of little interest to Husserl in spite of his being a transcendental idealist. Husserl proposed that the world of objects—and of ways in which we direct ourselves toward and perceive those objects—is normally conceived of in what he called the "natural standpoint", which is characterized by a belief that objects exist distinct from the perceiving subject and exhibit properties that we see as emanating from them. Husserl proposed a radical new phenomenological way of looking at objects by examining how we, in our many ways of being intentionally directed toward them, actually "constitute" them to be distinguished from materially creating objects or objects merely being figments of the imagination; in the Phenomenological standpoint, the object ceases to be something simply "external" and ceases to be seen as providing indicators about what it is, and becomes a grouping of perceptual and functional aspects that imply one another under the idea of a particular object or "type". In order to better understand the world of appearances and objects, phenomenology attempts to identify the invariant features of how objects are perceived and pushes attributions of reality into their role as an attribution about the things we perceive or an assumption underlying how we perceive objects. Husserl tries new methods of bringing his readers to understand the importance of phenomenology to scientific inquiry and specifically to psychology and what it means to "bracket" the natural attitude. In it, Husserl for the first time attempts a historical overview of the development of Western philosophy and science, emphasizing the challenges presented by their increasingly one-sidedly empirical and naturalistic orientation. In the former, sense-perception in correspondence with the material realm constitutes the known reality, and understanding is premised on the accuracy of the perception

and the objective knowability of what is called the "real world". He identified several different kinds of names. For example, there are names that have the role of properties that uniquely identify an object. Each of these names expresses a meaning and designates the same object. There are names which have no meaning, but have the role of designating an object: Finally, there are names which designate a variety of objects. These are called "universal names"; their meaning is a "concept" and refers to a series of objects the extension of the concept. The way we know sensible objects is called "sensible intuition". Husserl also identifies a series of "formal words" which are necessary to form sentences and have no sensible correlates. Examples of formal words are "a", "the", "more than", "over", "under", "two", "group", and so on. Every sentence must contain formal words to designate what Husserl calls "formal categories". There are two kinds of categories: Meaning categories relate judgments; they include forms of conjunction, disjunction, forms of plural, among others. Formal-ontological categories relate objects and include notions such as set, cardinal number, ordinal number, part and whole, relation, and so on. The way we know these categories is through a faculty of understanding called "categorical intuition". Through sensible intuition our consciousness constitutes what Husserl calls a "situation of affairs" *Sachlage*. It is a passive constitution where objects themselves are presented to us. To this situation of affairs, through categorical intuition, we are able to constitute a "state of affairs" *Sachverhalt*. One situation of affairs through objective acts of consciousness acts of constituting categorially can serve as the basis for constituting multiple states of affairs. For example, suppose a and b are two sensible objects in a certain situation of affairs. For Husserl a sentence has a proposition or judgment as its meaning, and refers to a state of affairs which has a situation of affairs as a reference base. Philosophy of logic and mathematics[ edit ] Husserl believed that truth-in-itself has as ontological correlate being-in-itself, just as meaning categories have formal-ontological categories as correlates. Logic is a formal theory of judgment, that studies the formal a priori relations among judgments using meaning categories. Mathematics, on the other hand, is formal ontology; it studies all the possible forms of being of objects.

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### Chapter 7 : Edmund Husserl : definition of Edmund Husserl and synonyms of Edmund Husserl (English)

section "Freges Versuch" from *Husserls Philosophie der Arithmetik* (pp. ). Garrison, James W. "Husserl, Galileo and the Processes of Idealization".

In lieu of an abstract, here is a brief excerpt of the content: Introduction Setting out to understand Frege, the scholar confronts a roadblock at the outset: We just have little to go on. Much of the unpublished work and correspondence is lost, probably forever. The people he studied with and those he spent daily time with are little known to historians of philosophy and logic. To be sure, this makes it hard to answer broad questions like: Say we encounter a sentence that may be read as alluding to a scientific dispute. Should it be read that way? Is it reasonable to think Frege would be familiar with the issue? Deep or superficial familiarity? Would he expect his readers to catch the allusion? Can he be expected to anticipate certain objections? Can people he knows be expected to press those objections? Hermann Schaeffer cared about mathematics education but made no contributions to mathematics as such. Later, Frege could talk to Otto Liebmann and Johannes Thomae – a productive philosopher and mathematician respectively, both of them respectably good. I have the impression that it is generally not appreciated what a profound, versatile, and charismatic thinker Abbe was. I hope a side benefit will be a sense of what a compelling person Abbe was to the people around him, of his warmth and humanness as well as the depth and energy he brought to his surroundings. In a contextual vacuum, these may seem to be random and disconnected asides. A First Glimpse 2. Basic Facts Ernst Abbe was born in into the family of a foreman in a textile mill. You are not currently authenticated. View freely available titles:

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## Chapter 8 : Edmund Husserl - Wikipedia

