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HUSSERL and STEIN

Edited by
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Introduction
Husserl, Stein, and Phenomenology
William Sweet and Richard Feist

Introduction

The philosophy of Edmund Husserl is difficult to categorise. Although laced with idealist themes, Husserl's work presents a 'phenomenology' that resists reduction to any standard idealist view. In fact, Husserl wove a realist thread throughout the fabric of his writings – a thread that reflects his education in mathematics and his subsequent interaction with some of the seminal figures of modern philosophy of mathematics (such as Georg Cantor and Kurt Gödel). And while Husserl's thought has often been regarded as very different from that characteristic of Anglo-American philosophy, there are nevertheless important links between it and the twentieth-century 'analytic' tradition.

A similar comment might be made concerning the philosophy of Edith Stein. Although a student of Husserl, his assistant, and an interlocutor, Stein resisted drawing on mathematics and the sciences that were central to Husserl's understanding of phenomenology. She was faithful to the phenomenological project, yet brought it into closer contact with classical thought and, after a fashion, back to its roots in scholastic philosophy. And while Stein came to develop phenomenology in a way quite different from her contemporaries, the result was to reinforce its realist character. Aside from all this, Stein is widely recognised as one of the leading feminist writers of the early twentieth century, and her work has had a particularly strong influence within the Catholic tradition on how one should understand the role and 'genius' of woman.¹

There are, clearly, important relations between the work of Husserl and Stein. Husserl obviously influenced Stein. But he also referred to, and drew on, her writings in his efforts both to ground knowledge of the person and to extend phenomenological insights to social and political issues. And yet, while they were equally committed to approaching philosophical questions through a phenomenological method, much distinguishes the two. (To fully appreciate the continuity in their philosophical views as well as the differences between them, one might also know the intellectual context of their work – e.g., the influence of Franz Brentano, William James, and Cantor, for Husserl, and these and others, such as St Thomas Aquinas and St John of the Cross, for Stein.)

Much needs to be said, then, to understand each's distinctive contribution to philosophy, and to phenomenology in particular.

The aim of the present volume is twofold: to help readers to better understand some of the insights of two very different representatives of the phenomenological tradition, and to suggest where the work of these authors might lead. Yet it is also the case that, in providing readers with some background to the thought of Husserl and Stein, these essays may enable us see connections between phenomenology and the classical and analytic approaches to philosophy.

Of course, a volume of essays on Husserl and Stein will be – almost by the very nature of its subject matter – incomplete. Both thinkers contributed to a wide range of topics. Yet this openness is a virtue, since it allows the authors of the essays in this collection to proceed in different directions, determined only by where each author sees the contribution of the thinker concerned. Thus, some focus on questions in the philosophy of mathematics or philosophy of physics; some

discuss philosophical psychology and the role of intention, or intuition, or empathy; some examine issues in social and political theory. Still, many of the studies here – particularly (and understandably) those on Stein – have something to say on questions which concern both thinkers, and allow us to see the relevance of Husserl and Stein to contemporary philosophical thought.

Husserl

Edmund Husserl (1859-1938) is often called the ‘father of phenomenology.’ This may be misleading, since he was by no means the first to use the term. Prior to Husserl, many philosophers and scientists claimed to be doing ‘phenomenology,’ by which they meant describing and analyzing *appearances* without providing a causal explanation of these appearances.

What was particularly distinctive about Husserl’s work was his approach. Husserl declared that philosophy must return ‘to the things themselves.’ But this return must be within the guidelines of the methodology Husserl called the ‘phenomenological reduction’ or *epoché*. One lives normally in the ‘natural attitude,’ which holds that the world exists outside and independent of consciousness. The phenomenological reduction, however, brackets this thesis, declaring it unusable. Consciousness must be examined on its own terms. It is its own field of inquiry. Thus, the *epoché* is a shift, from the natural attitude to the phenomenological attitude.

Despite certain common themes that appear in his writings, it is difficult to provide a concise outline of Husserl’s philosophy; he changed his mind on several issues during the course of his life. Nevertheless, we can get a broad sense of Husserl’s philosophical work if we have some understanding of his intellectual career.

Husserl lived during a time of intense developments in the so-called hard sciences; mathematics and physics achieved unprecedented heights of content and depths of rigour.² He began his academic life in the area of mathematics. From 1878 to 1881, at the prestigious University of Berlin, he studied and worked with the mathematician Karl Weierstrass. Soon he departed for the University of Vienna, where in 1883 he completed his doctoral thesis in mathematics. As was then common, Husserl had to confirm his doctoral work by defending a ‘thesis of habilitation’; *Über den Begriff der Zahl: Psychologische Analysen* ["On the Concept of Number"] was written at the beginning of his time (1886-1901) at the University of Halle. Georg Cantor, the founder of transfinite mathematics and one of the most important mathematicians of the nineteenth century, sat on the jury that examined Husserl’s habilitation thesis, and the two struck up a lasting friendship. Husserl’s first major work, *Philosophie der Mathematik* [*The Philosophy of Arithmetic*], which contains the text of his *Habilitationsschrift*, appeared in 1891, and it clearly shows Cantor’s influence.³

Husserl had also attended lectures by Franz Brentano (1838-1917) from 1884 to 1886, while in Vienna. In perhaps his best-known work, *Psychologie vom empirischen Standpunkt* (1874) [*Psychology from an Empirical Standpoint*], Brentano attempted to develop a systematic psychology that was scientific without, at the same time, excluding the possibility of "inner states" or metaphysics. Brentano’s lectures were largely responsible for ‘shifting’ Husserl’s interests from the philosophy of mathematics to what became phenomenology.

In "Brentano and Intentionality," Rolf George discusses the nature of Brentano’s understanding of philosophy and how the concept of ‘intentionality’ was to fit into it. Brentano’s work provided a starting point from which Husserl argued that the basic structure of human consciousness, revealed after the phenomenological reduction, is ‘intentional.’ (The term ‘intentional,’ as it applies to mental states or beliefs, does not, however, mean the same as

‘intentional’ in contemporary speech. It refers, rather, to the act of directing one’s attention to something, and holds that, when a person does so, this has "immanent objectivity" – even though no explicit reference is being made to anything existing outside of consciousness.⁴)

A particular concern of Husserl was the appearance of consciousness; he wanted to articulate structures of conscious experience. This, of course, puts Husserl in line with the Kantian tradition that concentrated on the explication of the *a priori* structures of human experience. However, Husserl’s reduction demands that the structures themselves be ‘brought to intuition.’ (This is also an influence of Brentano.) These structures were neither to be postulated nor indirectly argued for as the necessary conditions of a pre-existing branch of knowledge, such as science. We have here the beginnings of the notion of intuition in Husserl’s thought.

For Husserl, then, all knowledge must be rooted in intuition. Indeed, ‘intuition’ is the life-blood of Husserl’s approach. But ‘intuition’ is also one of the most ambiguous terms in epistemology. At this early stage in his work, Husserl’s analysis of intuition focused upon the mental act itself. In "Altered States: American Empiricism, Austrian Rationalism and Universal Intuition," Anoop Gupta delves into the issue of intuition, and considers it in the thought of James, Husserl, and Gödel. Husserl was influenced by the work of James and, in turn, influenced the thinking of Gödel – and Gupta’s paper brings out these respective influences at some length. But Gupta also goes on to consider the role of intuition within naturalized epistemology.

From this analysis of intuition, one could say that Husserl was an empiricist in the most radical and broad sense of that term – radical, in that *all* must be within the bounds of intuition; broad, in that the bounds of intuition extended beyond sense intuition. (For at least part of his career, Husserl held that the human mind had intuitions of non-empirical objects.)

Like philosophers such as Kant and Leibniz, Husserl had a firm grasp of the ‘cutting edge’ of scientific knowledge. He did not admire from the sidelines, and he knew many of the finest mathematical and scientific minds of the time. In addition to his contacts with Brentano and Cantor, Husserl corresponded with the Jena mathematician, Gottlob Frege (1848-1925), who is often regarded as the founder of analytic philosophy – though the depth and content of Frege’s influence on Husserl has been the subject of some debate. Nevertheless, while impressed by the achievements of the hard sciences, Husserl himself did not contribute anything substantial to them.

From 1901 until 1916, Husserl taught as *ausserordentlicher Professor* at the University of Göttingen, then one of the greatest mathematical research institutes in the world. These years were witness to several major works, most notably *Logische Untersuchungen* [*Logical Investigations*] (1900-1901)⁵ and the first volume of *Ideen* [*Ideas*] (1913).

Husserl regarded *Logical Investigations* as the "breakthrough to phenomenology." Here he invoked the division of labour between the mathematician and the philosopher. The former presents the foundational concepts of mathematics and embeds them within frameworks that are ultimately applied to empirical domains. The latter articulates the fundamental experiences that are the foundations of the concepts themselves. The analysis of intuition now turns from the mental act to the object of this act; one could say that here intuition is more in the Platonic vein of grasping eternal essences. (This is, however, a matter of debate since *Logical Investigations* is a long and complex work, containing considerable tensions between Platonic and Kantian approaches to essences. Depending on one’s particular selection of quotations, either side can be argued for – and often has been.)

Given the development in his analysis, it is not surprising that Husserl’s view of intuition remains controversial to this day. In "Are There Really Appearances? Dennett and Husserl on Seemings and Presence," David Thompson investigates the supposed clash between Husserl and

Dennett regarding the notion of intuition. But, as Thompson points out, when the two thinkers are read in a constructivist manner, the clash disappears. Nonetheless, the key philosophical issue remains one of a constructive reconceptualization of the very ideas of mind, consciousness, and reality.

The controversial *Ideas* is where Husserl fully expounds his phenomenological method. It is also a work in which this method broadens and grounds a type of metaphysics. The *Ideas* is often regarded as Husserl's so-called "transcendental turn,"⁶ and it is on account of this that Husserl is sometimes referred to as a "transcendental idealist."

A difficulty which often plagues transcendental idealist systems is that of the nature of the relationship between the subject and the world. How can the subject constitute the world – which includes the subject – while that subject is also independent of the world? (Some of Husserl's own concerns about this were discussed later in his *Cartesian Meditations*[1931].⁷) In the third essay in the present volume, "The Sixth Meditation," Richard Holmes takes up just this question. He considers different solutions before offering his own, a solution which follows the ideas contained in quantum mechanics regarding the interpretation of the two-slit experiment involving light.

Since transcendental idealism is not a species but a genus, Husserl's transcendental idealism is difficult to categorise. As Husserl's work developed, one could say that the Kantian approach to essences eventually dominated. Yet he rejected the Kantian species by denouncing the *Ding-an-sich* and, in *Ideas*, Husserl's notion of intuition carries a strong constitutive flavour. Husserl, arguably, is closer to Fichte than Kant.

It is fair to say that both *Logical Investigations* and *Ideas* bear the strong influence of the type of mathematics that was being conducted in Göttingen by mathematicians such as Felix Klein and David Hilbert, the latter being one of the most important mathematicians of the twentieth century. The Göttingen milieu also exposed Husserl to the latest developments in physics, especially Einstein's special and general theories of relativity. Göttingen mathematicians rapidly absorbed Einstein's theories and mathematized their foundations, and Hermann Minkowski (1864-1909) translated the theory of relativity into the geometric form in which it is taught to this day. But one of the central figures among the Göttingen thinkers was the physicist Hermann Weyl (1885-1955).

In "Reductions and Relativity," Richard Feist explores the relationship between Husserl's phenomenological reduction and the work of Weyl. Weyl extended the geometric framework of General Relativity to include not only gravitation, but electro-magnetism. Most physicists – Einstein among them – admired Weyl's work, although they ultimately rejected it. (The tide has changed, however, and today Weyl's theory enjoys a renaissance.) Weyl claimed that Husserl's transcendental idealism influenced his own work in relativity. In essence, he grafted his extension of relativity onto the trunk of Husserl's transcendental idealism. Much to Husserl's delight, Weyl insisted that even the basic concepts of science must be grounded in intuition. Thus, phenomenology had broadened from the analysis of mathematics to physics, and ultimately to a metaphysical system including all knowledge.

Weyl was not the only major figure influenced by Husserl. Gödel claimed that Husserl's phenomenology was the means by which we should interpret the incompleteness theorems. And even Rudolph Carnap was indebted to Husserl's work. In "Carnap, Husserl and the Idea of Material Geometry," René Jagnow examines the nature of Husserl's influence on Carnap and the thorny issue of the status of the discipline we call geometry. Jagnow examines how one might avoid the problems that result from Carnap's appropriation of Husserl's thought by returning to Husserl's views themselves, and he develops a more coherent idea of a "material geometry."

During the Göttingen years, Husserl was increasingly recognized as one of Germany's most eminent philosophers, and he attracted a large number of disciples and students. Among them, we may include Max Scheler, Roman Ingarden, Alexandre Koyré – and, of course, Martin Heidegger and Edith Stein. Husserl's interest in consciousness and in the development of the phenomenological method in order to do philosophy had a significant impact on his contemporaries for two reasons. First, following Brentano, Husserl proposed to provide philosophical certainty, so that one could restore the traditional place of the human sciences and put them on as firm a footing as that of the natural sciences. But there was a second reason – and that is that Husserl's method was not narrowly academic; it touched on the living world and on features of philosophy that were essential to understanding human existence.

In 1916, Husserl was named *ordentlicher Professor* at the University of Freiburg. He taught until 1928, after which he was made Emeritus Professor (until stripped of this title by the German government in 1935). In his Freiburg years, Husserl deepened the insights of his previous work rather than developed new ideas. Still, themes concerning history and society came to play a larger role in Husserl's thought than they had previously. For example, during this period, Husserl worked on a number of topics, such as the concept of empathy, which he discussed at length in the second book of *Ideen*⁸ [*Ideas*]. And in 1923-1924, Husserl prepared five papers on social and political thought, for the Japanese journal, *Kaizo*.⁹

Husserl's academic career began with concerns regarding the foundations of mathematics and science, but he always wished to situate these foundations within the broader context of a general philosophy. This general conception of philosophy mutated over the years, beginning with Husserl's attack on the radical specialization and isolation of disciplines from each other, to the notion of all disciplines having their roots in what he came to call the "lifeworld." But it also became the seedbed for the philosophies of a number of followers, whose work came to dominate mid- and late-twentieth century European thought. Among these followers, one of the most fascinating was Edith Stein.

Stein

Born in Breslau, Germany (now Wrocław, Poland) in 1891, Edith Stein was the youngest of eleven children of a devout Jewish family. While studying at the University of Breslau, she heard of Husserl's groundbreaking philosophical work and, in 1913, decided to attend his lectures at Göttingen. What specifically attracted the young Edith Stein to Husserl was his philosophical approach and method, evidenced in his *Logical Investigations*, and particularly his work on consciousness.

Husserl's interest in the philosophical issues involved in acts – and particularly the intentional object or phenomenon at which an act aims (i.e., the contents of consciousness) – became Stein's as well. And the topic of empathy – a topic that attracted the attention of Husserl, Max Scheler, and others – became the subject of Stein's doctoral dissertation, *Das Einfühlungsproblem in seiner historischen Entwicklung und in phänomenologischer Betrachtung*, published as *Zum Problem der Einfühlung* [*On the Problem of Empathy*]. In general, empathy was an important issue for phenomenologists, since it is relevant to how we are able to know anything at all about the 'inner life' of other persons. If 'lived experience' (*Erlebnis*) is central to philosophical analysis and is its starting point, we must not be interested simply in understanding things, but in understanding how other people see things and each other.

The specific 'problem of empathy' Stein considered is 'How can one share certain experiences with others, not just the same*kind* of experience, but the actual experience itself?' Stein's aim was to describe empathy from the phenomenological standpoint – i.e., as a "pure transcendental phenomenon."¹⁰ She held that "empathy is a *sui generis* phenomenon affording us the direct experience, and thus understanding, of others' emotional states."¹¹ But she also asked whether analyzing empathy can tell us anything about ourselves.

In "Other Bodies and Other Minds in Edith Stein: or, How to Talk about Empathy," Judy Miles takes up Stein's account of empathy which, Miles argues, is properly understood as 'projection.' Miles argues that, on Stein's view, one can "comprehend empathetically" – transfer oneself into the feeling of another – and have the same primordial feeling of (for example) joy that another has. Miles then defends this view against some recent feminist critics who object that the notion of 'projection' is mistaken and male-centred, and adds that Stein's account of empathy allows us to solve problems about 'the Other' that her critics' views cannot.

For Stein, empathy not only functions as "an aid" to understanding one's own emotional life,¹² but is "the condition of possible knowledge of the existing outer world."¹³ But our knowledge of ourselves and of others is not only of beings with bodies, but of 'living' beings. Our discussion of the body – Stein would say – must take account of it both as physical and as living.

Stein's dissertation on empathy was, in several respects, a continuation of Husserl's work. She followed Husserl in method, and notions found in her work are also to be found in the second volume of Husserl's *Ideas* – e.g., Husserl's understanding of the body as "the carrier of the point of orientation," the "zero point."¹⁴ Yet Stein's dissertation was clearly original. How far it differs from Husserl's view as presented in volume two of *Ideas* is hard to say, since it was after completing her dissertation that she was asked by Husserl to edit and give form to the notes that formed the basis of that book. But it is certainly different from Husserl's later writings on empathy in the *Cartesian Meditations* (1931/15), in that Stein focuses on the description of empathy rather than (as in the *Cartesian Meditations*) on the possibility of the other with whom one might empathise.¹⁶ Stein's analysis of empathy also goes beyond that of her contemporaries. To Max Scheler's fear that, in empathy, one risks losing – and frequently loses – the awareness of one's ego, Stein replies that genuine instances of empathy involve no such loss. And to Heidegger's later argument that empathy cannot be foundational,¹⁷ Stein would undoubtedly refuse to concede.

Ernest McCullough, in "Edith Stein and Inter-Subjectivity," focuses on several aspects of the relation of Husserl to Stein. He presents some of the issues in Husserl's thought to which Husserl's students – Ingarden, Heidegger, and Stein – objected, particularly concerning the interrelation of metaphysics, consciousness, and empathy. McCullough argues that, despite the relatively minor and mitigated role for empathy in Husserl's early work, Husserl came to depend on it in his later work as a means of avoiding subjective idealism. (McCullough adds that, although there are similar subjectivist tendencies in the analysis of empathy in Stein's early work, her focus on intersubjectivity distinguishes her views from those of Husserl.) McCullough also insists that Stein understands empathy as 'projection' in a secondary sense – and that it is better to see empathy as an ability 'to identify oneself mentally with another' than to project one's personality into another. Finally, McCullough notes that, against Husserl, Stein came to argue (by the 1920s) for a more integrated account of soul and body and a fuller account of community and (by the 1930s) for a more classical metaphysics – leaving epistemology and phenomenology as secondary and, at best, a part of metaphysics.

There is, perhaps, a bitter irony in empathy being the theme of Stein's dissertation. While Stein, along with Husserl and others, discussed and debated the nature and character of empathy,

the first world war was waging. Its coarse brutality and the annihilation of individuals in battles where millions of human beings died were signs of an absolute inability of individuals to experience empathy or to understand ‘the other.’

Stein’s dissertation, defended in 1916, was a success. It received the grade *summa cum laude*, and was published in 1917 in Halle.¹⁸ Husserl is reputed to have said that Stein was the best doctoral student he had had¹⁹ – which is remarkable given that Heidegger was also a student of Husserl’s – and in 1916 he chose Stein to be his assistant (*Privatassistentin*) when he was appointed Professor of Philosophy at the University of Freiburg. But working with Husserl was difficult and, following the war, Stein gave up her post. Yet she remained productive in academic work, completing manuscripts on the philosophy of psychology,²⁰ on community, on the state, and writing a substantial amount of material that was later incorporated into an introduction to philosophy.²¹

These studies were closely related to one another – though there is a shift from an individual-focused theme (i.e., a person’s empathy) to broader, social topics. Nor was this shift idiosyncratic; this increasing interest in the social is also to be found in the work of many of Husserl’s students and colleagues, and in the master (Husserl) himself (e.g., in the *Kaizo* articles).

The first two of these texts built on her doctoral dissertation; they were published together as "Beiträge zur philosophischen Begründung der Psychologie und der Geisteswissenschaften" [*Contributions to the Philosophical Foundations of Psychology and the Human Sciences*].²² Starting, in Part I, with work on ‘psychical causality’ (written in 1919), Stein continues, in Part II, with a text on *Individuum und Gemeinschaft* ["Individual and Community"], written in 1920, where she sets out to analyze "how human possibilities are actualized at the individual, community, and political levels."²³ There is an emphasis on freedom here, but this is not the "wild, lawless freedom" of individualism. A central issue underlying these studies is how understanding the individual requires referring to what is beyond the individual. On Stein’s view, the community is not only "organic," but "comes first." Still, while Stein emphasizes the role of the local community, her ethics avoids any cultural relativism, and is consistent with a universal ethics. As Marianne Sawicki points out, since the community is "that dimension of action which affirms one’s own dependence on a prior subjectivity," a communal ethics is universal, since it applies to all subjects in terms of the sharability of experience."²⁴

Stein’s 1921 essay, *Eine Untersuchung über den Staat* ("An Investigation Concerning the State"),²⁵ develops the themes of "Individual and Community" and, specifically, that of human beings as fundamentally social. Stein nevertheless distinguishes between the community and the state, insisting that the state is *not* a community. In a community, members of the community are subject to each other; the state simply is the context in which agents act. The state is the "intention" of certain acts; it is not an agent and does not itself act. While it may be an instrument of freedom, it cannot be the source of freedom.²⁶

Similar issues are discussed, directly and indirectly, in Husserl’s *Kaizo* essays. In "The Humane Community: Husserl versus Stein," Marianne Sawicki focuses on these essays, as illustrating the debate within the Husserl circle and, particularly, with Stein. Starting with a brief account of Stein’s text on "Individual and Community," Sawicki argues that Stein’s emphasis on the community as a product of members making themselves subject to one another, is replaced by Husserl’s account of ‘willing in freedom’ – which is supposed to provide a bridge from the individual to the community. But while Husserl drew on and attempted to develop Stein’s insights, he failed to adjust his own general phenomenological views sufficiently to do Stein – or the topics

themselves – justice. For example, Husserl (unlike Stein) insisted that there was an analogy between the community and the individual personality.