*The topic of the paper is the public reception of Gottlob Frege's (*Begriffsschrift*) after its publication in According to a widespread conception, the reception of the book was "unfavorable" and even "tragic."*

G Gabriel and W Kienzler eds. A Kenny, Frege London, An introduction to the founder of modern analytic philosophy Oxford, U Kleemeier, Gottlob Frege: Kontext-Prinzip und Ontologie Freiburg, E D Klemke ed. M D Resnik, Frege and the philosophy of mathematics Ithaca, H D Sluga, Gottlob Frege: The Arguments of the Philosophers Boston, Mass. Past Masters Oxford, T Aho, Frege and his groups, Hist. Logic 19 3 , I Angelelli, Frege and abstraction, Philosophy of science: History of science, Salzburg, , Philos. Frege critique de Cantor et de Dedekind, Rev. R Born, Frege, in Philosophy of science, logic and mathematics in the twentieth century London, , Logic 16 2 , Logic 5 1 , M Dummett, Frege on functions, Philos. Review 65 , D Follesdal, Husserl and Frege: B S Hawkins, Jr. R G Heck Jr. Symbolic Logic 58 , T Heblack, Wer war Leo Sachse? F Hovens, Lotze and Frege: Logic 18 1 , Historisch-philosophische Voraussetzungen und logisch-mathematische Grundlagen, in Frege conference, , Schwerin, Berlin, , Review 62 , V Peckhaus, Formalistische Taschenspielertricks? R Schmit, Gebrauchssprache und Logik: Eine philosophiehistorische Notiz zu Frege und Lotze, Hist. Logic 11 1 , Logic 8 1 , Logic 22 2 , Logic 2 , C Thiel, From Leibniz to Frege: Logic 18 4 ,

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## Chapter 9 : Bibliography of Analytic Philosophy and its Historiography - Oxford Handbooks

*Review of E. G. Husserl, Philosophie der Arithmetik I [Philosophy of Arithmetic I] In the introduction, the author decides to take a preliminary look at.*

This is a preprint version of the paper that appeared in definitive form in *The Monist*, July, vol. The published version should be consulted for all citations. Those who have examined the issues closely, however, have often risen to its defense. Husserl was in quite respectable company there. In fact, Frege himself is often said to have espoused theory of abstraction. Husserl clearly describes the theory of abstraction he had come to advocate in Chapter 4 of the *Philosophy of Arithmetic* where he defines number abstraction as a procedure by which, while actually engaged in the counting process, the counter "abstracts from" the particular properties of the individual members of the multiplicity, or set of items being counted, the particular way in which they are given, and any relations obtaining among them, only regarding the set as being composed of distinct featureless items to be counted pp. Anticipating the objection that in so doing the items themselves and any relations obtaining between them would naturally disappear p. For instance, Husserl marked and underlined the passage in which Cantor wrote: By the power of cardinal number of a set  $M$ . I understand the general concept or species concept universal which one obtains when one abstracts from the set both the nature of its elements as well as all relationships which the elements have either between themselves or to other things, in particular to the order that may prevail between the elements, and only reflects on that which is common with all sets which are equivalent with  $M$ . We attend less to a property, and it disappears. By thus making one characteristic mark after another disappear, we obtain more and more abstract concepts" Frege, Then Frege went on to provide this caricature of the procedure Husserl had advocated: We do not attend to their colour, and they become colourless --but they still sit side by side. We no longer attend to the place and they cease to occupy one --but they continue presumably to be separate. We have thus perhaps obtained from each of them a general concept of cat. By continued application of this procedure, each object is transformed into a more and more bloodless phantom. One might disregard the properties which distinguish a white cat and a black cat, but the white cat would still remain white, and the black one black whether or not one thought about their colors, or made any inference from their difference in this regard. The cats would not become colorless. They would remain precisely as before. However, ten years later, he apparently could no longer imagine that abstraction did not actually change objects because in his review of the *Philosophy of Arithmetic* he maintained that it must surely be assumed that the process of abstraction effects some change in the objects and that they become different from the original objects which are either transformed or actually created by the abstraction process Frege, Nonetheless, in spite of the force of the charges he directed against Husserl in his review, Frege was honest enough to admit that Husserl himself did not hold that the mind creates new objects or changes old ones, and actually acknowledged that Husserl "disputes this in the most vehement terms p. A posthumously published draft of this review Frege, is more revealing and considerably less tame than the one actually published. There Frege likens mathematicians who like Cantor talk of abstraction to "negroes from the heart of Africa. In the spirit of the cat example in his review of Husserl, Frege complains that mathematicians like Cantor find a whole host of things in mice which are unworthy to form a part of the number. Indeed when you get down to it everything in the mice is out of place: So one abstracts from the nature of the mice. Husserl would first analyze the concept of multiplicity and use it in determining definite numbers and the generic concept of number presupposing them. He would go from the general to the particular and back again Frege, Husserl had even argued that the relationship between the number and the generic concept of what is numbered was in certain respects the opposite of what Frege supposed Husserl, In one of its concluding sections he wrote of extensions that: I attach no decisive importance even to bringing in the extensions of concepts at all. So the Frege and Husserl exchange on the relationship between numbers and extensions of concepts described in the first two paragraphs of this section was actually an echo of the earlier