Stein had undoubtedly hoped that one of these studies written just after her doctoral dissertation, might serve as a thesis for the Habilitation – the German qualification for a permanent university professorial position. But her application to register for the Habilitation was rejected. German universities did not accept women for such positions, and Husserl's recommendation, though positive, was rather lukewarm.²⁷

Stein struggled with questions concerning her future. In the summer of 1921, she visited a friend – another of Husserl's students – Hedwig Conrad-Martius, who had a summer home in Bergzabern and who had, with her husband, converted to Christianity. One evening, Stein picked up a copy of the autobiography of St. Teresa of Avila. She read the book in a single night and, upon finishing it (as she later wrote) she declared, "This is the truth!"²⁸ On New Year's Day – January 1, 1922 – Stein was baptized a Catholic, taking 'Teresa' as her baptismal name.

Stein's wish, following her conversion and baptism, was to enter a Carmelite convent – but her spiritual advisors recommended against it. Thwarted from a career as a professor, and with the contemplative life out of the question for the time being, Stein taught German and history at the Dominican Sisters' school and teacher-training college at St Magdalena's Convent (1922-1931) in the town of Speyer. Here, she read a number of Catholic authors – spiritual thinkers, but also St Thomas Aquinas who was acknowledged as the pre-eminent philosopher of the Catholic tradition. And Stein continued writing – now, seeking to build bridges between the insights of the major philosophers of her adopted faith and those of phenomenology.

Given her background and her work, it is no surprise that Stein was often called on to address the role of women in education and in society at large. Among the topics she lectured on were "The Ethos of Women's Professions," "Fundamental Principles of Women's Education," "Problems of Women's Education," "The Church, Woman and Youth," and "The Significance of Woman's Value in National Life."²⁹ Some have seen in these essays the roots of a strong feminism; at the very least, they served both as an attempt to bring women into the discussion of social issues and as a way of reconceiving woman within the metaphysical understanding of human nature. And Stein's essays have had a significant influence on recent feminist thought.³⁰

Stein was also consistently interested in bringing phenomenology and Catholic thought into closer contact and exchange. Her 1929 essay in a Festschrift for Husserl on his 70th birthday – "Husserls Phänomenologie und die Philosophie des heiligen Thomas v. Aquino"³¹ – was initially written in the form of a dialogue (though it was revised at the insistence of Heidegger³²). And, by 1931, Stein had produced a typescript providing a more substantive comparison of the two thinkers – a study that was to be entitled *Potency and Act* (referring to the two central concepts of Thomistic thought) – where she took basic insights of Thomistic metaphysics and sought to relate them to central issues in contemporary philosophy.³³

In 1931, Stein left her position at Speyer in order to teach at the Deutsches Institut für Wissenschaftliche Pädagogik [German Institute for Scientific Pedagogy] in Münster (in 1932). But January 1933 brought with it the rise to power in Germany of the Nazi Party and Adolf Hitler. Though Stein had only just taken up her post, she was told in April that she could no longer teach at the Institute because of her Jewish origins. At this point, her spiritual advisors yielded to her long-standing wish to live in a contemplative community. On October 14, at the age of 42, Edith Stein formally entered the Carmelite convent at Lidenthal-Cologne, taking the religious name, Teresia, Benedicta a Cruce.

Stein's life as a Carmelite did not put an end to her intellectual work. At the request of the Provincial of her Order, Stein returned to her study on *Potency and Act*. Completed in 1936, and ultimately titled *Endliches und ewiges Sein [Finite and Eternal Being]*,³⁴ it sought to bring closer together the philosophy of St Thomas Aquinas and ideas found in Husserl, Adolf Reinach, Alexander Pfänder, Scheler, Conrad-Martius, and Heidegger.

Finite and Eternal Being is primarily a philosophical work, and it has, as its aim, a knowledge of the "meaning of being."³⁵ Using a careful phenomenological analysis, Stein leads the reader through a number of ideas from classical to mediaeval and modern philosophical thought. We also see a move from epistemology as primary, to epistemology as an element within metaphysics. Key in Stein's account is intersubjectivity. Stein's philosophy of the body as well as her views on knowledge through – not simply by – experience, provide the basis for access to the transcendent; finite human being cannot (it is clear) be completely comprehended by itself, and we are led, not just to other beings like ourselves, but to a Transcendent, Infinite, Eternal Other. But the publication of *Finite and Eternal Being* was stopped at the last minute under a law that restricted publication by Jews and those of Jewish origin, and it appeared only posthumously in 1950.

Chantal Beauvais ("Edith Stein and Modern Philosophy") finds in Stein's *Finite and Eternal Being* a third way between two contrasting approaches to subjectivity – approaches which Paul Ricoeur describes as characteristic of a 'weak' modernity, on the one hand, and a 'strong' modernity, on the other. Stein's objective in *Finite and Eternal Being* was to understand the meaning of being, and one of her principal targets is Heidegger. While Stein has an interest in exploring her 'new' philosophical and theological resources, Beauvais maintains that Stein's concerns and approach are wholly consistent with her earlier work. Beauvais also notes that there is a certain mystical element present in *Finite and Eternal Being*; Stein writes that 'seeing' the totality of being will not satisfy reason, but experiencing its plenitude will, and that the domain of meaning is larger than the role or domain of comprehension. Some have responded that Stein's understanding of the 'terminus' of philosophical investigation is inconsistent with Husserl's project, but Beauvais holds that Stein believed that it was not.

During the last decade of her life, Stein wrote a number of essays and texts on more specifically religious and spiritual topics. Most, however, were not published during her lifetime. In these essays, we see repeatedly three important themes: an emphasis on the role of the body and bodily experience; an acknowledgement of the importance of suffering; and a recognition of her own direct participation in this suffering. Indeed, Stein's vocation can itself be seen as reflecting her philosophical views; religious life is, as it were, a practical act of empathy. With empathy, there is an entry into the passion or the emotional life of another (as a first stage). Then – for example, through contemplative prayer – there can be a becoming one with others (a second stage) that is consistent with *others* becoming present through oneself.

By late 1938, conditions had reached a point in Germany where attacks on Jews and those of Jewish origin could take place with impunity. For safety, on 31 December 1938, Stein was transferred to a convent at Echt, in the Netherlands. It was in Echt, in 1941, that Stein began what was to be her last book, a study of St John of the Cross: *Kreuzeswissenschaft [The Science of the Cross]*. While in the main a biography, the book is also a reflection on the Saint's mystical writings – and Stein saw the mystical philosophy of St John of the Cross as, in many respects, a culmination of the philosophical pursuit of knowledge. (It is noteworthy that one of the other great Catholic writers of the time – Jacques Maritain – also drew on St John of the Cross for the concluding sections of his study of the *Degrees of Knowledge*.³⁶ There, Maritain presents a scheme of the levels of knowledge, from the lowest to the highest, culminating in two chapters where he writes

of "St John of the Cross, Practitioner of Contemplation," who saw that contemplation of God is the highest form of knowledge.)

Despite its origins and purpose, *The Science of the Cross* may also be seen as a work of philosophy in the phenomenological tradition. It is a description and analysis of consciousness, and certain elements (e.g., Stein's account of the concept of 'the Night') show this well. But it is also a book in which Stein is able to articulate some of her own views – though she carefully distinguishes them from those of the Saint.³⁷ While it is not an academic work, neither did Stein intend it to be.

It is said that Stein was writing *The Science of the Cross* until 2 August 1942 – the day that she and her sister Rosa were arrested at the convent in Echt by the SS and taken to Amersfoort prison camp. The manuscript of the book was nevertheless virtually complete, and it serves, in many respects, as her own testament. Stein was transferred to the concentration camp at Auschwitz soon afterwards, and was killed there on 9 August.

It has been argued that Edith Stein's philosophical and spiritual development cannot be separated from one another. From her early studies on the problem of empathy, through her progressive interest in psychology, education, and personalism, to her later spiritual works, she showed the importance of not only understanding but experiencing suffering and self-sacrifice, and held that they could serve as a source of philosophical insight.

In this albeit unusual way, then, Stein returns 'phenomenology' to its origins in the work of Husserl's teacher, Franz Brentano. The focus in phenomenology on intentionality can be traced back to Brentano, who himself drew on the mediaeval notion of "intentional existence." And Brentano himself was not only a Catholic, but a priest – though he left the priesthood after nine years. Indeed, many of Husserl's students were led to Christianity and Catholicism through insights in his work that, in turn, had their inspiration in Brentano. One wonders whether it might be through Brentano that we may be able to understand better not only the work of Husserl and Stein, but the relation between the two.

Conclusion

The essays in this volume provide insights not only into the work of Edmund Husserl and Edith Stein, but into the nature and character of phenomenology in general. These enquiries into the contributions of Husserl and Stein also remind the reader of the importance of the origins of the phenomenological tradition and how that approach was employed by Husserl, his colleagues, and his students, on several fronts. To fully understand the contribution and significance of Husserl and Stein, however, we must be attentive to history – to the intellectual context of phenomenology and to ways in which they engaged in philosophical discussion. We must also be attentive to the influences on, and concerns of, Husserl and Stein themselves – what led them to embrace the theories they did, how they responded to their contemporaries, and where they saw their own views as leading. And, when it comes to the matter of assessing the plausibility of their conclusions and the rigour of their analyses, we must also be attentive to whom each saw as the audience of their work.

The contributors to this volume argue that there is much of value in the writings of Husserl and Stein, and that both have much to contribute to contemporary philosophy. In particular, they show how both Husserl and Stein's views bear on a number of current topics – in the philosophy of science, the philosophy of mathematics, and in social and political philosophy. But it is clear

that the work of Husserl and Stein is also relevant to issues in philosophical anthropology, ethics, epistemology, and even metaphysics.

Discussing the work of Husserl and Stein and the conditions which attended its origin is important for yet another reason. As the authors of the essays in the present collection claim, by understanding the phenomenological tradition through the insights of these two very different representatives, we may discover ways in which greater communication among the phenomenological, classical, and analytic traditions can occur, and in which a more complete appreciation of some of the central issues of philosophy might be possible. In fact, as the essays here attest, such communication and appreciation has already begun.

Notes

1. See Sr. (Mary) Prudence Allen, RSM, "Can Feminism be a Humanism?" *Maritain Studies*, Vol. XIV (1998), pp. 109-140.

2. For more bibliographic information see J.N. Mohanty, "The Development of Husserl's Thought," in Barry Smith and David Woodruff Smith, eds., *The Cambridge Companion to Husserl*, Cambridge: Cambridge University Press, 1995, pp. 45-77.

3. For more on the Cantor-Husserl connection see Claire Ortiz Hill, "Frege's Attack on Husserl and Cantor," *The Monist*, 3, (1994), pp. 345-77.

4. See "Brentano, Franz (1838-1917)," *Encyclopedia of Marxism*, eds. Brian Basgen and Andy Blunden. <http://www.marxists.org/glossary/people/b/r.htm>

5. See *Logical Investigations*, tr. J.N. Findlay [based on the 2nd German edition of *Logische Untersuchungen*], 2 vols., London & New York: Routledge and K. Paul, 1970.

6. See Mohanty, "The Development of Husserl's Thought."

7. See *Méditations cartésiennes. Introduction à la phénoménologie*, tr. Gabrielle Peiffer and Emmanuel Levinas. [Bibliothèque de la Société française de Philosophie] Paris: A. Colin, 1931. Although these lectures were given in Paris in February 1929, the German manuscript was not published until 1950. The explanation for this delay is traced in the Introduction [Einleitung] to *Cartesiansche Meditationen und Pariser Vorträge*, ed. S. Strasser [Husserliana I] The Hague: Nijhoff, 1950, pp. xxv-xxviii.

8. *Ideen zur einer reinen Phänomenologie und phänomenologischen Philosophie. Zweites Buch: Phänomenologische Untersuchungen zur Konstitution*, ed. Marly Biemel, The Hague: Martinus Nijhoff, 1952; cf. *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy, Second Book: Studies in the Phenomenology of Constitution*, tr. Richard Rojcewicz and André Schuwer [Collected Works: Edmund Husserl, Volume 3] The Hague: Kluwer Academic, 1989.

9. *Aufsätze und Vorträge (1922-1937)*, ed. Thomas Nenon and Hans Rainer Sepp [Husserliana XXVII] Dordrecht: Kluwer, 1989. [The first five essays are the *Kaizo* articles.]

10. *On the Problem of Empathy*, 3rd rev. ed. W. Stein, Washington: ICS Publications, 1989, p. xviii. The notions of sympathy and empathy were problems discussed by others who had been influenced by Husserl as well. Max Scheler (whose work profoundly influenced that of Karol Wojtyła – the future John Paul II) began his major work on sympathy, with a detailed discussion of empathy. See M. Scheler, *Wesen und Formen der Sympathie*, in *Gesammte Werke*, Bern: Francke Verlag, Band VII, 1973: pp. 7-258 (expanded version of his *Zur Phänomenologie und Theorie der Sympathiegefühle und von Liebe und Hass : Mit einem Anhang über den Grund zur*

Anahme der Existenz des fremden ich, Halle: Niemeyer, 1913). It is also discussed by Martin Heidegger in *Sein und Zeit* [*Being and Time*].

11 See Douglas E. Chismar, "Heidegger's Critique of Empathy," <http://www.chowan.edu/acadp/Religion/pubs/Heidemp.pdf>

12. *On the Problem of Empathy*, 3rd rev. ed., p. 63.

13. *On the Problem of Empathy*, 3rd rev. ed., p. 64.

14. J. N. Mohanty, "The Development of Husserl's Thought," in *Cambridge Companion to Husserl*, p. 65.

15. See note 7 above, concerning the publication of the *Cartesian Meditations*.

16. W. Stein, "Preface," *On the Problem of Empathy*, 3rd rev. ed., p. xiv.

17. Cf. Martin Heidegger, *Being and Time*, tr. John Macquarrie and Edward Robinson, New York: Harper and Row, 1962, p. 162.

18. *Zum Problem der Einfühlung*, Halle: Buchdruckerei des Waisenhauses, 1917.

19. See Kathleen Haney, "Edith Stein," *Encyclopedia of Phenomenology*, Dordrecht: Kluwer, 1997, pp. 679-683, at p. 680. See also John E. Brooks, S.J., "Saint Edith Stein," (an address on the occasion of the dedication of Edith Stein Hall, 6 May 1988). <http://www.holycross.edu/departments/history/vlapomar/hiatt/estein.htm>

20. "Psychische Kausalität," "Beiträge zur philosophischen Begründung der Psychologie und der Geisteswissenschaften, Erste Abhandlung." *Jahrbuch für Philosophie und phänomenologische Forschung*, Vol. 5 (1922): 1-116; reprinted Tübingen: Niemeyer, 1970. It is worth noting that "Stein's own works on empathy and on psychology establish that natural science is a cultural achievement, resting on the ability to isolate caused data by recognizing and subtracting motivated data from raw data. This subtractive literacy is the most basic scientific competence, and it is fundamentally interpersonal. The reality of the illegible causal remainder overcomes the critiques of science recently offered by psychoanalytic and standpoint feminisms" (Marianne Sawicki, *Body, Text, and Science: The Literacy of Investigative Practices and the Phenomenology of Edith Stein* [*Phaenomenologica*, Vol. 144], Dordrecht: Kluwer, 1997).

21. *Einführung in die Philosophie* [*Edith Steins Werke*, Vol. 13], Freiburg im Br.: Herder, 1991. [While this text appears to have been prepared in 1931, Marianne Sawicki reports that much of the material was composed about 1920, and that it may have been a third Habilitationsschrift, intended for Breslau.]

22. "Beiträge zur philosophischen Begründung der Psychologie und der Geisteswissenschaften," *op. cit.*

23. Taggart, "Edith Stein: Saint and Philosopher." See Mary Catherine Baseheart, SCN, *Persons in the World*, Dordrecht: Kluwer, 1997, pp. 60-61.

24. *Ibid.*

25. *Jahrbuch für Philosophie und phänomenologische Forschung*, Vol. 7 (1925), pp. 1-123; reprinted Tübingen: Niemeyer, 1970.

26. See Marianne Sawicki, "Husserl and Stein on the State: Toward a Critique of Race Theory" <http://jewel.morgan.edu/~sawicki/esstaat.html>

27. Husserl wrote: "Sollte die akademische Laufbahn für Damen eröffnet werden, so könnte ich sie an allererster Stelle und aufs Wärmste für die Zulassung zur Habilitation empfehlen" ["Should academic careers be opened up to ladies, then I can recommend her whole-heartedly and as my first choice for admission to a professorship."] See *Heil und Unheil. Das Lebens Edith Steins: Reife und Vollendung* [*Edith Steins Werke*, Vol. 10], Freiburg im Br.: Herder, 1987, p. 22; see Stephanie Brander, "Sollte die akademische Laufbahn für Damen eröffnet werden ..." *Jüdische*

Philosophinnen in Deutschland: Hannah Arendt und Edith Stein, in *Aus dem Leben jüdischer Frauen. "Welche Welt ist meine Welt?"* ed. Leonie Wagner [et al.], Kassel: Archiv der Deutschen Frauenbewegung; Wiesbaden: Hessische Landeszentrale für Politische Bildung, 1994 [Schriftenreihe des Archivs der deutschen Frauenbewegung. Bd. 9], pp. 63-88.

28. See Sr. Thersia Renata de Spirito Sancto, *Edith Stein*, Nürnberg: Glock und Lutz, 1952, pp. 68, 64; cf. *Edith Stein*, New York: Sheed and Ward, 1952.

29. See *Die Frau: Ihre Aufgabe nach Natur und Gnade* [*Edith Steins Werke*, Vol. 5], Freiburg: Herder, 1959 [expanded reedition of *Frauenbildung und Frauenberufe*, München: Schell & Steiner, 1949]; *Essays on Woman*, ed. L. Gelber and Romaeus Leuven; tr. Freda Mary Oben [*Collected Works of Edith Stein*, Vol. 2], Washington, DC: ICS Publications, 1987; 2nd ed., 1996.

30. Laura Garcia, "Edith Stein – Convert, Nun, Martyr," *Crisis* 15, No. 6 (1997), pp. 32-35; Freda Mary Oben, "Edith Stein: Holiness in the Twentieth Century," in *Spirituality Today*, 35, No. 2 (1983), pp. 141-154; Freda Mary Oben, *Edith Stein: scholar, feminist, saint*, New York: Alba House, 1988; Mary Catharine Baseheart, "Edith Stein's Philosophy of Woman and Women's Education," *Hypatia* 4, No. 1 (1989), pp. 120-131 (reprinted in *Hypatia's Daughters: Fifteen Hundred Years of Women Philosophers*, ed. Linda López McAlister, Bloomington: Indiana University Press, 1996, pp. 267-279); Linda López McAlister, "Edith Stein: Essential Differences," *Philosophy Today*, 37 (1993), pp. 70-77.

31. Ergänzungsband zum *Jahrbuch für Philosophie und phänomenologische Forschung*, Halle: Niemeyer, 1929, pp. 315-338. (Cf. "Husserl's Phenomenology and the Philosophy of St. Thomas Aquinas: Attempt at a Comparison," tr. Mary Catharine Baseheart, in *Persons in the World: Introduction to the Philosophy of Edith Stein*, by Mary Catharine Baseheart. Dordrecht: Kluwer, 1997, pp. 129-144 and 179-180.)

32. See "Was ist Philosophie? Ein Gespräch zwischen Edmund Husserl und Thomas von Aquino," in *Erkenntnis und Glaube* [*Edith Steins Werke*], Freiburg im Br.: Herder, 1993, Vol. 15, pp. 19-48.

33. This was to have been used by Stein as a Habilitation thesis for the University of Freiburg.

34. *Finite and Eternal Being: an attempt at an ascent to the meaning of being*, tr. Kurt Reinhardt, Washington, DC: ICS Publications, 2002.

35. *Endliches und ewiges Sein: Versuch eines Aufstieges zum Sinn des Seins* [*Edith Steins Werke*, Vol. 2], Freiburg: Herder, 1950.

36. See Jacques Maritain, *Distinguer pour unir ou Les degrés du savoir* (1932), *Oeuvres complètes*, Fribourg / Paris 1981-1999, Vol. IV; *Distinguish to unite, or, The Degrees of Knowledge* [*Collected Works of Jacques Maritain*, Vol. 7], Notre Dame, IN: University of Notre Dame Press, 1995.

37. Edith Stein, *The Science of the Cross: A Study of St. John of the Cross*, tr. Hilda Graef, London: Burns & Oates, 1960, p. 121.

Chapter I

Brentano and Intentionality

Rolf George

I

Late in his life, Brentano wrote to Oscar Kraus that, when he was a young philosopher, he had had to apprentice himself to a master. But since he was born "at a time of the most lamentable decay of philosophy," he could find no better teacher than "old Aristotle." Thomas Aquinas, he said, helped him to a deeper understanding of the Philosopher.¹ When a Viennese student (of Austrian nobility, presumably) asked Brentano for an inscription in his album, he wrote

You, who claim noble descent, hear who my ancestors were!
I am of Socrates seed through whom Plato came into being.
Plato begot the stagirite whose force has never abated...
Even today I can claim to be of his issue.
Welcome Eudemus, you pious, welcome O brother, and you
Godlike in speech, Theophrastus, sweet as the Lesbian wine.²
Since I was given him late, youngest of all his descendants
Loves my father me most, more tenderly than all the others.³

Brentano was born in 1838. The philosophers who were active when he began his studies – Mill, Spencer, Comte, Lange, Lotze, and Trendelenburg – are not often thought to be of the first rank, but his derisive remark about the lamentable decay was not aimed at them. His target was, rather, Kant, German idealism, and the Kantian revival.

In 1894 Brentano gave a lecture, "The Four Phases of Philosophy," in which he maintained that western philosophy had run through the same four phase cycle three times, with a single period of advance followed by three phases of decline. The first, positive, phase is characterized by a "natural method" (though capable of improvement) and purely theoretical interest. In antiquity, this first period ended with Aristotle. Then came the first decline; theoretical interest is weakened and practical motives begin to predominate in Epicureanism and Stoicism. Philosophy becomes unscientific, and its methods no longer trustworthy. Hence skepticism arose which, dour and unfulfilling, cannot hold back the desire to know. This becomes an irrational urge and leads to the construction of bizarre and ungrounded philosophical systems. Plotinus and other neo Platonists not only claimed higher inspiration but were even accorded divine status in their schools.

Four analogous phases occur in the Middle Ages. Albertus Magnus and Thomas Aquinas are followed in the first phase of decline by the hypertrophied subtlety of Duns Scotus. Then comes Skepticism, here represented by the nominalism of Ockham. Finally, the last stage of decline is the mysticism of Eckhart, Tauler, Suso, and Lullus.

Brentano did not bother much about historical niceties: the time lines don't always work well. For instance Pyrrho, the great skeptic, was a rough contemporary of Epicurus, and the theoretical achievements of the Stoa are not addressed. But there is also a certain philosophical arrogance in this. Late medieval mysticism, in Tauler and Suso, was hardly a reaction to Ockham, but to the calamities of the period, the great plague, fires, pogroms, flagellants swarming the country, riots,

famines, and a general decline of ecclesiastic authority. Mysticism was not an event in the progress of book learning or reaction to monkish manuscripts.

More surprising even is the modern period. The upward movement begins with Descartes and Bacon and continues in Leibniz and Locke. Then comes the routine, the shallowness in the "popular" philosophy of the Enlightenment, to be followed by the skepticism of Hume. The time line is a bit warped here again: much of that popular philosophy arrived at Hume's time and later.

Now comes the punch line, the consummation of the whole enterprise: Immanuel Kant had the astonishing idea that objects obey the blind prejudices inherent and innate in our minds. His successors, Fichte, Schelling, and Hegel carried this conceit forward. "I do not hesitate to assert that their [Schelling's and Hegel's] works are altogether devoid of any and all value from a scientific point of view."⁴ In an earlier piece, *Was für ein Philosoph manchmal Epoche macht*, of 1876, this same view is adumbrated. The last phase is "pseudo philosophy."

Here as in other places, the point is made that philosophy must mirror the method of other "less difficult" sciences. It has no proprietary methodology. The insights claimed by Kant and others are factually in error and methodologically not only flawed, but absurd, since insights are claimed that go beyond what scientific methodology can deliver.

Brentano was concerned to establish his own place in history. After the dark night comes a new dawn, another ascending phase. His own work starts a new cycle. He writes to Kastil "I would not have been immodest had I said *Ecce, nova feci omnia*."⁵ This is strong stuff, being a quotation from Ch. 21 of *Revelation*:

And I, John, saw the holy city, new Jerusalem, coming down from God out of heaven, prepared as a bride adorned for her husband... And he that sat upon the throne said *Ecce, nova facio omnia* – "Behold, I make all things new"... I am alpha and omega, the beginning and the end...

Brentano was not the first to push a view of the development of philosophy that would assign him a prominent place in it. Hegel, of course, is well known. But Kant did something much like Brentano. When he wrote his piece on the *Progress of Metaphysics since Leibniz and Wolff*, he claimed that skepticism followed upon dogmatism in antiquity, and that this same sequence had to be run through again in the modern period – in his own work, in fact – to be crowned by criticism.

It is true that Brentano resolutely turned away from a certain tradition in epistemology, about which I shall say more later. Much of his theory of intentionality derives directly from his master, Aristotle. He wants to reconnect with Aristotle in much the same way as Thomas – and even Leibniz, as he occasionally suggests – to recreate a new ascending phase.

II

I now turn to an issue arising from Brentano's famous distinction between psychical and physical phenomena. To recapitulate, both kinds are mental occurrences. As examples of physical phenomena, Brentano cites: "a colour, a figure, a landscape that I see, a chord that I hear, a warmth, coldness, odour that I sense, as well as similar entities when they appear to me in imagination."⁶ A distinction is also made between the pain and the sensing of it – that is, whenever a pain occurs, a physical phenomenon is present, e.g. in the foot, and I sense this phenomenon with pain.⁷ As examples of psychical phenomena, he cites: "every representation through sensation or imagination, and by representation I do not here mean that which is represented, but the act of

representing." There follows a list of examples of sensations; "every judgement, every recollection, every expectation, every inference, every conviction or opinion, every doubt is a psychical phenomenon; and such is also every emotion, joy, sadness, fear, hope, courage, despondency, wrath, love, hate, desire, will, intention, astonishment, admiration, contempt, etc."⁸

These lists make quite clear what sorts of thing Brentano has in mind. After dismissing a number of other solutions, he comes to the conclusion that the distinction between physical and psychical phenomena lies in the latter having objects that "intentionally inexist" in them whereas the former do not.

There are two theses connected with this. The first is that the intentional relation is *sui generis* and cannot be reduced to extensional attributes. The second thesis is that all psychical phenomena have objects in this manner. The first thesis has attracted much more attention than the second. But it is plain that Brentano, when he wrote the first volume of his *Psychologie vom empirischen Standpunkt*, was much more concerned with the second than the first.

In the *Psychology of Aristotle*, Brentano attributes to Aristotle a distinction between something being physically in a sense (or sense organ) and something being objectively there: my hand can be physically warm or cold, but I can also sense through my hand that something is warm. In the latter case, too, the sensory organ will be said to *be* warm (for sense receives the sensible forms without matter), but it will be warm *objectively*.⁹ This distinction between physical and objective inexistence is then applied to the interpretation of *De anima* 429a24, where Aristotle says "Hence it is not proper to say that the intellect is mixed with the body, for then it would be of a certain kind, either hot or cold." Aristotle cannot here be arguing that if the intellect were physically hot or cold by being mixed with the body, then it could not be objectively cold, for the two are quite compatible. Indeed, the hand is most sensitive to warmth when it is physically cold. Rather, Aristotle is speaking of what is in the intellect objectively, not physically.¹⁰ Thus, Brentano attributes to Aristotle an argument that, in its simplest terms, can be stated as follows. If the intellect were mixed with body, it would have to be hot or cold, or have some other sensible quality objectively whenever it thinks. It would have to have a proper object, as sound is the proper object of hearing, colour of sight, and so on. But there is no proper object of the intellect: the mind is in a way *all* existing things (*De anima* 431b20). Therefore it is unmixed with body. The senses, by contrast, because they are mixed with body, can perceive only their proper objects; the eyes cannot see warmth, the hands cannot feel colour, etc.

This is the context in which the notion of intentional inexistence (though not the expression) occurs for the first time in Brentano's writing. It is not yet used as a criterion for psychical phenomena, nor does he emphasise or perhaps even notice that one can here speak of an intentional relation. He prefers to follow Aristotle's terminology, saying that the intellect (or any organ of sense) is what it thinks (or senses). The relational mode of expression is eschewed in favour of qualified predication: "is-physically" and "is-objectively."

Given that objects somehow inexist in the mind, the problem arises how we become aware of the state the mind is in when it has them – for example, how we perceive *that* we see, hear, etc. – and this is the point taken up at the beginning of *De anima* III, 2 (425b12). The difficulty here raised is evidently the same as that hinted at in *Metaphysics* XII, 9 (1074b35) where Aristotle says that "knowledge and perception and opinion and understanding have always something else as their object, and themselves only by the way (*en parergo*)." Brentano discusses the matter at some length.¹¹

It is fairly obvious that what is here said to be known *en parergo* are, in his later terminology, psychical phenomena. They obviously satisfy Brentano's requirements that they have an object,

for if no primary object is present, then there is nothing to be known *en parergo*. Brentano himself calls attention to this agreement with Aristotle. But in itself this fact does nothing to establish our second thesis, namely, that all psychological phenomena have objects, Aristotle, after all, considers only knowledge, perception, opinion, and understanding.

But Brentano's second thesis results at once, if we add a further Aristotelian premise to the distinction between primary object of knowledge and knowledge *en parergo*. It is the doctrine that the mind is in actuality *nothing* other than the object that it thinks. While the mind is in a way (i.e., potentially) all existing things, it is in actuality only what it actually thinks. But a mind devoid of actuality cannot be known to itself. Hence there is no state of mind that can be known if there is no nonexistent object. If we add to this Aristotle's view that the object of desire must also be an object of cognition (*De anima*433b10), we can see how Brentano arrives at his belief that "representation forms the basis ... of desire and every other psychological act. Nothing can be judged ... desired, nothing can be hoped or feared if it is not represented."¹² If then the objects of desire, etc., are also objects of cognition, it follows from Aristotle's premise that no psychological phenomena can be experienced *en parergo*, or even exist, unless an object intentionally exists in the mind. The mind can know itself only if it knows another thing.

Let me recapitulate Aristotle's argument as Brentano saw it: in order to be able to receive all intelligible forms, the mind must as such be pure potentiality. Only when the mind *is* an object (i.e., when one intentionally exists in it) is there an attitude either of acceptance, desire, aversion, fear, and so on (toward that object). It follows that these attitudes – i.e., the psychological phenomena – always have objects. We can call this the deductive argument for the thesis that all psychological attitudes are intentional. For the special case of intellectual cognition this argument is clearly stated in section 11 of Part Four of *The Psychology of Aristotle*.¹³

In Book II of the *Psychology from an Empirical Point of View*, Brentano endeavours to establish the very same conclusion by what he calls an inductive procedure.¹⁴ He tries to explain, by way of examples, what psychological phenomena are, then states that all of these have intentionally existing objects, and finally defends this view against competing theories.

One can be sure that when Brentano wrote *The Psychology of Aristotle* in 1867 he had actually adopted the Aristotelian view that the mind is in a way (i.e., potentially) all things, but that it is actually only what is present in it as an object. But it is an open question whether at the time of writing the *Psychology from an Empirical Point of View* in 1874 he still adhered to this premise, and sought empirical confirmation for it. Possibly, the old Aristotelian argument had merely put him on the track of his own theory, so that what he wanted to confirm was merely the conclusion, i.e., that all psychological phenomena have intentional objects.

The volume that is known in German as *Psychology III*, and in English as *Sensory and Noetic Consciousness*,¹⁵ opens by raising a skeptical question, leading to a new twist in the discussion of the primary knowledge of objects and the secondary knowledge of the activity; Which is more certain? Brentano's answer is unequivocal; "mental activity always includes the evident consciousness of that activity"¹⁶ and – even more strongly – "Aside from our knowledge of ourselves as mentally active beings, we have no directly evident knowledge of facts."¹⁷ To put this in Chisholm's adjectival form of expression: I can be certain that I am appeared to redly, but not that the object, even if described as a sense datum, is red. "In the final analysis I do not know that a colour exists, but that I have a presentation of that colour."¹⁸

I take it, then, that Brentano not only argues that the secondarily perceived psychological phenomena are the only entities known with evidence, but that *all activities* of the mind are evident to it.

III

Now I think that this is quite a stretch. I don't want to dwell here on Brentano's understanding of evidence, but on his theory of mental activity. I want to contrast it with what had been a common understanding, even if not often noted, among many major philosophers and common folk. Possibly, Condillac's *Treatise on Sensations* was the fountainhead of this view, which was picked up and developed by Reid, Kant, and others.

In this tradition it was held that there is a class of mental occurrences, usually called sensations, of which it is best to say that one just has them, rather than construing them as objects that are perceived. It was thought wrong to separate act from object in the case of sensations, and it seems equally inappropriate to call them physical phenomena in Brentano's sense. In Brentano's view we become aware of the psychical object "on the side" as we intend the primary object. But is there such a separate awareness, for example, in the case of a pain? Or if someone feels (or is) cold, is there a recognisable separation of act and object? Reid had denied this by saying, tersely, "I don't perceive pain, I just have it." Similarly, it is arguable that one can be just despondent or elated, without being despondent or elated about any specific object.

These days scholars often attribute to Kant the view that he meant to explain "intentional objects." This has now come to mean that he meant to give an account of the entities referred to in the object position of such expressions as "I see...", etc. But it in no way implies that every conscious event has an object in this sense, nor that we are evidently aware of the mind's activity when perceiving or thinking about something. Hence, in this context, this expression does not have Brentano's proprietary sense.

One difficulty for the historian of philosophy is that the accepted morphology of eighteenth century philosophy takes no account of the salient contribution of sensationism. The term is often applied only to a small group of French philosophers who are thought to represent a minor offshoot of Empiricism, and which was an epistemological dead end.

It seems that Malebranche was the first to hold that external impingements upon the senses must initially result in sensations, merely subjective modifications of the mind.¹⁹ The important insight here is not that all knowledge of external things begins with sensory awareness – many others held this view – and that some elaboration of the sensory input by central functions of the mind is needed before one can properly speak of knowledge or perception. It was, rather, that the mental states initially induced are *non-intentional* or *non-referential*.

Some cautions must be placed on the term "intentional." I am not using it here quite in the sense of Brentano, who would have considered the presence of a sensation an intentional act, the sensation being the object of that act.²⁰ (In this sense, everything of which one is aware is an object. In Kant's words: "Everything, every representation even of which one is conscious may be called object."²¹) I wish nevertheless to speak of sensations as non-intentional since they do not *have* objects, even if they *are* (in a sense) objects. It was common to think that reference to things (other than one's own states) required some sort of mental token or symbol "by means of" which the object is thought,²² analogous to the way in which one refers to things by using words. Kant, accordingly, goes on to say that he is not concerned so much with representations insofar as they are objects, but only "insofar as they designate an object."²³ Sensations, in this view, were not thought suited to designate anything. This is why I call them non-intentional.

This, then, is the central thesis of sensationism: that there are non-intentional mental states in which no object, other than the state itself, is present to the mind, and that they are the foundations of empirical knowledge. Some writers, notably Condillac, preferred to describe all such states in

the manner of bodily sensations. In order to avoid reference to an object, he would allow "I am green" to describe a visual analogue to such statements as "I am cold."

The sensationist supposition demands an account of the mechanisms that engender reference to objects. This differs markedly from the criteriological concerns that had dominated epistemology earlier on, and seems to be revived in Brentano's later work. The problem is no longer to discover a criterion that allows us to sort out ideas that truly represent external objects from those that merely appear to. It is, rather, to explain the very roots of reference, regardless of whether the object before the mind is real or merely virtual or illusory, or some conceptual object. Kant's description of the problem is this: "How does it come about that we posit an object for these representations, or attach to them, beyond their subjective reality as representations, an objective reality?"²⁴

Sensationism so understood forms a major departure both from the empirical and the rationalist traditions. It is, in fact, a fundamental tenet of several philosophers who are generally grouped with widely divergent schools or movements, among them Condillac, Reid and the Scottish school, Tetens, Fichte, Schopenhauer, W. V. Humboldt, and William Hamilton.

Leibniz's thesis that the soul mirrors the entire universe is familiar. Less well appreciated is the fact that he also subscribed to its converse, that is, that everything in the soul mirrors something in the universe: "The nature of the monad is to represent." In the *Principles of Nature and of Grace*, he claims that all internal states of monads are perceptions (No. 2).²⁵ Christian Wolff and his orthodox successors made the point with a clarity that leaves nothing to be desired: "We meet in the soul nothing but the ability (*Kraft*) to represent the world... hence all changes that are noticeable in the soul are due only to various limitations of this ability..."²⁶

Leibniz's view has several troublesome consequences – for instance, that all people are deeply deceived about most of the objects of their thought, and that one does not usually know what one is really thinking about. I shall not pursue this matter beyond mentioning that Reid made very nearly this point when he remarked against Leibniz that "no man can perceive an object without being conscious that he perceives it."²⁷ Reid does not deny unconscious mental states, but the possibility of inadvertent reference.

The main point of criticism against Leibniz's thesis was that it did not allow for mental states that represent nothing.

The excuses made in this connection are very poor. For example, it is said that a pain corresponds to (i.e. represents) an injury to the solid parts of the body. But the representation of the injury already corresponds to it. What then corresponds to the pain, of which we are clearly aware that it is something altogether different?²⁸

The answer is, of course: Nothing at all. J. N. Tetens, whose book was "always before" Kant when he wrote the *Critique of Pure Reason*,²⁹ remarked that, on Wolff's view "Joy, hunger, longing, fear, and all emotions and desires and passions are representations, just like the ideas of the sun, of a horse, of a man." He goes on to wonder what is gained if "the formation or representations is seen as basic to all forms of mental activity."³⁰

Kant took the same line. He criticized Leibniz as follows:

Leibniz takes all sensations (deriving from) certain objects for cognitions of them. But beings who are not the cause of the object through their representations must in the first instance be affected in a certain way so that they can arrive at a cognition

of the object's presence. Hence sensation must be the condition of outer representation but not identical with it . . . Hence cognition is objective, sensation subjective (*Reflexionen* § 695).³¹

The term *idea*, as it occurs in British Empiricism, is notoriously ambiguous. It is, however, always construed as meaning an *object* before the mind. Ideas are what the mind "is applied about whilst thinking."³² For Berkeley, they are simply the "objects of human knowledge."³³ In like vein, Hume takes the sentences "an object appears to the sense" and "an impression becomes present to the mind" to be equivalent.³⁴ If to have an impression is to have an object present, the same must also hold of ideas. Since anything that may occur in a mind is an idea or (in Hume) an impression, it follows that any mental occurrence is to be described as the presence of an object to the mind.

It is not such a big stretch to say that Brentano did not just learn from Aristotle, but that he returned to that earlier tradition – the Leibnizian, pre-Kantian. Like that lot, he held not only that consciousness is always consciousness of objects, but also that the workings of the mind lie open before us. This is not so in the tradition Brentano so despises. Here central functions of the mind – not observable and not at all evident – are postulated to explain how, under what circumstances, we come to perceive objects. There is no simple deductive argument that explains intentional objects in this sense. What we find in this paradigm is, rather, an early form of cognitive science that in Brentano's dispensation is not possible.

Conclusion

Brentano's debt to Aristotle is great. One can show for some of his theories that they grew out of his enquiry into Aristotelian problems, and I have done so for one of them. Not only this, it seems that whenever he took a major step forward, he asked himself how his new theory related to Aristotle's teaching. This is a pervasive feature of his systematic work. Even as he moved away from his teacher, he rarely failed to make specific mention of the points of divergence. For example, he took it that reism implied that there is a univocal generic concept 'something,' covering everything that can be an object of thought. The contrast to Aristotle, who denied that there is a common generic concept above the ten predicaments, is duly noted.³⁵

Again, when he came to believe, late in life, that the primary objects of thought are universals, on the grounds that "what one sees, hears, tastes, believes, denies, wishes, enjoys, deplores could without contradiction equally well have many other things as (external?) objects," he attributes the same view to Aristotle. For in Aristotle, accidents are individuated through substances, and the individual determination of a substance cannot be represented (since it resides in matter, presumably), so that Aristotle must be committed to the view that "all our representations, even sensory perceptions, basically represent something universal."³⁶

Aristotle's claim, in *Anal. Post.* 87b37, that "perception must be of the particular," does not agree with this and is called "unclear and misleading."³⁷ These are just a couple of issues to show that Brentano did not just begin his career as Aristotle's student, but again and again, throughout his life, compared and contrasted his own discoveries with the views of the master. A full account of this development from discipleship to critical distance would form a substantial chapter of his intellectual biography.

Notes

1. To Oscar Kraus on March 21, 1916, in *Die Abkehr vom Nichtrealen. Briefe und Abhandlungen aus dem Nachlass*, ed. F. Mayer-Hillebrand, Bern: Francke, 1952; 1966, p. 291.
2. In antiquity, the wine from the island of Lesbos was famous for its sweetness. Aulus Gellius, a Roman of the 2nd century CE who went to Athens for his higher education, describes how Aristotle appointed his successor as head of the *Lyceum*. The choice was between Eudemos of Rhodes, and Theophrastus of Lesbos: "Pretending to dislike the wine he was drinking, he asked for samples from Rhodes and Lesbos and remarked: 'Both are very good indeed, but the Lesbian is the sweeter.' When he said this, no one doubted that gracefully, and at the same time tactfully, he had by those words chosen his successor, not his wine... And when, not long after this, Aristotle died [in 322 BCE] they accordingly all became followers of Theophrastus." Aulus Gellius, *The Attic Nights*, ed. John C. Rolfe, 3 vols., Cambridge MA: Harvard University Press, 1927, Vol. 2, pp. 425 f.
3. Brentano's preface to his *Aristotle and His World View*, tr. R. George and R.M. Chisholm, Berkeley: University of California Press, 1978.
4. Brentano, *Über die Zukunft der Philosophie*, ed. Oskar Kraus, Leipzig: Meiner, 1929, p. 125.
5. To Kastil, after 1911. *Über Aristoteles: Nachgelassene Aufsätze*, ed. Rolf George, Hamburg: Meiner, 1986, p. 38.
6. Brentano, *Psychologie vom empirischen Standpunkt*, 2nd enl. ed. by Oskar Kraus, Hamburg: F. Meiner, 1924, Vol. 1, p. 112.
7. *Ibid.*, p. 119.
8. *Ibid.*, p. 111f.
9. *Die Psychologie des Aristoteles*, Darmstadt: Wissenschaftliche Buchgesellschaft, 1967, p. 80f.
10. *Ibid.*, p. 121.
11. *Die Psychologie des Aristoteles*, pp. 136ff.
12. *Psychologie vom empirischen Standpunkt*, Vol. 1, p. 112.
13. *Ibid.*, pp. 129ff.
14. *Ibid.*, p. 111.
15. Brentano, *Sensory and Noetic Consciousness*, ed. Linda McAllister, London: Routledge, 1981.
16. *Ibid.*, p. 4.
17. *Ibid.*, p. 5.
18. *Ibid.*
19. N. Malebranche, *Recherche de la verité*, Paris: Chez André Pralard, 1674. I, 151 f ; new edition Paris, 1962.
20. *Psychologie vom empirischen Standpunkt*, Vol. 1, Part 2, Hamburg: Meiner, 1955, pp. 109ff.
21. Immanuel Kant, *Critique of Pure Reason*, tr., ed. Paul Guyer and Allen W. Wood, Cambridge: Cambridge University Press, 1998, A 189/B 234 f.
22. The expression is very common in Kant, e.g. *Critique of Pure Reason*, A8, B68, B94, B144, B147, B149, B177, B203.
23. *Critique of Pure Reason*, A190/B235.
24. *Critique of Pure Reason*, A197/B242.