exchange Frege and Cantor had had on the same subject. The extensions he had introduced, he now explained to his readers had made for "far greater flexibility" and "also have a great fundamental importance" p. As far as he could see, he wrote, his basic law about extensions Basic Law V or Principle V was the only place in which a dispute could arise. This would be the place where the decision would have to be made p. Then, a year later Frege came out fighting for extensions in his review of Husserl. Nonetheless, in spite of the sureness regarding extensions Frege expressed in that review, upon receiving the news of the paradox of the class of all classes that are not members of themselves in a letter from Russell in , Frege immediately wrote back that it was the basic law about extensions that was at fault, and that its collapse seemed to undermine the foundations of arithmetic he had proposed for arithmetic. I should have gladly dispensed with this foundation if I had known of any substitute for it. And even now I do not see how arithmetic can be scientifically established Solatium miseris socios habuisse malorum Everybody who in his proofs has made use of extensions of concepts, classes, sets, is in the same position as I. Then he set out to track down the origin of the contradiction p. There was nothing, he decided, to stop him from transforming an equality holding between two concepts into an equality of extensions in conformity with the first part of his law, but from the fact that concepts are equal in extension we cannot infer that whatever falls under one falls under the other. The extension may fall under only one of the two concepts whose extension it is. This can in no way be avoided and so the second part of the law fails. This, however, really abolishes the extension of the concept, he concluded p. Arithmetic, however, was a branch of logic for which no ground of proof need be drawn from experience or from intuition ex. In so doing, Frege complained, Husserl had transposed everything into the subjective mode Frege , We can make properties disappear one after another, and actually essentially change objects. A close look at the context, however, usually makes the intended reference clear, and several passages from the Philosophy of Arithmetic clearly indicate that Husserl was not guilty of confusing logic and psychology in the sense of obliterating the differences between mental processes and objects. According to the order of succession in which the whole is formed finally, only D is given as a sensory Vorstellung. The remaining contents are, however, merely given as imaginary Vorstellungen altered in time and content. If we go in the opposite direction, from D to A, the phenomenon is different. The logical meaning nullifies all these differences While we make the Vorstellung of the set, we pay no attention to the fact that, in the grouping process, changes have occurred in the content. It is our intention to hold them together and unify them and so the logical content of the Vorstellung is not, for example, some D, then C just before, B even earlier, until we get to the most radically changed, A, but rather: A, B, C, D. Husserl , This passage shows that Husserl did not reduce everything to subjectivity. He considered the theory that mental acts can engender relations to be untenable. In Philosophy of Arithmetic he wrote: Our mental activity does not make relations; they are simply there, and when interest is directed toward them they are noticed just like any other content. Genuinely creative acts that would produce any new content. Husserl , 42 Husserl even plainly wrote: In the same passage of the Mannigfaltigkeitslehre in which Cantor explicitly rejects the belief that "the source of knowledge and certainty is located in the senses or in the so-called form of pure intuition of the world of Vorstellungen," he goes to write that "certain knowledge. Husserl was finally "deeply dissatisfied" with the analyses of the Philosophy of Arithmetic. Conclusion In the Basic Laws of Arithmetic, Frege accorded extensions "great fundamental importance" p. A year later, he published an angry attack on the ideas of two Halle mathematicians who had criticized his use of extensions. The review was also partly a reflection of certain personal psychological problems Frege had regarding extensions and of his inability to accept criticism gracefully. The logical empiricist Bertrand Russell did likewise. Frege, "Rezension von E. Other articles in the Collected Papers are cited in the text as Frege Miller, Numbers in Presence and Absence, M. Nijhoff, The Hague, ; D. Bell, Husserl, Routledge, London, Church, "Review of M. Cantor, Gesammelte Abhandlungen, E. Russell, Principles of Mathematics, Norton, London, , pp. Die Abstraktion," Studies on Frege, Vol. Nijhoff, The Hague, ; Miller, pp. Nijhoff, The Hague, , pp. Kusch, Language as Calculus vs. Language as Universal Medium, Kluwer, Dordrecht, , pp. Nijhoff, The Hague, , p. Husserl, "Skizze eines Lebensbildes von E.

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Husserl" Husserl Studies 5, , p. Dummett discusses problems with extensionality at length in Frege, Philosophy of Mathematics cited above. He discusses his views on presentation at length in "The Nature of Acquaintance", Logic and Knowledge, pp.