25. R.S. Woolhouse and Richard Francks (ed.), *G.W. Leibniz: Philosophical Texts*, Oxford: Oxford University Press, 1998.
26. Wolff, *Vernünfftige Gedanken von Gott, der Welt, und der Seele des Menschen*, Frankfurt and Leipzig, 5th ed., 1733, p. 488.
27. Thomas Reid, *On the Intellectual Powers of Man*, ed. William Hamilton, Edinburgh, 1880, II, XV, p. 308.
28. C. A. Crusius, *Weg zur Gewissheit und Zuverlässigkeit der menschlichen Erkenntnis*. Leipzig, 1747, p. 265.
29. A letter from Hamann to Herder, May 17, 1779: "Kant is working busily on his moral (sic.) of pure reason, and Tetens is always before him."
30. Johann Nicolaus Tetens, *Philosophische Versuche über die menschliche Natur und ihre Entwicklung*, Nachdr. d. Ausg. Leipzig, 1777; Hildesheim: Olms, 1979.
31. Immanuel Kant, *Reflexionen zur Anthropologie, Kants handschriftlichen Nachlaß*, Bd. 2, zweiter halfte, in *Kants Gesammelte Schriften*, Bd. XV, Berlin & Leipzig: Walter de Gruyter, 1928.
32. John Locke, *An Essay Concerning Human Understanding*, ed. Peter H. Nidditch, Oxford: Clarendon Press, 1975, 2.1.1.
33. *A Treatise concerning the Principles of Human Knowledge*, ed. Jonathan Dancy, Oxford: Oxford University Press, 1998, I.
34. David Hume, *A Treatise of Human Nature*, reprinted from the original ed. in three volumes, and edited, with an analytical index, by L. A. Selby-Bigge, Oxford: Clarendon Press, 1928, 1.8, p. 20.
35. *Psychologie vom empirischen Standpunkt*, Vol. 2, ed. Oskar Kraus, Hamburg: Meiner, 1959, p. 214.
36. *Psychologie vom empirischen Standpunkt: Vom sinnlichen und noetischen Bewusstsein; Äussere und innere Wahrnehmung, Begriffe*, Vol. 3, ed. Oskar Kraus, Hamburg: Meiner, 1928; new edition, revised by Franziska Mayer-Hillebrand, Hamburg: Meiner, 1968, p. 90. (Dictated 12 January 1915).
37. *Über Aristoteles*, p. 105.

Chapter II

Altered States: American Empiricism, Austrian Rationalism, and Universal Intuition

Anoop Gupta

Introduction

Intuition can be understood as immediate awareness of a fact. What constitutes the class of facts that one can intuit, however, varies from, for example, James' radical empiricism¹ (whereby the object of intuition is stripped of conceptual content), to the rationalistic tradition of Husserlian phenomenology² and, more recently, the mathematical realism of Kurt Gödel (whereby the object of intuition is the relation of concepts).³

According to Gödel, on the one hand, empiricists traditionally abandon realism (whereby the truth-values of the statements of the domain P are recognition-transcendent).⁴ On the other hand, rationalists achieve realism but leave one with an unpalatable epistemology. Gödel wanted to avoid the anti-realism of the empiricist and the problem of cognitive access faced by the Platonist.⁵ Being a realist, Gödel looks to providing an adequate epistemological account, which includes appeal to intuitions.⁶

Gödel writes:

But, despite their remoteness from sense experience, we do have something like a perception of the objects of set-theory, as is seen from the fact that the axioms force themselves upon us as being true.⁷

Gödel maintains that mathematical intuition – which is to give us access to mathematical objects – is just as solid as sense perception.⁸ Gödel's mathematical intuition concerns the perception of the relation of concepts.⁹ He writes:

[Intuitions] are necessary not only for obtaining unambiguous answers to the question of transfinite set theory, but also for the solution of the problems of finitary number theory (of the type of Goldbach's conjecture).¹⁰

Gödel claims that there are proofs that are not fully formalizable (which is supposed to support his view that machines could never do some things humans can).¹¹ Humans have a mysterious power – intuition – that allows access to abstract objects.

Guillermo E. R. Haddock complains, however, that there is "insufficient elaboration"¹² of how one comes to know mathematical objects. An intuitive account is like replacing a mystery (e.g., how does one access mathematical objects) with a mystery (that of intuition). On Gödel's account, sticking with that example, one does not know the scope of intuition: Does it apply to logical truths?¹³

Intuition shall be discussed in the following authors thus: first, James' notion of pure experience, second, Husserl's pure consciousness and Gödel's appropriation are considered. Finally, it is argued that (both empirical and rationalistic) intuitions have value in a program of naturalized epistemology.

American Empiricism: William James and Intuition

According to James, empiricism, on the one hand, starts with parts (perceptions) and tries to reconstruct the world in accord with human cognitive faculties (and has often been thought to stand to collapse into idealism if one cannot get outside one's head, as it were). On the other hand, rationalism starts at the top, with certain ideas (for which realism is maintained), and works its way down to the world.¹⁴ James seeks to avoid both idealism and realism (subjectivism and objectivism, respectively).¹⁵ James' pure experience is supposed to circumvent – and precede – the idealist-realist hypotheses. According to James, one does not experience sense data or an external world.¹⁶ His strategy to escape the idealist-realist dichotomy is as follows.

By purging oneself of abstractions (like idealism and realism), James seeks to attain a pure experience, where one has direct access to what is presented to one.¹⁷ James says:

The instant field of the present is at all times what I call the Pure experience. It is only virtually or potentially either object or subject as yet. For the time being, it is plain, unqualified actuality, or existence, a simple that.¹⁸

In pure experience, one has only an unadulterated, immediate presence, which one intuits.¹⁹

Austrian Rationalism: Husserl and Intuition

Husserl also attempts to avoid idealism and realism.²⁰ According to Husserl, the empiricists²¹ are dogmatic by assuming ideas to be constructions of sense data; they fail to recognize that ideas may proceed all theory.

Husserl's starting point is the everyday view of the world, one's "natural attitude," which is anti-intellectual in that it avoids abstracting to the philosophical quandary of the idealist-realist debate and the doubt of the global sceptic.²² Like James, Husserl hopes to find a middle ground between empirical "psychologism" (which is subjectivist) and rational "logicalism" (which is supposed to be objective). Through bracketing²³ the "natural attitude" Husserl hopes to discover of a "new region of being,"²⁴ i.e., phenomenological orientation.²⁵ He attempts a "cognitive critique" and a "critical modes of inquiry."²⁶ The epoché is to provide the residuum of the phenomenological reduction, which "excludes" and "puts out of action" all positing; one is supposed to be left with direct access to something given, pure consciousness.²⁷ Intuition promises access to essences which Husserl is a realist about.²⁸ Like James' pure experience, Husserl's natural attitude is also supposed to be immune from doubt (though, admittedly, the phenomenological stance imports a methodology foreign to James).

If phenomenology can attain pure consciousness and remain self-critical, Husserl thinks it can be a "first philosophy."²⁹ Pure consciousness, according to Husserl, lays bear the dual structure of consciousness.³⁰ On the one side, there is the noetic (the perceiving act), and on the other, the noematic (the perceived),³¹ the perceiver (cogitation) and a perceived (cogitatum), respectively.³² Furthermore, pure consciousness, according to Husserl, allows access to essences. The phenomenological goal is to attain "pure mental process," where ideas are "seen."³³ Husserl identifies two types of perception, that which is primary (empirical) and universal (categorical acts).³⁴ Finally, in these pure states, James recognizes the flux of experience and Husserl observes a successive flow.³⁵ Furthermore, James' distinction between the "known" and the "knower" parallels Husserl's conception of the perceived (noemata) and perceiving (noematic).

The experiences in question are supposed to provide direct access to what is given, though the content of the purging differs from James to Husserl. James' pure experience is pre-conceptual. Conversely, Husserl's pure consciousness includes conceptual participation on the part of the subject. According to Gödel, Husserl provides a "procedure or technique that should produce in us a new state of consciousness in which we describe in detail the basic concepts we use in our thought, or grasp other basic concepts hitherto unknown to us."³⁶

On the one hand, taking the empiricists' tack, intuition can be indexed to one's experiences (*a posteriori* knowledge). In empiricist programs, like that of James, it is to provide access to sense data upon which knowledge is to be based.³⁷

On the other hand, taking the rationalists' tack, intuition can be indexed to one's deductive insights (*a priori* knowledge). Rationalists, like Husserl, often appeal to intuition to provide access to mind-independent abstract objects in order to justify the necessity of certain types of knowledge (e.g., mathematical knowledge).

The historical distinction between empiricists and rationalists finds expression in the contemporary realist debate that accompanied it. The *a posteriori*–*a priori* distinction was accompanied by an evaluation of the necessity of the knowledge yielded by each type of knowledge. Generically, empiricists were anti-realists (or sceptics) and rationalists were realists.

The realist debate can be traced perhaps, as part of the legacy of Christianity. Kant had said, in the preface to the *Critique of Pure Reason*, that he had posited the thing-in-itself to make room for faith. Since Kant prohibits the option of intuiting the thing-in-itself (i.e., mysticism), he may be considered sceptical (one can never know what the world is really like).

Upon the anti-realist (i.e., traditionally empiricist) gleaning of Kant, intuition functions within empiricist programs that yield tentative knowledge (i.e., mind-dependent knowledge) about the phenomenal world. Upon the realist gleaning of Kant, intuition functions within rationalist programs that yield knowledge that is possibly recognition-transcendent about the phenomenal world (or in Husserl's case, access to mind-independent abstract objects, like essences).

James was read by Husserl, and in turn was studied by Gödel after 1959, in order to clarify his notion of intuition. Tieszen writes, however, "What exactly is the [phenomenological] method supposed to be? How does one learn it? What are some examples of this method? What are some of its fruits?"³⁸ Why did those in the past not have the intuition we now do? Are evolutionary changes going to result in different intuitions?

Intuition does not break a chain of justificatory regress for empiricists (there is no apodictic foundation of knowledge one can intuit). Empirical treatments of intuition – like that of James – stand to be viewed as psychologistic, for instance, by Husserl (thus abandoning realism and collapsing into idealism).

Yet Husserl's program (or Gödel's) can also slide into anti-realism (or scepticism). If the veracity of intuition is called into question, truth is either agent-dependent or exiled to the neither world of unknowability. Since intuition is not (so the story goes) veridical as empiricists and rationalists demand, its inclusion in one's epistemology is dubious (if intuition does not guarantee cognitive access to *X*, it can be used as a justification of *X*).

Back to America: Naturalism and Intuition

The notion of intuition, however, – as conceived of by empiricists or rationalists – has epistemological cash value for a naturalized epistemologist.³⁹ The dissolution of the analytic-synthetic split in Quine's "Two Dogmas of Empiricism," lays the basis for his naturalist program

(because all statements are empirical to some degree).⁴⁰ According to Quine, some claims though depending upon concepts that are empirical at their base require a further act on the part of the subject that relates ideas in fruitful ways. Quine writes, "[A] statement is analytic if *everybody* learns that it is true by learning its words. Analyticity, like observability, hinges on social uniformity."⁴¹ Quine calls such statements "stimulus-analytic."⁴² Analytical statements (e.g., mathematical ones) have become calcified from the stream of experience.

Quine's naturalist program depends on two arguments, one negative and one positive.⁴³ The negative argument is against first philosophy. Naturalized epistemology grew out of the ruins of its foundationalist predecessor. The positive argument is a scientific account of the acquisition of basic concepts, which has already been considered.

Foundational epistemology attempts to justify knowledge on a model akin to an axiomatic system like that of Euclid. On the foundational model, knowledge is contingent upon a finite number of first principles (the so-called self-evident, intuitive truths). On the foundational model, upon a finite number of first principles (the conceptual) rests knowledge (the doctrinal).

Also, since Popper, according to the traditional foundational epistemologist, there is a difference of the context of discovery from that of justification. How one acquires the values, practices, and knowledge (the doctrinal) says nothing about their epistemic justification. Intuition as a state to be examined by the scientist, for example, does not operate within Husserl's foundationalist program because it violates justificatory priority, where science has to rest on something deeper than itself (something other than how knowledge is acquired).

According to a naturalized epistemologist, however, empirical psychology is to explain how one acquires basic concepts which serve as the foundation of knowledge. Naturalized epistemologists use science to help explain its methods of justification. There is still what is foundational (i.e., acquired, basic concepts) and what rests upon that (the doctrinal), but one begins with an epistemic content.⁴⁴

For a naturalized epistemologist, the distinction between the context of discovery from justification is rejected. One has to separate, however, three types of cases. First are the cases where justification differs from the way claims are discovered. For example, the mathematization of electro-magnetic theory by Maxwell served as a corroboration. Yet Maxwell's mathematization played no role in the discovery of electro-magnetic theory.

Second, are the cases where features of discovery play no role in justifying a belief (e.g., hitting one's head on the bathtub may be the way one discovered X, but that would not count as the justification for X).

Finally, however, there are the cases where features of the discovery of *P* are co-extensive with the justification *P*. For example, in the case of basic arithmetic, the logic of discovery (e.g., as explained by Philip Kitcher in *The Nature of Mathematical Knowledge*⁴⁵) is isomorphic with justification.

For the naturalist, the debate about whether what one intuits has conceptual content or not is moot since scientists decides when and how (different types of) intuitions function.⁴⁶ One may have intuitions with little conceptual content (roughly, empirical ones) or ones that are highly conceptual (roughly, rationalistic ones). Intuition (in whatever form it takes) can be of service to a naturalized epistemologist once explained by cognitive psychologists. For example, pure consciousness is a state present in, say, the discovery of new theorems (a process which, in turn, is naturalized). A cognitive explanation provided by empirical science may aid in the justification for a belief. If intuition explains how one acquired a belief, its explanation can play a role in the justification of that truth-candidate.

What intuition could not do for empiricists and rationalists alike – i.e., guarantee access to something which is necessary in one's epistemological tale – naturalism can. Naturalism works backwards. It begins with epistemic content (e.g., science) and seeks to explain how it is justified (or should be justified). For the naturalist, the priority of empiricism is pragmatic, that is, beginning with practices that work.

Consider the foundation for a scientific insight. Knowledge gained by intuition – e.g., intuiting the second axiom of Peano number theory, which states that every number has a successor – serves the naturalized epistemologist (in this case, in justifying the second axiom). One has, presumably, learned, for example, adding an apple to a set of them increases the membership by one. Intuition comes, for instance, when one makes an inductive inference – "membership can go on increasing by one (because it has so in the past)," or as Peano put it for number theory: Every number has a successor. The intuition (with the apples, in the example) is codified by Peano as his second axiom.⁴⁷ As Putnam writes, "Science at best is a way of coming to know, and hopefully a way of acquiring some reverence for, the wonders of nature."⁴⁸

It has been argued that intuition can be utilized by a naturalized epistemologist in accounting for some of the truths of *P*. The knowledge produced about different types of intuitions – perceiving tables, the butter knife slipping off the counter, the end of a story, or a scientific fact – can be empirically investigated and serve in an epistemological account.

Notes

1. Empiricism claims "that experience is the only source capable of furnishing us with knowledge of the world... [A]ll knowledge originates in what is immediately perceived" (Cf. Hans Hahn, *Empiricism, Logic and Mathematics*, ed. Brian McGuinness, London: D. Reidel Pub., 1980).

2. Rationalism is the view that reason has access to truth independent of experience. Husserl calls it pure consciousness, but I will, in the most part, stick to pure experience for the sake of simplicity.

3. Gödel divides up views within the philosophy of mathematics by their proximity or distance from metaphysics (or religion) ("The modern development of the foundations of mathematics in the light of philosophy [English translation]," in *Collected Works, Volume III*, ed. S. Feferman, Oxford: Oxford University Press, 1990, p. 375). On the one hand (the right one), there is spiritualism, idealism, and theology, e.g., a priori rationalism, which is optimistic and realist. On the other hand (the left one), there is scepticism, materialism, and positivism, e.g., empiricism, which is pessimistic and relativistic. Gödel acknowledges that there are positions that have features of both (e.g., empirical theology and Schopenhauer's pessimistic idealism) (*Collected Works, Volume III*, p. 375). Gödel chastises Bertrand Russell for backing away from realism (a fault he attributes to the influence of Wittgenstein): "When he [Russell] started on a concrete problem, the objects to be analyzed (e.g., the classes or propositions) soon for the most part turned into 'logical fictions'" (*Collected Works, Volume II*, ed. S. Feferman, Oxford: Oxford University Press, 1990, p. 121). Gödel claims that there is a fact of the matter independently of whether we recognize it or not. One should believe, according to Gödel, what is not decidable now could be so in the future (*Collected Works, Volume II*, p. 268).

4. Gödel writes, "[T]hese nihilistic consequences are very well in accord with the spirit of the time..." (*Collected Works, Volume III*, p. 379). Under the nihilist spirit of the times, the antinomies of set-theory have been "exaggerated" by empiricists, but he laments that arguments

are "of no use against the spirit of the time" (*Collected Works, Volume III*, p. 377). Gödel's writes, "[T]he correct attitude appears to me to be that the truth lies in the middle or consists of a combination of the two conceptions... In any case there is no reason to trust blindly in the spirit of the time..." (*Collected Works, Volume III*, p. 381).

5. Charles Parsons, "Platonism and Mathematical Intuition in Kurt Gödel's Thought," *The Bulletin of Symbolic Logic*, Vol. 1, No. 1 (1995), pp. 44-74, at p. 51.

6. Richard Tieszen, "Mathematics" in *Cambridge Companion to Husserl*, ed. B. Smith and D. Smith, Cambridge: Cambridge University Press, 1995, pp. 438-462, at p. 438.

7. *Collected Works, Volume II*, 1990, p. 268.

8. Just because abstract objects cannot be associated with any "actions of certain things in our sense organs, [they] are not purely subjective, as Kant asserted" (*Collected Works, Volume II*, p. 268). He goes on, "Rather, they, too, may represent an aspect of objective reality, but, as opposed to the sensations, their presence in us may be due to another kind of relationship between ourselves and reality" (*Collected Works, Volume II*, p. 268). The two relationships between ourselves and reality can be cashed out in terms of our interaction with physical and abstract objects. Gödel adopts Husserl's distinction between perception of physical – as opposed to – abstract objects.

9. Tieszen writes, "We do not intuit numbers in 'straightforward' perception, but only in founded acts. The intuition of mathematical objects is said to be founded on perception because perceptual acts provide the concrete, immediate, and non-reflective basis of all our experience, and any intuition of abstract objects, by various kinds of acts of reflection." See Richard Tieszen, "Phenomenology and Mathematical Knowledge," *Synthese*, 75 (1988), pp. 373-403, at p. 387.

10. *Collected Works, Volume II*, p. 269. Gödel is committed to a faculty of cognition that allows access to mathematical truths, and links necessity to order. He writes, "One of my reasons [for belief in the continuum hypothesis] is that I don't believe in any kind of irrationality such as, e.g. random sequences in any absolute sense" [written to Tarski, see Gödel, *Collected Works, Volume II*, p. 175].

11. Tieszen writes, "There must be, in other words, a kind of 'informal rigor' in mathematics. This suggests the possibility that human minds might surpass machines in solving problems or in obtaining proofs of statements based on an understanding of the abstract meaning of statements involved. Gödel has noted this implication in many places in his writings...". See Richard Tieszen, "Gödel's Path From the Incompleteness Theorems (1931) To Phenomenology (1961)," *The Bulletin of Symbolic Logic*, Vol. 4. No. 2 (1998), pp. 181-203, at p. 190.

12. Guillermo E. R. Haddock, "Husserl's Epistemology of Mathematics and the Foundation of Platonism in Mathematics," *Husserl Studies*, 4 (1987), pp. 81-102. at p. 81.

13. Charles Parsons, "Platonism and Mathematical Intuition in Kurt Gödel's Thought," *The Bulletin of Symbolic Logic*, Vol. 1, No. 1 (1995), pp. 44-74, p. 44.

14. James observes that "the whole philosophy of perception from Democritus's time downwards has been just one long wrangle over the paradox that what is evidently one reality should be in two places at once, both in outer space and in a person's mind" (*Essays in Radical Empiricism and a Pluralistic Universe*, Gloucester: P. Smith, 1967, p. 11).

15. *Ibid.*, p. 15.

16. As James says, "Experience... has no such inner duplicity; and the separation of it into consciousness and content comes, not subtraction, but by way of addition..." *Ibid.*, p. 9.

17. *Ibid.*, pp. 5, 7.

18. *Ibid.*, p. 23.

19. Intuition could be useful for those interested, for example, in religious experiences. Religious experience is non-dualistic (neither subjective or objective), anti-intellectual (free from doubt) and primordial (i.e., one has direct, transparent access to reality). If intuition, like pure experience and consciousness, are construed in with a religious experience, they could contribute to cognitive descriptions of those types of states.

20. Phenomenology, Husserl says, is concerned with the "descriptive eidetic doctrine of transcendently pure mental process as viewed in the phenomenological attitude." (*Ideas*, tr. W.R. Boyce Gibson, New York: Allen and Unwin, 1969, p. 167). Husserl says, "We put out of action the general positing which belongs to the essence of the natural attitude; we parenthesize everything which the positing encompasses with respect to being... If I do that, as I can with complete freedom, then I am not negating this world as though I were a sophist; I am not doubting its factual being as though I were a sceptic; rather I am exercising the phenomenological epoche which also completely shuts me off from any judgment about spatio-temporal factual being" (*Ideas*, p. 61).

21. These, sciences, are based on an empiricism. Husserl acknowledges that empiricism sprang from honest motives, that is, a rigorous genealogy back to the ground of knowledge. The empiricists, however, have proclaimed experience the ground of all knowledge (*Ideas*, p. 35).

22. In describing, in order to clarify, he says: "The annulment in question is not a transmutation of positing into counter positing, of position into negation; it is also not a transmutation into uncertain presumption, deeming possible, undecidedness, into a doubt (in any sense whatever of the word): nor indeed is anything like that within the sphere of our free choice. Rather it is something wholly peculiar. We do not give up the positing we effected, we do not in any respect alter our conviction which remains in itself as it is as long as we do not introduce new judgment motives: precisely this is what we do not do. Nevertheless the positing undergoes a modification: while it in itself remains what it is, we, so to speak, put it out of action we exclude it, we parenthesize it" (*Ideas*, pp. 58-9).

23. Parenthesizing is a "specifically particular mode of consciousness" (*Ibid.*, p. 59).

24. *Ibid.*, p. 63.

25. Husserl says: "We shall therefore keep our regard fixed upon the sphere of consciousness and study what we find immanently within it. First of all, without as yet effecting the phenomenological judgment exclusions, we shall subject it to a systematic, though by no means exhaustive, eidetic analysis" (*Ideas*, p. 65).

26. *Ibid.*, p. 48.

27. Husserl writes, "Consciousness is consciousness of something" (*Ibid.*, p. 73). Husserl says: "We do not yet know... what fundamental lines of description are prescribed by the most universal essential species of mental process" (*Ibid.*, p. 173).

28. *Ibid.*, p. 177.

29. Husserl's terms should conform "faithfully to what is given" (*Ibid.*, p. 151). Husserl remarks, "We have originary experience of ourselves and of our states of consciousness in so-called internal or self perception." Yet internal perception cannot of itself be the foundation of knowledge, until it is submitted to his type of analysis.

30. Consciousness is intentional; it is intended towards some "object" (*Ibid.*, p. 231). Husserl says: "Cognitions of the essential two-sidedness of intentionality, according to noesis and noema, have the consequence that a systematic phenomenology is not allowed to direct its aim one-sidedly at an analysis of what is really inherent in mental processes and specifically of intensive mental processes" (*Ibid.*, p. 308).

31. Husserl says, "Just as every intensive mental process has a noema and therein a sense by which it is related to an object, so, conversely, everything which we call object, of which we speak, which we confront us actuality which we hold as possible or probable, no matter how indeterminately we think it, is precisely therefore already an object of consciousness..." (*Ibid.*, p. 322).

32. *Ibid.*, p. 73.

33. *Ibid.*, p. 41.

34. Richard Tieszen, "Kurt Gödel and Phenomenology," *Philosophy of Science*, 59 (1992), pp. 176-194, at p. 180.

35. Ideas are experienced by both James and Husserl as "relations." See *Essays in Radical Empiricism and a Pluralistic Universe*, p. 42.

36. *Collected Works, Volume III*, p. 383. Gödel writes, "Now one may view the whole development of empirical science as a systematic and conscious extension of what the child does when it develops in the first direction" (*Collected Works, Volume III*, p. 385). Charles Parsons also sees some idea of empiricism in Gödel, but again not developed. See C. Parsons' "Quine and Gödel on Analyticity" in *On Quine: New Essays*, ed. P. Leonardi and M. Santambrogio, Cambridge: Cambridge University Press, 1995, p. 309. Gödel does not – like Husserl did – relate primary and categorical intuition, which could be formed into a plausible tale of how mathematics is developed. Rather, empiricist's perception (which deals with physical objects) and intuition (the relation of concepts) seem to be mutually exclusive.

37. Wilfrid Sellars, for instance, has told us that appeal to a given is mythical (Wilfrid Sellars, *Empiricism and the Philosophy of Mind*, intr. R. Rorty, Cambridge: Harvard University Press, 1997, p. 13).

38. Richard Tieszen, "Gödel's Path From the Incompleteness Theorems (1931) To Phenomenology (1961)," p. 201. He goes on to only to edge one away from these concerns, but one is left unsatisfied: There is no answer to how intuition works, the mechanics, which is what one is seemingly promised by an analysis of consciousness.

39. Husserl had read James' *Principles of Psychology*, and referred to him as a "genius," for instance. See James M. Edie, *William James and Phenomenology*, Indianapolis: Indiana University Press, 1987.

40. Note that the deterioration of the Kantian distinction between *a priori* and *a posteriori* knowledge by Quine does not determine the issue of the necessity (i.e., what "necessary" means, or what, if any, of knowledge is necessary?). Also note, however, necessity can be explicated in terms of realism and be applied to the phenomenal world (e.g., scientific realists maintain necessary knowledge about the phenomenal world) since, according to the scientific realist, it is the only world.

41. W.V. Quine, *Roots of Reference*, La Salle, IL: Open Court. 1973, p. 79.

42. W.V. Quine, *Word and Object*, Cambridge: MIT Press. 1960, pp. 55, 65-9.

43. Roger Gibson, "Quine on the Naturalizing of Epistemology" in *On Quine*, pp. 89-103, at p. 89.

44. Van Frassen, "Against Naturalized Epistemology" in *On Quine*, pp. 68-88, at p. 81.

45. *The Nature of Mathematical Knowledge*, Oxford: Oxford University Press, 1984.

46. Gibson, "Quine on the Naturalizing of Epistemology," *op. cit.*

47. The second axiom: $N(x) N(x+1)$. For the naturalist, induction can rest upon itself. Note, intuition need not always have a proximate empirical analogy as has been chosen here. One can have intuitions when playing chess, for example; one makes discoveries. Induction (which the

apple example depended upon) also perhaps rests on an acquired intuition, which pushes cognition forward, as it were.

48. Hilary Putnam, *Mathematics, Matter and Method: Collected Papers*, 2 vols., New York: Cambridge University Press, 2nd ed., 1979. Vol. 1, p. xiv.

Chapter III

The Sixth Meditation

Richard Holmes

In what follows I am primarily interested in setting the stage for appreciating a set of basic problems with the enterprise of Husserlian phenomenology and then briefly sketching what I believe is a fruitful way to approach these problems.

Written as a continuation of Husserl's five *Cartesian Meditations*, the *Sixth Cartesian Meditation* was drafted by Eugene Fink and then worked on and critiqued by Husserl.¹ It is subtitled "A Transcendental Theory of Method" and was intended to show

that the methodological question in phenomenology, in the 'radical self-reflection' that phenomenology puts into practice, the question of the nature of the move back to the *beginning* beyond which questioning cannot go, is ultimately going to involve the central substantive difficulty of the nature of the difference and identity between human and transcendental subjectivity, between the subjectivity that lives and subsists with the world and the subjectivity that constitutes the world and all in it.²

This is a question of how a phenomenologist can explicate a subjectivity that both belongs in the world and yet constitutes objectivity and its world. Fink's answer is to the effect that to explicate the sense of world and subjectivity within it (again from the translators introduction) "requires a dimension of reflective analysis in phenomenology that works beyond the strict limits of the intuitional giving of something in its very self [*Selbstgebung*]." ³ That is, it seems to require we violate the fundamental principle of phenomenology to not accept "any judgment as scientific *that I have not derived from evidence*, from "experiences" in which the affairs and affair-complexes in question are present to me as "*they themselves*."⁴

For Fink this root problem concerns as well whether the intersubjective enworlding that is a necessary condition for phenomenological reflection on how world and subject are constituted "is to be characterized in terms of, and parallel to, the individuality and multiplicity of *human* subjectivity."⁵ This leads us to ask how we can develop "the analysis of primordial temporality and the metaphysics of individuation."⁶ In other words, we need an analysis of the individuation of subjectivities and their world to work out the difference and identity between human and transcendental subjectivity.

I want to focus on this analysis which underpins the further analysis of intersubjectivity by asking the question: How can I explicate the world and my subjective life within it as both the product of my subjective life and as having as part of their sense that they are independent of, and apart from, this subjective life? Put otherwise, Ego and World are subject and object poles of my constituting subjective life but are they essentially unavailable to a phenomenological analysis *and* yet essentially apparent in it? I come back to this type of answer that seems to violate the sense of what it means to do phenomenology later, but first another version of the problem and an answer.

Fred Kersten tackles the same question in his essay on the Sixth Meditation entitled: "Notes from the Underground."⁷ To set up the problem he quotes Husserl: "This division between constituting and phenomenologizing living now defines the concept of the absolute: it is the

synthetical unity of antithetical moments."⁸ What is antithetical, according to Kersten, is the subjective life that constitutes itself as an Ego and its World on the one side, and this Ego and World which are not given to it in evidence, in the strict limits of the intuitional giving of something in its very self, on the other. The question basically revolves around how the subjectivity and the world are observable and describable as objects independently and apart from the subjectivity that is world-constituting. The subjectivity that is constituting is also constituted; it is a synthetical unity of antithetical moments. The Ego and World are described and characterized as apart from and independently of the subjective life that is the focus of phenomenological analysis. And yet the Ego and World that appear as its subjective and objective poles cannot be so focused on. We must ignore or forget the subjective life in order to describe them. Kersten's own take on how this is possible relies on a phenomenological insight of Merleau-Ponty and I return to it later.

To properly explicate an answer to this question requires, I suggest, re-thinking what is usually believed to be happening as the subject and world crystallize in our experience. I start this by looking at a basic example of a subjectivity being aware of an object. I take my clue from Hume for reasons that will soon be apparent. In the *Enquiry* he states: "Nothing so like as eggs, yet no one, on account of this appearing similarity, expects the same taste and relish in all of them."⁹ Awareness of an egg includes the egg appearing with sense of an object which exists independently of my awareness of it and it stands out as such from a background of the world which includes all objects of whatever type or description. Initially, objects do not become constituted as transcendencies, instead they are given as such immediately by virtue of their always pointing beyond themselves toward further "seeings" of themselves and the system of objects within which they are found. In addition, the subjectivity appears with the sense of an Ego engaged in this awareness and who exists as a subjective pole. Just as Husserl distinguishes the object intended to from the properties imputed to it, so we can distinguish the Ego from the Ego's engaging in a particular subjective awareness. In this way we can distinguish both the subject pole and the object pole from the subjective life they are described and characterized as apart from.

The question becomes how to explicate the appearance of the Ego and the object so that their appearance is not confined and contained only in the particular awareness of an object. Or, to simplify even more, how do we explicate the appearance of the Ego such that we capture its being characterized as apart from any particular engagement in an awareness of whatever and yet retain the insight that we only have access to it through those particular engagements. This is the problem Fink and Kersten make very clear; we seem to have to step outside of phenomenology's commitment to staying within the limit of the intuitional giving of something in its very self. Or, in Kersten's terms, characterize "*the Ego apart from any engagement in mental processes, independently of the polarity of mental processes and acts, and thus the phenomenological reductions are not required to describe and characterize the structuring itself of the transcendental Ego.*"¹⁰ I have to forget that of which I am aware to be aware of the Ego and world. Put otherwise, and in Husserl's terms, a subject and its object are each the synthetical unity of antithetical moments.¹¹

Kersten suggests a solution to this dilemma can be found in considering, as does Merleau-Ponty, the example of the way Rembrandt in *The Nightwatch* makes us see a hand pointing to us by the use of the play of light and shadows that we forget, do not see, when we "see" the hand. We somehow see the hand while we do not see the premises for our seeing it—the play of light and shadows. I examine the painting and there is no finger pointing to me, only the shadow on the soldier next to him. Similarly, we become aware of the antithetical nature of seeing the Ego and World, as we advert from our subjective life to the Ego and World. We forget the subjective

processes themselves, the premises of Ego and World, which are then thematized as objects independently and apart from the subjective life. But how is it possible to both use and not see that which enables our seeing? I believe it requires working out an analogy with how to interpret quantum physics.

If I send light towards a barrier in which there are two slits, I can observe and record a pattern on the wall behind the barrier which demonstrates that light is wavelike. Einstein has proven, and I can replicate the necessary experiments to validate his proof, that light is particle like as well. Yet, if I perform this experiment using only single particles at a time – namely, single photons – then when both slits are open, the photon cannot behave as if only one were open. Rather, it conforms to a wave pattern. This means it will strike a particular place on the wall with a certain probability. It will hit someplace in the wavelike pattern caused by the interference of two waves going through the two slits, and not where it would hit if only one slit were open and a stream of single photons were going through one slit. Important to all this is seeing that, although I cannot calculate exactly where any one photon will land, I can calculate precisely the probability that it will strike at a certain place by calculating a wave function which includes the various possibilities. This wave function is a mathematical synopsis which gives a physical description of what could happen *if* I made an observation or measurement. At the point of observation the wave function collapses – it is an abrupt collapse of all the developing aspects of the wave function except for the one that actualizes; the photon hits somewhere.

The best way to understand this is to say that, until a measurement or observation is made, there exist only tendencies, or probabilities, for a photon to actualize at slit one or at slit two. No real particle called a photon existed until one actualized at slit one or at slit two. There is only a developing potentiality in which a photon is going to slit one *and* to slit two.

This is to say that, prior to my observation, the light was wavelike and could best be described by a probability function so that, if I had thought ahead to the future and had asked what would happen, I could have described the probability of a photon landing in a particular area. But unless I intervene, there is not a photon landing here, rather than there. What I expect to find comes from the future as informed by the past but only because I "get into" the situation. These probabilities are known only because of past experiences, but that too was only known because I observed and measured – because I was in-the-world. Without me, or us, light continues to be and do whatever, but if I insert myself into the situation with my observations and expectations then what-is stands out, becomes crystallized; the photon hits somewhere.

This example points out the possibility to readjust what we mean by an Ego, a single photon or an egg. I see the egg and believe it to have a certain origin, inside appearance and taste; this is contrary to Hume who could not always be sure of what his eggs would be like inside due to a lack of refrigeration. Part of what I see is its having had a continuous objective existence independently of my awareness of it. But by analogy with my interpretation of quantum physics, I can say that no object was there previously – only developing possibilities which crystallize and are later experienced as eggs or photons. As I observe, I thematize and individuate; the egg crystallizes and is meant as having been previously on its way to being the egg I now experience and mean as having been wherever and whenever.

So too in the case of a subject. When I think or say "I was reading" the 'I' was not present at the time of the reading. There was only awareness of the book; the developing possibilities which may be crystallized and make possible seeing and saying 'I'. As is the case with the Rembrandt painting, I must forget there was no I or egg in the developing possibilities and see and say "I saw

the egg." Subjects and objects are at the notional end of constitution and are the synthetical unity of antithetical moments.

As Sartre states of the relation of the self to the consciousness on which it is founded and from which it and its meaningful actions are the precipitate, there is a circuit of selfness (*Circuit de ipséité*).¹² This is a relation of the possible ways the self may be seen as carrying out its goals to the consciousness which is acting. As it acts, consciousness does so in light of possible courses of action, or of possible selves it might become. These possibles are automatically there as the horizon for the projects of consciousness, and when reflection takes place the enacted ones are then seen as having been there "already." Sartre illustrates this point: The self appears as having desired to drink from the glass while "the-glass-drunk-from haunts the full glass as its possible and constitutes it as a glass to be drunk from."¹³

There is a fusion as the possible ways of the self and its objects are developing and are merged with and evident in the present on-going subjective life. The circuit of selfness encompasses the possibles and incorporates them so that as crystallized they were "already there." Or, to use an example from George Steiner, possibly the writers of the Homeric epics were actually only one person, but he transcribed the *Iliad* and while doing so thought up the *Odyssey*, of which he was the creative author.¹⁴ As the relation of circuit of selfness implies, even as he transcribed he would see his self as possibly writing the *Odyssey*, and as having written it. As Sartre further elaborates this, "world" is the "totality of being in so far as it is traversed by the circuit of selfness." "The world (is) mine because it is haunted by possibles, and the consciousness of each of these is a possible self-consciousness which *I* am; it is these possibles as such which give the world its unity and its meaning as the world."¹⁵ The world is the synthetical unity of the possibilities and the enduring totality haunted by them.

This interpretation depends on changing the concept of objectivity so that objects are not directly objectivated and described as having properties independently of consciousness. Correlatively, there is no concern or need to believe in an objective world which founds the experienced one and makes it appear as it does. According to this interpretation, we do attribute a definite existence or property to an object independent of and prior to its being experienced. But this is a change in the concept of objectivity; a change to a type of realism which affirms that there is a real world *meant* as independent of our awareness of it but we know it only as we, the plurality of mutually incompatible awarenesses, so constitute it. The world is the crystallized product of the interaction of the possibilities which are enacted by, and which then appear as, natural phenomena. In effect, the world and all objects are postulated as being, and having been, what they are so constructed to be. In addition, and put in more Sartrean language, the World and Ego are haunted by the possible self-awarenesses which I, and we, could become, just as the photon was the set of developing possibilities before it became actual.

Although we are characterizing the Ego and World as apart from and independently of the polarity of subjective life and its objects they are within the limits of the intuitional giving of something in its very self. They crystalize in the reflection that reveals them. They are synthetical unities whose origin is present in the on-going subjective life and yet are meant as absent; as existing independently of this subjective life. Just as the hand appears to be there in the painting by Rembrandt so too do the Ego and World appear to there independently of my subjective life. As Sartre speaks of the circuit of selfness and the world so too in our analogy with quantum physics the Ego and World are to be described and explicated as subject and object whose origins are in the developing possibilities and who are haunted by them even as they become Ego and World.

Human and transcendental subjectivities are genuinely unified as moments that are not antithetical in the same way that saying a photon is going to slit one *and* slit two is not a contradiction.

The solution to the problem of how to explicate the subject as both constituting the world and itself as in the world while being independently and apart from the world appears in seeing that the subject and object are present only as I constitute them and not before. The photon was not somewhere before it is detected nor is the egg or I.

Notes

1. Eugen Fink, *Sixth Cartesian Meditation: The Idea of a Transcendental Theory of Method*, tr. Ronald Bruzina, Bloomington: Indiana University Press, 1995.
2. Ronald Bruzina, "Introduction" to Eugen Fink, *Sixth Cartesian Meditation: The Idea of a Transcendental Theory of Method*, Bloomington: Indiana University Press, 1995, pp. xviii-xlix.
3. *Ibid.*, p. lviii.
4. Edmund Husserl, *Cartesian Meditations: An Introduction to Phenomenology*, tr. D. Cairns, Dordrecht: Nijhoff Publishers, 1977, p. 13.
5. Bruzina, "Introduction," p. lviii.
6. *Ibid.*
7. Fred Kersten, "Notes from the Underground: Merleau-Ponty and Husserl's Sixth Cartesian Meditation" in *The Prism of the Self: Philosophical Essays in Honor of Maurice Natanson*, ed. Steven Galt Crowell, Dordrecht: Kluwer, 1995.
8. *Ibid.*, p. 49; Husserl, *Cartesian Meditations*, II/I, p. 157.
9. David Hume, *Enquiry Concerning Human Understanding*, Section IV, Pt. 2.
10. Kersten, "Notes," p. 52.
11. *Ibid.*
12. *Being and Nothingness*, tr. Hazel E. Barnes, London: Methuen, 1957, pp. 102 ff.
13. *Ibid.*, p. 104.
14. See George Steiner, *Errata: An Examined Life*, New Haven, CT: Yale University Press, 1998, and *No Passion Spent: Essays 1978-1995*, New Haven, CT: Yale University Press, 1998.
15. Sartre, *Being and Nothingness*, p. 104.

Chapter IV
Carnap, Husserl, Euclid, and the Idea of a Material Geometry
René Jagnow

Introduction

The second half of the nineteenth and the beginning of the twentieth centuries brought about a dramatic change in our understanding of the nature of geometry. Until then, Kant's theories of geometry had dominated a significant portion, if not all, of the philosophical scene. Kant believed that the statements of geometry were synthetic *a priori* truths, grounded in pure spatial intuition. Two discoveries in geometry shattered this view, however. The non-Euclidean geometries of Bolyai and Lobatchevsky raised doubts as to the *a priori* validity of Euclidean geometry, while the construction of geometry as a purely formal deductive system that culminated in Hilbert's work *Grundlagen der Geometrie* showed that appeal to spatial intuition was not necessary in order to derive geometrical propositions.¹ Drawing the consequences from these developments, Einstein formulated a decidedly anti-Kantian point of view on the nature of geometry, one that was defended by the logical positivists and became a standard view.² He believed that we had to distinguish between pure (formal) and applied (physical) geometry. Pure geometry was a branch of pure mathematics and as such a purely formal deductive system; the terms occurring in its sentences did not refer to either real or ideal objects.³ As a consequence, pure geometry did not appeal to intuition; its sentences were true *a priori* simply because they followed from a consistent system of axioms. Intuition entered into the picture only when such geometrical constructs were applied to reality, when their terms were interpreted with concepts referring to real elements like light-rays or pencil-lines. The truths of the resulting geometry, that is, of applied geometry, became empirical statements. Here, too, there was no need to appeal to anything like pure intuition.

Rudolf Carnap also rejected Kant's idea of *a priori* synthetic judgments.⁴ Yet, in his first work, his doctoral dissertation *Der Raum* from 1922, he pursued a project that was strongly influenced by the neo-Kantianism of the Marburg school and by Husserl's mature philosophy of science.⁵ In this work, Carnap attempted to reconcile the new results of geometric research with Kant's idea of spatial intuition as an *a priori* source of geometric knowledge. Like Husserl, he believed that this could be done by assuming in addition to pure and applied geometry a third type of geometry. In order to realize this project, Carnap adopted Husserl's general typology of theoretical sciences that the latter had developed most fully in *Ideen I* (1913).⁶ Husserl had categorized these sciences according to their degree of abstraction and the corresponding epistemic status of their knowledge claims. The most general type was characterized by the category "formal ontology" (*formale Ontologie*). The sciences falling under it provided a general formal structure and yielded analytic *a priori* knowledge. The second type of science was concerned with ideal objects and their relations to each other. These sciences fell under the category "material ontology" (*materiale Ontologie*) and yielded synthetic *a priori* knowledge. Finally, the "sciences of fact" (*Tatsachenwissenschaften*) were concerned with actual objects of experience and yielded empirical knowledge.⁷ Carnap changed the terminology slightly, but also distinguished between three types of geometry, namely formal, intuitive, and physical, and asserted that they correlated with Husserl's three types of science.⁸ In particular, intuitive geometry was a synthetic *a priori* science or, as Husserl would say, a "material geometry."

I believe that it is difficult to escape the appeal of Kant's idea of a geometry whose propositions are neither purely formal consequences following from an arbitrarily accepted system of axioms, nor empirical truths in the sense of applied geometry and to simply dismiss Carnap's and Husserl's suggestions of a material geometry. My goal in this paper is to formulate a coherent notion of such a geometry. I will first criticize Carnap's account of a material geometry in his doctoral dissertation and show that it fails for two reasons: intuition is restricted to a limited region of space and material geometry is constructed as an axiomatic system in the contemporary sense.⁹ In the second part of this paper, I will then show that Husserl had earlier provided an account of spatial intuition that allows us to avoid Carnap's first problem. In the last part of this paper, I will suggest a non-standard interpretation of Euclid's method in the *Elements* that circumvents Carnap's second problem.¹⁰

Problems with Carnap's Concept of a Material Geometry

Within the context of the standard view of geometry and its clear distinction between pure (formal) and applied (physical) geometry, the main challenge for a philosopher who wants to do justice to the intuitions underlying Kant's idea is to formulate a notion of a material geometry that is truly distinct and does not collapse into either of these two geometries. In his doctoral dissertation *Der Raum*, Carnap establishes a distinction between the three types of geometry by ascribing to them separate subject matters that function as different sources of spatial knowledge. Formal space is the subject matter of formal geometry, physical space the subject matter of applied geometry, and intuitive space the subject matter of material geometry.¹¹ Accordingly, in order to assess his suggestion, we have to understand these three concepts of space and the way in which they function as sources of spatial knowledge.¹²

Carnap defines mathematical or formal space as a system of formal relations. The following quote shows how this has to be understood:

If we understand a general structure of relations not as one consisting of relations between [individually] determined objects of a sensible or non-sensible domain, but rather between completely undetermined relational terms of which we know only that from a connection of a certain kind we may infer a connection of another kind, then formal space is a general system of relations of a special kind.¹³

Whereas geometric relations are commonly said to hold between specifically geometric objects like points, lines, and planes, the relations of formal geometry contain only empty spots, or place-holders, as their relata. They are considered independently of any actual or ideal subject matter. Such a formal system of relations defines a structure that can be filled or interpreted with any isomorphic system of objects. In order to illustrate his exposition of the notion of formal space, Carnap points out that this concept of a formal geometry was first worked out by Hilbert in his *Grundlagen der Geometrie* in 1899.¹⁴ In this work, Hilbert established a system of axioms that implicitly defined various geometric relations such as 'to lie on' and 'between,' independently of any particular system of geometric objects. The set of axioms was complete in such a way that Hilbert could deduce from it *all* the propositions of Euclidean geometry by purely logical means. But in contrast to Hilbert, Carnap did not restrict his concept of formal space only to Euclidean geometry. Rather, he included a multiplicity of spaces in this category by distinguishing between formal spaces with different numbers of dimension on the one hand and between topological,

projective, and metric formal spaces on the other. In effect, he recognized an infinite number of formal spaces. In order to do justice to this multiplicity of constructible spaces, Carnap diverted from Hilbert's method in the *Grundlagen* and took the more general approach of a theory of continuous series of more than one dimension as suggested by Russell in his *The Principles of Mathematics*.¹⁵ Carnap believed that only this method was general enough to provide an adequate tool for constructing all the different types of formal space as purely logical systems of relations.

Physical space, according to Carnap, is the concrete space of actual experience. It is a system of mathematically representable relations between experientiable objects such as visible points or edges of physical objects. Carnap writes:

Those matters of fact, as, for example, the observation that the edge of this body stands in a certain spatial relation to a particular edge of another body, constitute the system of relations of physical space.¹⁶

Further, physical space can be measured and has a complete metrical structure. In this context, Carnap points out that the spatial facts [*Tatbestand*] given in actual experience, i.e., the observable coincidence relations, alone do not suffice to determine the metrical structure of physical space. The reason for this is that the practice of measurement presupposes a certain stipulation, namely either the stipulation of what a straight line is or a measure-stipulation. The former simply consists in defining a certain natural object as being straight, as, for example, a light-ray. The latter requires three different stipulations: a certain natural object is defined as a rigid body; two points on it are being marked; and a measure-unit is being ascribed to them. Once established either of these stipulations will allow a physicist to construct the entire mathematical structure of physical space, including its metric. According to this argument, the structure of physical space is determined by two different elements: its form as given through the immediately observable spatial facts and certain stipulations based on free choice. Only together they determine its structure.

For Carnap, intuitive space is a system of relations between the essences of actual objects of spatial experience. He writes:

We understand intuitive space as the structure of the relations between 'spatial' forms understood in the usual sense, that is, the line-, surface-, and space-elements whose determinate peculiarities we apprehend on the occasion of perception or also in mere imagination. These peculiarities do not yet concern spatial facts present in empirical reality. Rather, they concern only the 'essence' of these objects, which can be recognized in any of their representatives.¹⁷

We can understand Carnap's characterization of intuitive space better if we unpack the reference to Husserl's notion of *Wesensschau*, or eidetic seeing, implicit in this quote.¹⁸ Carnap believes that *Wesensschau* is a capacity of the human mind that allows a geometer to apprehend the essences of empirical spatial objects, like points, lines, and surfaces, by observing or imagining individual instances of them. For Husserl, the essences given in acts of *Wesensschau* do not merely represent general features of empirical reality. Rather, they are idealities in the sense of ideal objects.¹⁹ That Carnap agreed with this Husserlian view of the nature of essences becomes apparent in a later part of his doctoral dissertation where he states that the objects of intuitive space are apprehended as specifically spatial objects but not as objects of actual empirical intuition.²⁰ The only remaining option is that they are ideal objects. Intuitive space is then a system

of relations between ideal points, lines, planes, etc. that represents the essential form of the space of actual experience. In other words, it is an idealization constituted in acts of *Wesensschau*.

But Carnap believes that *Wesensschau* alone is insufficient to constitute intuitive space as a whole, i.e., as a total system of relations (*Gesamtgefüge*). The reason for this is that empirical intuition allows us to "derive knowledge only about spatial objects of a limited size."²¹ Since the idealizations of *Wesensschau* always depart from perceived or imagined empirical objects, they can never reach beyond a limited region of space. This leads Carnap to constitute intuitive space in two steps. He departs from the axiomatic system of geometry presented in Hilbert's *Grundlagen der Geometrie* and shows which of its axioms are valid within an intuitable region of space. Afterwards, he establishes a number of principles or demands (*Forderungen*) that allow him to extend these axioms to a system that comprises a totality of spatial relations. I will not explicate the details of Carnap's analysis, but rather simply state the results. Carnap finds that Hilbert's axioms of Euclidean geometry can be verified by intuition only in small areas, or more precisely, only in infinitesimally small areas.²² Intuitive space as a whole is thus characterized by what Riemann had called "flatness in the smallest areas."²³ Riemann has shown that this type of space leaves open the particular curvature values of each point. Accordingly, Carnap's concept of intuitive space so far is more general than Kant's and contains Euclidean space as a special case.

Carnap broadens his concept of intuitive space even further. He believes that the concept of three-dimensional metric space can be generalized in various ways and that the resulting spaces also deserve to be called intuitive. Further dimensions can be added to three-dimensional space, thus constituting *n*-dimensional metrical spaces. One can alternatively abstract from the congruence of lines and angles and consider only the system consisting of the basic concepts "point," "line," and "plane," thus constituting a three-dimensional projective space. One can further abstract from the geometric concepts "straight line" and "Euclidean plane" and consider only the relations between lines and surfaces in general, thus constituting a three-dimensional topological space. Finally, one can lift the restriction of three dimensions in projective and topological spaces, thus constituting *n*-dimensional projective and topological spaces.²⁴ An *n*-dimensional topological space is the most general structure common to this infinite multiplicity of spaces. Carnap believes that this structure represents the general condition for the perception of the matters of fact and, therefore, calls it the *a priori* form of spatial intuition.²⁵

We can now state the difference between formal, intuitive, and physical space and show how they function as separate sources of spatial knowledge. Carnap sums up his position in the following passage:

The relation of R [formal space] to R' [intuitive space] is that of a species of systems with specific properties of order but undetermined objects to a system with the same properties but with determined objects, namely intuitable spatial objects. The relation of R' [intuitive space] to R'' [physical space] is that of a form of intuition to a system of this form containing objects of actual experience.²⁶

Accordingly, the three types of space are distinct because they contain objects belonging to different ontological realms. Formal space is a purely formal species; its objects are entirely undetermined with respect to their non-formal properties. Intuitive space is a system of specifically spatial, but ideal, objects – ideal points, lines, etc. Physical space is a system of relations between objects of actual experience. Given this, formal, intuitive, and physical space function as sources of spatial knowledge in the following way: The epistemic function of formal space is exhausted

by the demand that it can be defined as a continuous series of more than one dimension. The construction of such a purely formal-logical system is not restricted by any external constraints. In this sense, it is independent from experience and thus *a priori*. Since its theorems are derived from purely logical laws, Carnap calls them "analytic." The properties of the ideal objects of intuitive space, on the other hand, are intuitively accessible through *Wesensschau* and, therefore, provide a source of synthetic knowledge. This knowledge is *a priori* because the *Wesensschau* departs from the observation or imagination of one instance and does not need further empirical input.²⁷ Finally, the structure of physical space must be discovered through observation of actual sensible objects and thus gives empirical knowledge.

In order to evaluate the coherence of Carnap's suggestion for a material geometry, we have to ask whether intuitive space as he defines it can in principle serve as a source of *a priori* synthetic knowledge. In his dissertation, Carnap claims that this is the case because the different types of intuitive space retain an intimate connection to the intuition of a limited spatial region. He specifies four different relations between a limited region of space and the various types of intuitive space: 'whole-part', 'being-contained-in', 'being-built-up-of', and 'general-particular.' Three-dimensional Riemannian space is intuitive because it contains intuitively accessible regions as its parts. *N*-dimensional metric space is intuitive because "all intuitible objects that are known to be part of three-dimensional metrical space [are also contained] in an *n*-dimensional metric space; and . . . all these higher level objects are built up of parts given in intuition."²⁸ Finally, projective and topological spaces deserve to be called intuitive, because they relate to other intuitive spaces as a general to a particular.²⁹ Of these four relations, the whole-part relation is the crucial one, because the extension of directly intuitible space to the full space depends on it and the latter serves as the starting point for the further generalizations. If the whole-part relation cannot account for the intuitive nature of the different types of three-dimensional Riemannian space, then the other relations will also be unable to do this for their respective spaces. Since my goal is to criticize Carnap's notion of intuitive space, it is thus sufficient to consider the whole-part relation alone and to ask whether intuitive space as constituted by Carnap really is a composite of idealizations of intuitively accessible parts.

That this is not the case is a result of the fact that Carnap actually does not extend the intuitively accessible regions; but rather he extends a purely conceptual construct, namely an axiomatic system. In order to constitute intuitive space, he proceeded from Hilbert's axioms, isolated a subset that could be verified by *Wesensschau*, and extended it to a total structure. The intention that lead Hilbert to construct his axiomatic system was to represent the structure of Euclidean space by purely conceptual means and to divorce geometry from intuition. Thus, not only the subset of axioms isolated by Carnap, but also its extension to a total structure are purely conceptual constructs – a fact of which Carnap was well-aware as the following quote shows:

Intuitive space is an order structure of which we can certainly circumscribe conceptually its formal type, but, like everything intuitible, not its particular properties. Here we can only point to contents of experience, namely to intuitive-spatial objects and relations: points, line-segments, plane-elements, volume-elements, the lying of a point on a line or in a volume, the intersection of two lines, etc.³⁰

Given this, his assertion about the whole-part relation is to be understood as the claim that idealizations of intuitively accessible regions are parts of the structure described by the axiomatic

system. This, however, is not possible because the spatial regions and the newly constructed total space are entities belonging to different levels of abstraction. The spatial regions that are intuitively given are idealizations effected by acts of *Wesensschau*. Although the regions are idealizations, they are concrete in the sense that they are being apprehended in intuitive acts and concern a domain of specifically spatial objects. The total space, in contrast, is nothing other than the structure picked out by the formal axiomatic system. Thus, intuitively accessible spatial region and total space belong to ontologically different types and the former cannot be part of the latter. Carnap has committed a category-mistake. Intuitive space as a conceptual construct can not serve as a source of synthetic *a priori* knowledge. Carnap's notion of intuitive space collapses material into formal geometry.

We can illustrate the fact that the objects of the intuitively accessible region belong to a different category than those in the space constructed through Carnap's extension by means of the following example. Carnap believed that Hilbert's axiom I,1 was verifiable through *Wesensschau*. The axiom states that "for any two points there exists (at least) one line that contains each of them."³¹ *Wesensschau* allows the geometer to verify axiom I,1 because for any two intuited points he/she can also intuit a line on which they both lie. One of the principles by which Carnap extends his axioms to a total system demands that axiom I,1 should also hold for space as a whole. Since intuition is always restricted to a limited region of space, there exist points in the total space that are further apart than the limits of any such region. For any two points of this kind, the geometer can no longer intuit a line which contains both of them. He/she therefore cannot verify axiom I,1. Carnap's demand simply stipulates that such a line exist and that the axiom be true. As a result, the points and lines are characterized only by the relational properties defined through the axioms. Whereas points and lines were intuitable objects before the extension, after it they are purely formal objects. On the basis of this criticism, we can state a first condition for a coherent notion of a material geometry: it must be based on a concept of spatial intuition as a capacity that grants human beings access to the structure of space as a whole.

A second problem for Carnap's account of a material geometry arises from the fact that he understands it as an axiomatic system in the contemporary sense. The most important property of an axiomatic system in this sense is that all its propositions follow from the axioms by means of purely formal logical deductions. The particular intuitive content which allowed Carnap to establish the axioms of material geometry does not play any role in these deductions – they are content-neutral. From this it follows that geometric deductions explicate only formal, rather than specifically *spatial*, relations between intuited objects. The result is a conceptual structure that can be generalized (formalized) in the way proposed in Hilbert's *Grundlagen der Geometrie* by simply abstracting away from the specific intuitive content of the terms occurring in it, thus constructing a formal axiomatic system. The resulting axiomatic system represents the form of material geometry – a form that is common to any system of objects that exhibits the same relations.

The question now is whether this view allows us to recognize an essential difference between Carnap's material geometry and the formal system constructed from it. The way in which the former is said to differ from the latter is that the geometer understands its terms as speaking about certain objects given through *Wesensschau*. This, however, is irrelevant to the resulting structure. As we have seen in the previous paragraph, material and formal systems are constructed from axioms according to the same principles, i.e., according to the principles of logical deduction, and thus have the same structure. Accordingly, the difference between the conceptual structure represented by Carnap's material geometry and an isomorphic formal axiomatic system lies only in the geometer's intention of "seeing" the former as being about one particular intuitable reality.

But this does not amount to an essential difference between the two, because the formal system also represents perfectly well the logical structure of this particular reality. Consequently, we have to say that the material geometry suggested by Carnap is a formal axiomatic system which is interpreted by certain ideal objects accessible through *Wesensschau*.³² Thus, the assumption that material geometry is an axiomatic system in the contemporary sense also leads to its collapse into formal geometry.³³ We can now formulate a second condition for a coherent notion of a material geometry: it must not be understood as an axiomatic system in which the propositions are derived from the axioms by purely formal deductions.

Husserl and Spatial Intuition

Husserl's phenomenology could have provided Carnap with a notion of spatial intuition that would have allowed him to meet the first condition. Carnap restricted the results of *Wesensschau* to a limited region of space simply because he thought human beings could not see or imagine objects beyond a certain distance. Husserl would have agreed with this. But, his analysis of perceptual space implies that seeing a limited region requires a grasp of a structure that comprises space as a whole.

Husserl defines the notion of perceptual space, or what he also calls the "space of everyday experience," first in an early study from 1892/93. He writes:

By representation of space, we may first mean the space of intuition, that is, the space of extra-scientific experience, the space which everyone, children or adults, scholars or laymen, are able to experience in lived perception and fantasy.³⁴

Husserl's term 'intuitive space' here refers to what Carnap had called an intuitively accessible limited region of space, i.e., to perceptual space.³⁵ In his lecture course *Ding und Raum* from 1907, Husserl describes how perceptual space is experienced:

One actual bodily objectivity is seen, but it leaves open infinitely many possibilities for further objectivities in the "between." The "between" however is constituted because discrete extensions, no matter what they are, can be mediated by continuous extensions in different ways and finally continuously. Although we cannot say that empty space is seen, we have the between as an empty space, that can be filled continuously, as a mere possibility of actual mediations that are characterized by laws. We can see only bodies and with them we see the between. Space is rather implied in actual perception.³⁶

According to this passage, the representation of perceptual space, or, more precisely, the perception or imagination of space presupposes the perception or imagination of concrete sensible spatial objects. As Husserl would say, perceptual space is immediately "founded" in perception or imagination; and it is precisely this feature that distinguishes it from more abstract types of space. Moreover, perceptual space is given as an entity that can be filled or occupied with actual objects and is thus experienced as a system of possible places for those objects, or, more generally, as a system of possibilities.

Since perceptual space is founded in the experience of concrete spatial objects, Husserl first tries to understand how the latter are given in experience or, as he says, "constituted." The central

notion is what one could call a "perspectival system." Let us assume a situation in which an observer perceives a given spatially extended visual object from a fixed point in space. In this case, the object is seen only from one side. As Husserl would say, it is given only by means of a certain fixed adumbrated representation or appearing side (*Abschattung*). Since the object is experienced as a spatial object, however, this perception of one side entails a system of other possible sides which the observer would see, if he/she moved in certain ways. So, for example, if an observer perceives a car from the front, he/she will expect that successively different points of observation will give successively different pictures or sides, as Husserl calls them, like the car's doors, then its back, etc. Being only in one single position at a time, the observer will not have a fully specified idea of how these sides will actually look. Nevertheless, they will be the doors and the back of a car, of this particular car. This means that there is a law-like connection, not between concrete changes of the observer's position and concrete changes of the adumbrated representation, but rather between certain types of observer movements and certain types of adumbrational changes. According to Husserl, these types are specified *a priori* by the essence of the given spatial object. A spatial object is thus constituted as the correlate of a system of rule-governed typical perspectival changes. One perspective is actually adumbrated and the others – an infinite manifold – are given as expectations. In this sense, a perceptual spatial object is experienced as an ideality.³⁷ Perceptual space as the system of possible places for these objects is then constituted as a generalized perspectival system comprising all possible concrete perspectival systems.³⁸

Husserl argues that we can not specify *a priori* the particular law that governs the connection between the two types of change explicated in the previous paragraph; but he believes that we can show that this law has to fulfill a general condition. The most important presupposition of his argument is the fact that human beings experience rigid, or, as Husserl says, "thing-like" objects. The constitution of such objects, presupposes that an observer make a clear distinction between merely perspectival changes on the one hand and physical changes on the other.³⁹ An observer can do so only on the basis of experiences of exclusively perspectival changes, which can be of two types. First, an observer experiences purely perspectival changes if the modifications in the appearance (the changes in the adumbrated representation) of an object which is moved are completely reversed when it returns to its point of departure. Second, an observer experiences purely perspectival changes if the modifications in the appearance of an object that are caused by the observer's movements are completely reversed when he/she returns to his/her point of departure. The former presupposes that an object can freely move around in space and the latter presupposes that this is possible for the observer him/herself. By appealing to the results of Helmholtz's and Lie's mathematical analysis of free mobility, Husserl is able to derive a following general condition for the law governing the two types of change:⁴⁰

The forms of this law-like connection [that is, the laws that underlie the adumbrational changes] are bounded by the further requirement that this objectivity has to be thing-like, that is, has to be such that the manifolds contained in it exhibit fixed relations, which leave open the possibility of movement and change. But identity in motion requires a continuum of places, one that is congruent in itself.⁴¹

The constitution of rigid objects requires that they are experienced in a space that is a self-congruent continuum, i.e., that has a constant curvature, be it negative, positive, or zero.

The fact that perceptual space is founded in the experience of individual spatial objects seems to imply that the perspectival structure applies only to one part of this space, namely, to the part

that falls within the reach of the visual system. Indeed, this seems to have been Husserl's view.⁴² Yet, his analysis of the constitution of space commits him to the opposite point of view. Husserl's description of the perception of a spatial object showed that the latter includes expectations concerning the perspectival changes that would follow upon certain changes in the observer's position. Thus, spatial perception includes an implicit knowledge that I want to call "spatial intuition." Since, as Husserl argued, the expectations determine space as a structure with constant curvature, spatial intuition comprises space as a whole. As a result, an individual spatial object and a limited region of space can only be experienced as parts of a total space.⁴³ This fulfills the first condition derived in the previous section. The geometer does not need to introduce a stipulation extending the visually accessible facts to a system comprising space as a totality.

Euclid and the Practice of Geometry

The second condition that I derived from Carnap's account of a material geometry requires that it not be understood as an axiomatic system in which the propositions are derived by purely formal deductions. In other words, material geometry must be based on inferences which can explicate and carry non-formal content. In order to fulfill this condition, I want to suggest that we understand material geometry as a practice that allows a geometer to explore the perspectival structure of perceptual space by means of certain constructed spatial objects, namely geometric diagrams. I believe that this is accomplished by Euclid's method as exhibited in the *Elements*.⁴⁴ Most contemporary textbooks on Euclidean geometry understand it as a precursor of axiomatic geometry. As such, it is said to contain some confusions typical for such a pioneering project, as, for example, hidden assumptions or the reliance on the method of superposition.⁴⁵ Against this view, Ian Mueller has argued that there is a significant difference between Euclid's method and modern axiomatic geometry as presented by Hilbert – a difference that is not adequately characterized by saying that the former is simply a precursor of the latter. More specifically, Mueller writes:

For Hilbert geometric axioms are characterized by an existent system of points, straight lines, etc. At no time in the *Grundlagen* is an object brought into existence, constructed. Rather its existence is inferred from the axioms. In general Euclid produces, or imagines produced, the objects he needs for a proof.... It seems fair to say then that in the geometry of the *Elements* there is no underlying system of points, straight lines, etc. which Euclid attempts to characterize. Rather, geometric objects are treated as isolated entities about which one reasons by bringing other entities into existence and into relation with the original objects and one another.⁴⁶

According to Mueller, a Euclidean proof is based on a visual object that is constructed according to certain admissible procedures which are stated in Euclid's first three postulates.⁴⁷ If this reading of Euclid is correct, we can say that the constructive system defined by his postulates allows him to explore the structure of perceptual space, because the diagrams are nothing other than objects in it. Moreover, Euclidean geometry thus interpreted would retain an intimate connection to spatial perception and would in this way differ from formal geometry.

Whether Euclid's method in the *Elements* can be understood as a material geometry depends on whether it is possible to demonstrate that it does not collapse into an empirical science, that is, into some type of physical geometry. In the following, I will argue that Euclid's method has three

properties that prevent this: (i) the knowledge derived by it is not only approximately but absolutely certain; (ii) its results are general despite the fact that they are established on the basis of one single diagram; (iii) Euclidean geometry is *a priori* in the sense that it is grounded in a spatial structure that could not have been different.

Knowledge of the propositions derived by Euclid's method is absolutely certain because the latter restricts the reader's understanding of a given diagram in such a way that it is uniquely fixed and allows him/her to derive a proposition from it by purely logical means. I believe that this first point has been sufficiently confirmed by the long history of Euclid's *Elements*. Questions about the particular understanding of the diagrams rarely arise, and when they do, they are easily answered. Thus, the text itself provides its readers with adequate clues for interpreting the diagrams in the right way. Mueller suggested that this is mainly done by Euclid's definitions.⁴⁸ I believe that they accomplish this by focusing the reader's interest exclusively on readily recognizable qualitative features of a given diagram. This happens in two ways. On the one hand, the definitions pick out certain visual features of a diagram like lines and points, thus characterizing them as specifically geometric objects. On the other hand, the definitions show how those visual aspects of a given diagram that serve as a source of spatial knowledge are to be idealized. In the context of my suggestion, the main problem here is to explain how the definitions characterize an ideal geometric object in purely qualitative terms. If this was not the case, the properties of the geometric object would have to be approximated as an object of physics is, and geometry would end up becoming an empirical science. In order to explain how Euclid's definitions function, I will consider one example.⁴⁹ Euclid's first definition states that a "point is that which has no parts." This is often interpreted as defining a point as a limit-object, i.e., an ideal object that results from a process of continually diminishing some visual object or property.⁵⁰ Mueller's argument allows us to view this definition in a different way. A point is part of an already drawn and lettered diagram – it is given through a letter which either determines, more or less precisely, a certain place on a visual line or signifies a given intersection of different lines. Given as a feature of a diagram, a point is ambiguous with respect to its size, however. Without further information, the geometer would not know how many lines could be drawn through the same point in the same direction, for example. Thus, in order to be able to generate unique results, the geometer requires additional information that disambiguates the relation between points and lines.

In order to show the specific way in which Euclid's first definition achieves this, I want to consider two alternative definitions of a point. Heron writes that "a point is that which has no parts or an extremity without extension, or the extremity of a line."⁵¹ His first characterization of a point coincides with Euclid's. Yet, Heron seems to consider it as equivalent to the second and third definitions. Accordingly, he believes that Euclid disambiguated the notion of a point by ascribing to it zero extension. Aristotle, on the other hand, defines a point as an indivisible magnitude which has position. Thus, whereas Heron's definition appeals to the concept of extension, Aristotle's appeals to the process of division. Euclid's definition, in contrast, avoids any references to measurable notions and processes by appealing to a readily recognizable figurative feature of a visual point, namely the fact that it contains parts. It specifies criteria for the correct interpretation of a point (given by a lettered diagram) by requiring the geometer to abstract away from a certain visual feature. This does not involve approximation to a limit or measurement and appeals only to observable qualitative features.⁵²

We can give further evidence for this reading of Euclid's definition of a point. First, Euclid formulated this definition in a purely negative way. This was already pointed out in antiquity by Proclus, for example, who believed that this showed that Euclid did not want to define ideal objects

and was not a Platonist. If Euclid or whoever introduced the definitions into his text wanted to specify a point as an ideal object one would expect that he would have specified either the property that belonged essentially to this ideal object or the process according to which one could form the idea of such an object. If the goal of the definitions was to present criteria that disambiguated a given visual object, however, they would have had to have been formulated negatively. Second, Euclid seems to have thought of the part-whole relation as one that was readily recognizable in a given diagram. This can be seen from the way in which he applied Common Notion 5, which states that "the whole is greater than the part."⁵³ This notion establishes a relationship between the two relations 'greater than' and 'being-part-of.' From the way in which Euclid applies this common notion, we can see that he considered the 'part-whole' relation as primary and that he also thought that it could be recognized immediately in a given diagram. The same must then hold of a particular point: it is immediately recognized as an object containing parts. It is this feature that has to be disregarded in the actual proof. The remaining definitions function similarly to the first and also appeal to only qualitative features of the diagram.⁵⁴

Even though the geometric objects are uniquely determined with respect to their qualitative properties, Euclid's method would collapse into a type of applied geometry if its derivations were not logical inferences. Our contemporary concept of logic characterizes logical inferences as purely formal derivations. Since formal deductions cannot start from visual objects, but only from propositions or formulas, we would have to accept that Euclid's proofs can generate only empirical knowledge. I therefore want to adopt a suggestion made by John Etchemendy and John Barwise and simply accept the existence of non-formal logical inferences. Etchemendy and Barwise broaden the concept of logical knowledge by saying that it does not so much consist in formal derivation, but rather in making explicit information implicitly contained in certain representational systems. They argue that:

valid deductive inference is often described as the extraction or making explicit of information that is only implicit in information already obtained. Modern logic builds on this intuition by modeling inference as a relation between sentences of a formal language like the first-order predicate calculus. In particular, it views deductive proofs as structures built out of such sentences by means of certain predetermined formal rules. But of course language is just one of many forms in which information can be couched. Visual images, whether in the form of geometrical diagrams, maps, graphs, or visual scenes of real-world situations, are other forms.⁵⁵

According to this broader understanding of logical knowledge, a geometric diagram, or more precisely, all the geometric objects constructible by means of the postulates, can serve as a starting point for non-formal logical inferences.

The legitimacy of this broader concept of logical knowledge in this way can best be shown by considering a particular case of a non-formal logical inference. Etchemendy and Barwise give the following example:

Suppose you are a tourist in San Francisco's Chinatown, and a motorist stops and asks how to get to China Basin. You take out your map, find both Chinatown and China Basin, and tell him what route he could take.⁵⁶

They conclude from this example:

Here is a clear sense in which you have engaged in a valid piece of deductive reasoning, one whose assumptions consist in part on the information provided by the map and whose conclusion consists in the claim that a certain route will take the motorist to China Basin.⁵⁷

They continue by saying that the process of logical reasoning here consists in extracting the relevant information from the infinite amount of information contained in the map. Although this knowledge is derived from a pictorial representation of some kind and thus established by observation, it should be characterized as logical knowledge. Since the conclusion can be established by means of one single observation, no empirical generalization is required. My suggestion then is that the reasoning that takes place in Euclid's proof is of the very same nature.

As a result, we can say that the knowledge derived by Euclid's method is not empirical. First, the actual source of information, the idealized visual object, is not determined through measurement, so that approximation does not enter into Euclid's proofs at this point. Second, the reasoning that leads the geometer to the propositions is purely logical. Again approximation does not enter into the proof. Thus the certainty achieved by this method is absolute.

Let me now turn to the second point, the requirement that the proofs yield general results, despite the fact that they start from one individual object. Mueller himself believes that the Greeks never solved the problem of mathematical generality and that Euclid's proofs simply do not show that the propositions are true of all the objects they speak about.⁵⁸ More recently, however, Reviel Netz has argued that there is a way of interpreting Euclid's method that saves the generality of its proofs. Netz points out that the first interesting lesson about generality can be drawn from proofs like that of Proposition III.1, which construes the center of a circle.⁵⁹ Euclid gives the appropriate construction and then proves that the center can not be any other point than the point F, i.e., the one given by this procedure. In order to show this, he assumes that another point G be the center and demonstrates that this leads to a contradiction. After showing this for a given point G, Euclid concludes: "Similarly we can prove that neither is any other point [the center of the circle] except F." Accordingly, Euclid secures the validity of this proposition by excluding any other point within the circle from being its center. He does this simply by saying that an analogous argument can be given for any other point (except for point F). This is somewhat curious, because Euclid appeals here to a potentially infinite number of proofs. Netz concludes from this that the generality relevant to the *Elements* is likely to be generality with respect to provability, rather than with respect to the geometric results: a proof is universally valid, if it can be given for any adequate diagram. Generality thus is not truth about a domain of objects, but repeatability of proofs.

Netz supports this hypothesis by considering the structure and formulation of the proofs in the *Elements*. Consider the following proof of Proposition I, 20 as an example. (I have labeled its parts according to ancient custom.)

[*protasis* (enunciation)] *In any triangle two sides taken together in any manner are greater than the remaining one.*

[*ekthesis* (setting-out)] For let ABC be a triangle;

[*diorismos* (definition-of-goal)] I say that in the triangle ABC two sides taken together in any manner are greater than the remaining one, namely

BA, AC greater than BC,

AB, BC greater than AC,
BC, CA greater than AB.

[*kataskeue* (construction)] For let BA be drawn through the point D,
let DA be made equal to CA, and let DC be joined.

[*apodeixis* (proof)] Then, since DA is equal to AC,
the angle ADC is also equal to the angle ACD;
therefore the angle BCD is greater than the angle ADC.

And since DCB is a triangle having the angle BCD greater than the angle BDC,
and the greater angle is subtended by the greater side, therefore
DB is greater than BC.

But DA is equal to AC;
therefore BA, AC, are greater than BC.

Similarly we can prove that AB, BC are also greater than CA, and BC, CA that AB.

[*sumperasma* (conclusion)] Therefore, in any triangle two sides taken together in any manner
are greater than the remaining one. Q.E.D.⁶⁰

The proof consists of an enunciation or general statement that makes a conditional claim whose antecedent describes a constructed geometric situation and whose consequent states something that is supposed to follow from this situation. Netz represents this general conditional as $C(x) P(x)$. This is followed by the setting-out, which states a particular situation, symbolized as $C(a)$. Given this particular situation, Euclid states the definition-of-goal (*diorismos*): $P(a)$. The construction then extends the given situation $C(a)$ in such a way that the *apodeixis* can derive the particular conclusion $P(a)$. The achievements of the construction and the *apodeixis* together can be symbolized as $C(b), \dots, C(n), P(b), \dots, P(n)$. Finally, the conclusion repeats the enunciation $C(x) P(x)$. Given this representation of the structural elements of a Euclidean proof, Netz states his theory of generality as follows: Construction and *apodeixis* prove a particular case, namely $P(a)$. As such they prove the definition-of-goal (*diorismos*), rather than the conclusion (*sumperasma*).⁶¹ Now, setting-out (*ekthesis*) and definition of goal (*diorismos*) together are able to support the general claim $C(x) P(x)$. This follows from the fact that construction and *apodeixis* do not only show that $P(a)$ follows from $C(a)$, but also the provability of $P(a)$ from $C(a)$. In other words, by giving a proof for a particular geometric object, it is shown that "the same proof must be repeatable for any other object as long as the same *ekthesis* applies to that objects."⁶² This repeatability then shows the generality of the claim $C(x) P(x)$.

But how can a reader of Euclid's proofs be convinced of the provability of a particular proposition for other geometric objects? This can be explained by appeal to spatial intuition in the sense described in section two. The reader is able to accept the generality of Euclid's propositions because he/she is familiar with the structure of perceptual space, including the behavior of actual or possible ordinary spatial objects in it. Since the diagrams are such objects, the reader can anticipate how they will behave if they are changed in certain ways, i.e., under the same *ekthesis*. For example, spatial intuition shows that the construction of Euclid's proof of propositions 20 is possible with any triangle.

Even if my interpretation of Euclid's method is correct and its results are uniquely determined, material geometry thus understood could still collapse into applied geometry. If human beings could constitute intuitive space in a different way, then material geometry as the science that explicates its structure would be empirical. But intuition specifies the structure of intuitive space as a whole. If human beings have a representation of space, i.e., if they clearly distinguish between

spatial change and other types of change, space must necessarily include a constant curvature.⁶³ Accordingly, Euclid's geometry *isa priori* at least in one sense, namely in that it is a special case of the more general Riemannian space with constant curvature.

Conclusion

In this paper I argued that Carnap's notion of a material geometry was internally inconsistent and collapsed into pure (formal) geometry. The reason for this was that he constructed it as an axiomatic system in the contemporary sense and based it on a notion of spatial intuition that was restricted to a limited region of space. Shortly after the completion of his doctoral dissertation, Carnap gave up the idea of a material geometry and adopted the standard view.⁶⁴ It is likely that he changed his mind, because he realized the problems with his own early account. In sections three and four, I showed that we can define both the notion of spatial intuition and the concept of a material geometry in a way that prevents its collapse into pure or applied geometry. I therefore conclude that Carnap gave up the idea of a material geometry too soon and that it can be saved if we clarify both the concept of spatial intuition and Euclid's method in the *Elements* along the lines suggested.

Notes

1. David Hilbert, "Grundlagen der Geometrie," 1st. ed., published in *Festschrift zur Feier der Enthüllung des Gauß-Weber-Denkmal in Göttingen*, Leipzig: Teubner Verlag, 1899, pp. 3-92.

2. Albert Einstein, *Geometrie und Erfahrung*, Berlin: Springer, 1921. The most influential philosophical defense of the standard view by a logical positivist is Hans Reichenbach's *Philosophie der Raum-Zeitlehre*, Berlin: de Gruyter, 1928.

3. In his work *Space, Time, and Space-Time*, Lawrence Sklar shows that pure geometry can also be understood in a different way, namely as a hypothetical deductive system. The axiomatic system is here understood as a set of sentences of the form 'If A, then T' whereby A is the set of the axioms of the theory and T any theorem. But this notion of a pure geometry is not relevant to my further argument. Cf. Lawrence Sklar, *Space, Time, and Space-Time*, Berkeley: University of California Press, 1974, p. 105.

4. A summary of his view on geometry can be found in Rudolf Carnap, *An Introduction to the Philosophy of Science*, ed. Martin Gardner, New York: Dover Publications, Inc., 1995, Part III, pp. 125-183. This text is based on a lecture course given by Carnap in 1958 at the University of California at Los Angeles.

5. Michael Friedman has pointed out the neo-Kantian origins of logical positivism. See his *Reconsidering Logical Positivism*, Cambridge: Cambridge University Press, 1999. A more specific analysis of Rudolf Carnap's neo-Kantian background can be found in: Alan W. Richardson, *Carnap's Construction of the World. The Aufbau and the Emergence of Logical Positivism*, Cambridge: Cambridge University Press, 1998. Carnap wrote his doctoral dissertation in Jena under the supervision of Bruno Bauch who was strongly influenced by the neo-Kantianism of the Marburg school. After finishing his dissertation, Carnap moved to Buchenbach near Freiburg/Breisgau. Thomas Mormann believes that Carnap wanted to continue his studies with Husserl. He attended some of Husserl's seminars. Cf. Thomas Mormann, *Rudolf Carnap*, Munich: Verlag C.H. Beck, 2000, p. 17.

6. Husserl distinguishes between theoretical and descriptive sciences. The typology applies only to the former, which are characterized by the fact that all the theorems of such a science form an explanatory unity, i.e., a unity that can be captured in a decidable axiomatic system. The descriptive sciences, in contrast, do not exhibit such an explanatory unity. Edmund Husserl, *Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie* ed. Walter Biemel, [Husserliana III], The Hague: Martinus Nijhoff, 1950, first published 1913, § 72, pp. 132-136.

7. Cf. Edmund Husserl, *Ideen*, pp. 7-38.

8. Rudolf Carnap states this three-part distinction between geometries and its correspondence to Husserl particularly clearly in chapter four of *Der Raum: Ein Beitrag zur Wissenschaftslehre* [Kant-Studien, Ergänzungsheft. 56], Berlin, 1922, p. 60.

9. An axiomatic system in this sense is a system of axioms from which all the theorems follow by purely formal deductions.

10. E.g., Sir Thomas L. Heath, *Euclid: The Thirteen Books of The Elements*, New York: Dover Publications, Inc., 1956.

11. Carnap's main goal in his dissertation was to clarify these three concepts of space. Husserl uses slightly different terms but, in effect, accepted the same typology. He distinguished between formal space, the space of the natural sciences, and geometric space. The former two types of space were already present in a study from the early 1890's published as "Mehrfache Bedeutung des Terminus Raum." Notice also that in this study, he introduced the term 'intuitive space' which designated not the space of material geometry, but rather the space of everyday-life. Edmund Husserl, "Mehrfache Bedeutung des Terminus Raum " in *Studien zur Arithmetik und Geometrie, texte aus dem Nachlass (1886-1901)*, ed. Ingeborg Strohmeier, [Husserliana XXI], The Hague: Martinus Nijhoff, 1983, pp. 270-274. Husserl used the term 'space' in the sense of 'formal space' in his *Logische Untersuchungen* (see Husserl, *Logische Untersuchungen: Erster Band: Prolegomena zur reinen Logik*, ed. E. Holenstein, [Husserliana XVIII], The Hague: Martinus Nijhoff, 1975, p. 252).

12. A more explicit exposition and discussion of Carnap's notion of mathematical, physical, and intuitive space can be found in Alan W. Richardson, *Carnap's Construction of the World: The Aufbau and the Emergence of Logical Positivism*, chapter six, pp. 139-158.

13. "Verstehen wir unter einem allgemeinen Ordnungsgefüge ein solches von Beziehungen nicht zwischen bestimmten Gegenständen eines sinnlichen oder nichtsinlichen Gebietes, sondern zwischen durchaus unbestimmten Beziehungsgliedern, über das nur bekannt ist, daß aus der Verknüpfung bestimmter Art auf die Verknüpfung einer andern Art zu schließen ist, so ist der formale Raum ein allgemeines Ordnungsgefüge besonderer Art." Rudolf Carnap, *Der Raum*, p. 2.

14. Cf. Hilbert, "Grundlagen der Geometrie," *op. cit.*

15. Bertrand Russell, *The Principles of Mathematics*, London: Allen & Unwin, 1903.

16. "Jene Tatsachen wiederum, also z.B. der Erfahrungsbefund, daß die Kante dieses Körpers zu jener Kante des anderen Körpers in dieser bestimmten räumlichen Beziehung steht, bilden das Gefüge des physischen Raumes." Rudolf Carnap, *Der Raum*, p. 6.

17. "Unter Anschauungsraum dagegen wird das Gefüge der Beziehungen zwischen den im üblichen Sinne "räumlichen" Gebilden verstanden, also den Linien-, Flächen- und Raumstücken, deren bestimmte Eigenheit wir bei Gelegenheit sinnlicher Wahrnehmung oder auch bloßer Vorstellung erfassen. Dabei handelt es sich aber noch nicht um die in der Erfahrungswirklichkeit vorliegenden räumlichen Tatsachen, sondern nur um das "Wesen" jener Gebilde selbst, das an irgendwelchen Artvertretern erkannt werden kann." *Ibid.*, p. 6.

18. Carnap makes this implicit reference to Husserl's notion of *Wesensschau* fully explicit later on in his dissertation. *Ibid.*, p. 22.

19. Husserl writes, for example: "Das Wesen (Eidos) ist ein neuartiger Gegenstand. So wie das Gegebene der individuellen oder erfahrenden Anschauung ein individueller Gegenstand ist, so das Gegebene der Wesensanschauung ein reines Wesen." ["The essence (eidos) is an object of a new kind. In the same way in which something that is given in individual or experiencing intuition is an individual object, so is that which is given in eidetic seeing a pure essence."] Edmund Husserl, *Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie*, p. 14.

20. Carnap, *Der Raum*, p. 61.

21. *Ibid.*, p. 23.

22. Carnap's idea that *Wesensschau* allows a geometer to intuit the structure of space in infinitesimally small areas is problematic. If the results of *Wesensschau* are restricted because empirical intuition is unable to reach beyond a certain distance, why should this not also be the case with very small areas. Oskar Becker, a pupil of Husserl's, gives an extended argument justifying that intuition in the sense of *Wesensschau* can actually grasp the mathematical structure of the continuum. Becker's study was published in 1923, however, and Carnap could not have known it when he wrote his dissertation. Carnap probably just took over this idea from Husserl. Cf. Edmund Husserl, *Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie*, p. 138. See Oskar Becker, "Beiträge zur phänomenologischen Begründung der Geometrie und ihrer physikalischen Anwendung" in *Jahrbuch für Philosophie und phänomenologische Forschung* 6, ed. Edmund Husserl, Halle: Max Niemeyer, 1923, pp. 385-560, in particular, pp. 398-476.

23. Bernard Riemann, "Über die Hypothesen, welche der Geometrie zugrunde liegen," *Göttinger Abhandlungen* 13 (1867), pp. 133-152, reprinted in *Riemanns gesammelte mathematische Werke*, ed. Raghavaran Narasimhan, Berlin/New York: Springer Verlag, 1990, pp. 272-287, p. 280, Carnap refers to Riemann in *Der Raum*, p. 27.

24. *Ibid.*, p. 30.

25. *Ibid.*, p. 65.

26. "Das Verhältnis von R [formal space] zu R' [intuitive space] ist das der Gattung von Gefügen bestimmter Ordnungseigenschaften aber unbestimmter Gegenstände zu einem Gefüge dieser selben Eigenschaften, aber bestimmter Gegenstände, nämlich der anschaulichen räumlichen Gebilde. Das Verhältnis von R' [intuitive space] zu R'' [physical space] ist das einer Anschauungsform zu einem Gefüge dieser Form von erfahrungswirklichen Gegenständen." Carnap, *Der Raum*, p. 61.

27. Carnap defines the term 'apriori' in the following way: "According to the well-known distinction between 'to spring from experience' and 'to begin with experience' made by Kant this [i.e., the *a priori* status of knowledge] does not mean: knowable without experience, but 'independent of the amount of experience'." ["Nach der bekannten Unterscheidung Kants zwischen dem "der Erfahrung entspringen" und dem "Anheben mit der Erfahrung" bedeutet dies [d.h. der apriorische Status von Erkenntnissen] ja nicht: ohne Erfahrung erfaßbar, sondern: "unabhängig von der Menge der Erfahrung."] Carnap, *Der Raum*, p. 63.

28. "Anschauungsraum soll auch dieses Gebilde noch heißen, trotz der Unmöglichkeit, seine Gebilde, soweit sie selbst mehr als drei Abmessungen haben, in der Anschauung zu erfassen, weil erstens auch alle Anschauungsgebilde, die wir im R'^3m [three-dimensional metric intuitive space] kennen, im R''^nm [n -dimensional metric intuitive space] vorkommen, und zweitens auch jene höherstufigen Gebilde aus anschauungsgegebenen Gliedern zusammengefügt sind." *Ibid.*, p. 30.

29. *Ibid.*, p. 31.

30. "Der Anschauungsraum ist ein Ordnungsgefüge von dem wir wohl die formale Art begrifflich umgrenzen können, aber wie bei allem Anschauungsmäßigen nicht sein besonderes Sosein. Hier läßt sich nur auf Erlebnisinhalte hinweisen, nämlich auf die anschaulich-räumlichen Gebilde und Beziehungen: Punkte, Liniestücke, Flächenstücke, Raumstücke; das Liegen eines Punktes auf einer Linie, in einem Raumstück, das Sich-Schneiden zweier Linien usw." *Ibid.*, p. 22.

31. Carnap, *Der Raum*, p. 24.

32. An analogous argument showing that any axiomatic theory is necessarily abstract or formal was given by Roberto Torretti in *Philosophy of Geometry from Riemann to Poincaré*, Dordrecht: D. Reidel Publishing Company, 1984, pp. 191-199.

33. Husserl himself runs into this problem, because he also understands material geometry as an axiomatic system in the contemporary sense. See, for example, Edmund Husserl, *Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie*, p. 135.

34. "Unter Raumvorstellung kann fürs erste gemeint sein der Raum der Anschauung, ich meine den Raum des außerwissenschaftlichen Bewußtseins, den Raum, wie ihn alle, ob Kinder oder Erwachsene, ob Gelehrte oder Laien, in lebendiger Wahrnehmung oder Phantasie vorfinden." Edmund Husserl, "Mehrfache Bedeutung des Terminus Raum," p. 271.

35. Husserl himself calls the latter in a more adequate terminology "geometric space." *Ibid.*

36. "Eine Körperlichkeit ist gesehen, aber unendlich viele Möglichkeiten für weitere Körperlichkeiten läßt sie offen, nämlich in dem "Zwischen"; das Zwischen aber konstituiert sich dadurch, daß Dehnungsdiskretionen, wie immer sie bestehen, durch Dehnungskontinua in verschiedener Weise vermittelt werden können und schließlich in kontinuierlicher Weise. Das Zwischen als leeren, aber kontinuierlich erfüllbaren Raum, als bloße Möglichkeit gesetzlich bestimmt charakterisierter realer Vermittlungen hätten wir hier also, obschon wir nicht sagen können, daß der leere Raum gesehen sei. Gesehen sind die Körper, und mit dem Gesehenen erfaßt ist das Zwischen, das die Phantasie dann körperlich so oder so ausfüllen kann. <Der Raum> ist also eher mitgesehen." Edmund Husserl, *Ding und Raum: Vorlesungen 1907*, ed. Ulrich Claesges, [Husserliana XVI], The Hague: Martinus Nijhoff, 1973, p. 261.

37. Husserl expressed this idea already in a study about perceptual space from 1892/93, where he writes: "We called landscapes, trees, houses, and so on spatial unities and showed that they were not contents of momentary intuitions, but rather ideal objects." ["Wir nannten Landschaften, Bäume, Häuser usw. räumliche Einheiten und wiesen nach, daß sie nicht Inhalte von Momentananschauungen, sondern ideelle Objekte sind."], Edmund Husserl, "Der anschauliche Raum," in *Studien zur Arithmetik und Geometrie* [Husserliana XXI], *op. cit.*, zweiter teil, Nr. 5, p. 281.

38. Husserl actually describes the constitution of the spatial object as the correlate of a kinaesthetic, rather than a perspectival system. The kinaesthetic system coordinates changes in the qualitative aspects of the visual field with changes in the kinaesthetic sensations, that is, sensations that indicate bodily movements. Husserl used this terminology, because he was concerned mainly with what he called a real (*reelle*) analysis, i.e., an analysis of the subjective aspects of an intentional act. Ulrich Claesges reconstructs Husserl's account of the constitution of space along these lines in his *Edmund Husserls Theorie der Raumkonstitution*, Martinus Nijhoff: Den Haag, 1964, pp. 58-84. Yet, since I am critical of the possibility of a real analysis in Husserl's sense, I presented his view here in a slightly modified form, namely, in terms of what Husserl would call a "noematic analysis," i.e., an analysis in object terms. For Husserl's description of the notions of

real and noematic analysis, see, for example, *Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie*, pp. 200-224.

39. I am using the term 'rigid' in a purely visual sense because I am concerned only with visual space.

40. Husserl refers here to results of Hermann von Helmholtz concerning manifolds that allow for free mobility (cf. Helmholtz, "Über die Thatsachen, die der Geometrie zum Grunde liegen," *Nachrichten von der Königlichen Gesellschaft der Wissenschaften zu Göttingen*, (1868): 193-221; rpt. in Helmholtz, *Wissenschaftliche Abhandlungen*, vol. 2, Leipzig: J. A. Barth, 1883, pp. 618-639). Husserl was also familiar with the mathematically more sophisticated account of Helmholtz's view by Sophus Lie. See his criticism of Lie in "Philosophische Versuche über den Raum (1886-1901), Beilage IV <Verschiedene Richtungen in der Geometrie>," in *Studien zur Arithmetik und Geometrie*, op. cit., zweiter teil, p. 412.

41. "Die Formen dieser Gesetzmäßigkeit [that is, of the laws that underlie the adumbrational changes] sind dann umschränkt durch die weitere Forderung, daß diese Objektität eine dingliche sein soll, nämlich eine solche, in der Mannigfaltigkeitsdinge sich in feste Verhältnisse setzen derart, daß Möglichkeiten der Bewegung und Veränderung offen bleiben. Identität in der Bewegung setzt aber voraus ein stetiges Ortcontinuum, und zwar ein in sich kongruentes." Edmund Husserl, *Ding und Raum*, p. 243.

42. This becomes particularly clear in some of Husserl's manuscripts from the early 1920's. In these texts, he draws a distinction between immediate and distant environment (*Nahsphäre* and *Fernsphäre*), the former being restricted to the limits of the visual system. He argues that the infinite open visual space is constituted as the result of an extension of the immediate environment through the kinaesthesia of walking. Cf. Edmund Husserl, <Zur Konstitution des Raumes . . .>, Manuscript D13 I (5.-7. X. 1921, St. Mägen), housed in the Husserl-archive in Louvain, Belgium.

43. I believe that Husserl is mistaken in applying mathematical results to the space of experience. Helmholtz and Lie were concerned with idealized spaces, rather than with the necessarily imprecise structure of perceptual space. Nevertheless, the fact that perceptual space is given as a generalized perspectival system implies its homogeneity (understood in a pre-geometrical sense); otherwise, the perspectival laws would change from place to place, not allowing an observer to draw a distinction between purely spatial change and physical change. Thus, spatial intuition comprises the total structure of space.

44. Heath, *Euclid: The Thirteen Books of The Elements*, op. cit.

45. Virtually every textbook on Euclidean geometry interprets Euclid's method in *The Elements* as a precursor of a modern axiomatic system. See for example, Marvin Jay Greenberg, *Euclidean and Non-Euclidean Geometries: Development and History*, New York: W.H. Freeman and Company, 1993.

46. Ian Mueller, *Philosophy of Mathematics and Deductive Structure in Euclid's Elements*, Boston MA: The MIT Press, 1981, p. 14.

47. See also Ian Mueller's paper "Euclid's *Elements* and the Axiomatic Method," *British Journal for the Philosophy of Science* 20 (1969), pp. 289-309. David Reed and Reviel Netz have also argued that a proof in the *Elements* presupposes a correctly drawn diagram. Reed believed that the perfect imperative tense of the Postulates and the Constructions indicates that when the actual proof (*apodeixis*) begins the diagram has already been constructed. See David Reed, *Figures of Thought*, New York: Routledge, 1994, pp. 16-19. Reviel Netz, on the other hand, showed the close interdependence between the actual text of the proofs and the diagrams. The text could be

understood only on the basis of a concrete object or a diagram, because of the indexical character of the letters that refer to the geometric objects. Thus, the Greeks must have thought of the diagrams as a necessary presupposition for geometric proofs. Reviel Netz, *The Shaping of Deduction in Greek Mathematics: A Study in Cognitive History*, Cambridge: Cambridge University Press, 1999, pp. 12-68.

48. Mueller writes: "Euclid's definitions have frequently been belittled by modern commentators on the *Elements* who look at them from the perspective of the modern axiomatic method. Of course the definitions could never figure in a formal derivation, but that is just one more reason for denying that Euclid's proofs are formal derivations. The derivations should be looked at as attempts to make clear the meaning of the terms before argumentation begins, that is, to make clear the nature of the objects to be studied." "Euclid's *Elements* and the Axiomatic Method," p. 294. Originally, the definitions were not numbered as in Heiberg's and Heath's editions of the *Elements*. Rather, they were written as a kind of preamble. Cf. Netz, *The Shaping of Deduction in Greek Mathematics*, pp. 91-101. Lucio Russo has argued that the first seven definitions were not present in the original text and that they were introduced only in the first century A.D., "The Definitions of Fundamental Geometric Entities Contained in Book I of Euclid's *Elements*," *Archive for the History of Exact Sciences* 3 (1998), pp. 195-219. Yet, this does not falsify Mueller's interpretation of them.

49. I give an extended account of all the definitions in my doctoral dissertation *Geometry and Spatial Intuition: A Genetic Approach* (McGill University, 2002). I want to emphasize that I am not claiming that the actual geometric object has only qualitative properties. This would contradict much of Euclid's geometry. Since most of his propositions are metrical, the ideal geometric object must be understood as a metrical object. I am claiming only that the intuitive source of Euclidean geometry is determined solely by its qualitative properties.

50. Heath, *Euclid. The Thirteen Books of The Elements*, Vol. 1, p. 153.

51. Heron of Alexandria, *Heronis Alexandrini Opera*, ed. J. L. Heiberg, Leipzig: 1899-1914, Vol. 4.

52. I do not claim that Euclid's definition is the only possible way to convey to a reader how a point is to be interpreted. Heron's and Aristotle's definitions might also succeed if correctly understood. Moreover, a definition can be replaced with an oral explanation. My goal here was simply to point out the shift in emphasis between Euclid's definition and the other two. Clearly, whoever introduced the first definition into Euclid's text must have thought of the diagram as an object that is completely determined by certain qualitative features.

53. Heath, *Euclid. The Thirteen Books of The Elements*, Vol. 1, p. 155.

54. David Reed argued that the definitions in Euclid's *Elements* play an important in defining the subject matter of his geometry. This is another way in which they focus the reader's interest. David Reed, *Figures of Thought*, London and New York: Routledge, 1995, Part 1, pp. 1-48. See again my doctoral dissertation.

55. Jon Barwise and John Etchemendy, "Visual Information and Valid Reasoning," in *Logical Reasoning with Diagrams*, ed. Gerard Allwein and Jon Barwise, New York: Oxford University Press, 1996, pp. 160-182, p. 161. See also Jon Barwise and John Etchemendy, "Heterogeneous Logic," in *Diagrammatic Reasoning: Cognitive and Computational Perspective*, ed. J. F. Glasgow, N. H. Narayanan and B. Chandrasekaran, Cambridge: MIT Press, 1995, pp. 209-232.

56. Jon Barwise and John Etchemendy, "Visual Information and Valid Reasoning," p. 162.

57. *Ibid.*

58. Mueller writes: "It is natural to ask about the legitimacy of such a proof. How can one move from an argument based upon a particular example to a general conclusion, from an argument about the straight line AB to a conclusion about any straight line? I do not believe that the Greeks ever answered this question satisfactorily, but I suspect that the threefold repetition of what is to be proved reflects a sense of the complexity of the question." Ian Muller, *Philosophy of Mathematics and Deductive Structure in Euclid's Elements*, p. 13.

59. Heath, *Euclid. The Thirteen Books of The Elements*, Vol. 2, pp. 6-7.

60. Heath, *Euclid. The Thirteen Books of The Elements*, Vol. 1, pp. 286-287. It must be pointed out here that there are two different types of proof in the *Elements*, the so-called problems and theorems. The proof of proposition 20 is a theorem in that it proves a certain general statement. A problem, in contrast, shows how a certain constructive task can be accomplished. For example proposition I,1 shows how one can construct an equilateral triangle on a straight line.

61. Netz also believes that the word 'for,' which connects construction and *apodeixis* to the definition of goal, indicates that the former two are intended as proving the latter. Moreover, the same connector often introduces the setting-out, thus indicating that the conclusion is not supported by the *apodeixis*, but rather by the entire sequence from setting-out to *apodeixis*. Finally, the 'I say that' preceding the definition of goal can be understood as an affirmation of the provability of the enunciation. Netz, *The Shaping of Deduction in Greek Mathematics*, p. 255.

62. Netz, *The Shaping of Deduction in Greek Mathematics*, p. 256.

63. In his early view on geometry, Bertrand Russell also argued that the axiom of free mobility is *a priori*, because its denial would involve an action of mere space on things. Bertrand Russell, *An Essay on the Foundations of Geometry*, London: Routledge, 1996, first published in 1897, p. 149.

64. Already in his 1923 article "Über die Aufgabe der Physik und die Anwendung des Grundsatzes der Einfachheit," Carnap replaced Kant's synthetic *a priori* with conventional principles. Rudolf Carnap, "Über die Aufgabe der Physik und die Anwendung des Grundsatzes der Einfachheit," *Kant-Studien* 28 (1923), pp. 90-107.

Chapter V

Reductions and Relativity

Richard Feist

Introduction

According to Hermann Weyl, a physicist whose name is almost on par with that of Einstein, philosophy and physics have both been engaged in a long process of sifting properties of objects into subjective and objective categories.¹ As philosophy relegated ever more properties (such as "green") to the category of (subjective) sense qualities, physics altogether excluded ever more such properties from its objective world-view. Philosophy, as expressed by Kant's Transcendental Idealism, eventually declared that even spatial and temporal properties were ultimately subjective.² Correspondingly – but much later – science, as expressed by Einstein's Relativity Theory, also assigned spatial and temporal properties subjective status.

But Weyl does not say that the Einsteinian system is the scientific counterpart to the Kantian. The Kantian system eliminates all traces of space and time from the external world; in no way can human consciousness possess a theoretical understanding of the external world or noumena. The understanding of the external world, according to Kant, is ultimately grounded in ethics.

One would naturally ask 'what is the philosophical counterpart to Relativity Theory?' I will return to this in a moment, after considering the following example of Weyl's. From the perspective of relativity, a colour is not 'in itself' as it is experienced since the colour in itself lacks spatial and temporal properties. So, Weyl writes, relativity would not represent colour as an aether vibration. This representation involves motion, which ontologically depends on space and time. Instead, relativity maintains that a colour in itself:

...is simply a series of values of mathematical functions in which occur four independent parameters corresponding to the three dimensions of space, and the one of time.³

This description of a colour follows one interpretation of relativity theory's four-dimensional world-view. I say "one interpretation" since it is crucial to remember that different scientists and philosophers read relativity theory's ontological import in different ways.

Weyl's interpretation of relativity's world-view is by no means unique. It follows that of Herman Minkowski, the author of the geometric, four-dimensional reading of relativity theory. Weyl's attempt to embed this reading within a philosophical framework is not unique either. Science may be the offspring of philosophy, but she has repeatedly reimbursed her parent, providing powerful systematic descriptions of reality supposedly in need of foundations. Relativity Theory is perhaps the greatest of all these payments. Indeed, when it appeared in the early twentieth century, numerous philosophers struggled to be the provider of such luminous foundations. To do so would certainly increase the power and respectability of one's own philosophical system. For instance, the positivists happily read Relativity Theory as vindicating their call to jettison unobservables from physical theory.⁴

What is unique is that Weyl embeds his inherited reading of relativity's world-view within Edmund Husserl's phenomenological framework.⁵ This answers the previous question as to the philosophical counterpart to Relativity Theory. Not surprisingly, Husserl was absolutely delighted

with this. In a letter to Weyl Husserl wondered just what Einstein, "the positivist," would think after seeing that Weyl grafted relativity onto the tree of phenomenology.⁶

Even though Weyl's embedding of relativity into Husserl's phenomenology is unique, it is not entirely surprising.⁷ Weyl was a product of the Göttingen tradition in science. His Göttingen teachers – Felix Klein, David Hilbert and Herman Minkowski – held philosophy in high regard. Husserl frequently corresponded with these mathematicians, especially Hilbert.⁸ Moreover, within Minkowski's own reading of relativity's four-dimensional world-view lie the roots of Weyl's views.

Let us now consider in more detail what Weyl presents as the corresponding philosophical expression of (his interpretation of) relativity's world-view. Weyl states that to express relativity's particular world-view as a general principle is to say that:

...the real world, and every one of its constituents with their accompanying characteristics, are, and can only be given as, intentional objects of acts of consciousness.⁹

Let us call Weyl's general principle "the intentional object world-view." Admittedly, it is quite strange upon first reading. Thus, some remarks are in order. First, as mentioned, and as we shall see in detail, this has its roots in Minkowski's reading of relativity's four-dimensional world-view. Second, it is not a slip, or merely some kind of philosophical window dressing for Weyl. There is no question that Weyl often dressed up parts of his work in philosophical apparel, but this does not apply to the intentional world-view. For the intentional world-view appears in many different parts of the Weyl corpus. ¹⁰ In addition, it remains throughout the many editions of *Space-Time-Matter*, while many other principles were either heavily reworked or abandoned. Hence, strange as it is, it has a history and staying power. I submit that it should be taken seriously.

Two questions come to mind. What does Weyl mean by calling the world and its objects "intentional objects as acts of consciousness?" Moreover, why does he think that relativity theory's four-dimensional world-view is a particular instantiation of the intentional world-view? I will take up the first one and then turn to the second in the context of Minkowski's work. Weyl immediately rules out any *subjective* idealism that reduces the world and its objects to creations of consciousness; he stresses that subjective idealism is no more tenable than naïve realism.¹¹

Examining Weyl's ensuing discussion reveals an analysis of perception that mirrors Husserl's analysis of perception in the *Ideas*.¹² So the first move in clarifying the meaning of Weyl's general principle would appear to be a comparison between Weyl and Husserl on the nature of perception. This, however, is no easy task since what Husserl means by perception in the *Ideas* is a thorny issue. There is no consensus as to whether Husserl's ontological views are even clear in that work.¹³ My view here is that both Weyl and Husserl clearly held that there *is* a transcendent world. So in that sense they are both realists. However, the *meaning* of this transcendence is something that is, for both thinkers, based on consciousness. This sounds, I hold, much more mysterious than it really is. I will return to this later. For now I wish to turn to Minkowski's work and unearth the roots of the intentional object world-view.

Herman Minkowski: On Special Relativity's Geometric Structure

As is well known, Albert Einstein first put forth the Special Theory of Relativity in his 1905 paper "On the Electrodynamics of Moving Bodies," which expresses the theory in terms of particle

motion.¹⁴ Three years later Herman Minkowski (one of Einstein's mathematics professors) presented his paper, "Space and Time," which expresses Special Relativity in terms of geometry. Minkowski begins his paper as follows:

The views of space and time which I wish to lay before you have sprung from the soil of experimental physics, and therein lies their strength. They are radical. Henceforth, space by itself, and time by itself, are doomed to fade away into mere shadows, and only a kind of union of the two will preserve an independent reality.¹⁵

In sum, Minkowski's goal is to articulate the particular structure of this independent reality, a union he calls "space-time."

After admitting the radical nature of the space-time view, Minkowski backtracks, arguing that this union is within everyday experience; perceptual objects always include "places and times in combination."¹⁶ (Minkowski insists that we never notice a place without a time nor a time without a place.) Minkowski then idealizes this experiential connection of space and time calling a "space-at-a-time" a "world point." A world point is a system of values, three for space and one for time, x,y,z,t , "The multiplicity of all thinkable x,y,z,t systems of values we will christen the *world*."¹⁷ Now, "...not to leave a yawning void anywhere, we will imagine that everywhere and "everywhen" there is something perceptible." ¹⁸ Minkowski calls this "perceptible something" at a particular world-point a "substantial point."—In sum, Minkowski fleshes out his *world* in terms of "thinkable" systems of values and "perceptible" substantial points. Here are the roots of the intentional object world-view. There is, according to Minkowski, a deep connection between consciousness and the world. This connection is much like the rationalist line: that the order of the world and the order of the mind ultimately coincide.

Minkowski then considers a substantial point, presupposing that it can be recognized at various times. The point's path is a curve in the *world*; he calls this curve a "world-line." Each point on this world line can be uniquely identified via the parameter, t , where $-8 = t = +8$. The whole universe, then, can be resolved into such world-lines.

So far there is nothing specifically relativistic about this spatio-temporal model. Normally, relativistic considerations are introduced via the analysis of the concept "simultaneity." This is, more or less, the approach taken by Einstein. But Minkowski differs: he introduces the relativistic considerations as related to the non-relativistic ones via the analysis of permissible coordinate transformations.

Newton's equations, Minkowski notes, permit of a two-fold invariance. First, they are invariant under arbitrary rotations of the coordinate system. In other words, it does not matter which "direction" one chooses to call the x axis. (Or the other axes, y and z for that matter.) The crucial idea is that the axes are orthogonal. These permissible transformations reflect, Minkowski writes, the general homogeneity of space.

The second set of permissible transformations consists of arbitrary translations of the coordinate system. Intuitively speaking, we could use a coordinate system supposedly at rest or we could use a system in uniform relative motion to the former. Suppose that we have a system, S , consisting of (x,y,z) at rest. Suppose that we have another system, R , consisting of (x',y',z') that is moving uniformly with respect to S . To make things simple, suppose that S and R were initially coincident regarding their origins. Suppose that R is moving at a velocity v along the x axis of S .

At any time, t , $y = y'$ and $z = z'$. The following transformation equation relates x and x' : $x' = x - vt$.

Note that t is also the same for S and T . As Minkowski notes, it does not matter which direction we point the time axis for these systems, so long as it is pointing towards the "top of the world."¹⁹

Minkowski now turns to link these Newtonian transformations with the transformations of special relativity.

Let us begin, he says, by considering the graphical representation of:

$$c^2t^2 - x^2 - y^2 - z^2 = 1$$

Visually, this is a hyperboloid of two sheets. Now, from the discussion involving the connectedness of space and time in experience, time will be intimately connected to each transformation of these coordinates. To simplify things, and relate them to the second Newtonian invariance, Minkowski considers only those homogeneous transformations of the above equation which leave the y and z values unchanged.

What results is a simple hyperbola. Finally since we are considering time as pointing towards the "top of the world" we need only consider the upper branch of the hyperbola. The result is simply the equation:

$$c^2t^2 - x^2 = 1$$

Let us now take the x, t axes as orthogonal. Call this system, Q . The transformations of Q will result in other sets of axes, whose axes are no longer mutually orthogonal, but oblique. This set of permissible transformations of Q Minkowski calls G_c ; this set depends upon the parameter, c .

Now, suppose, Minkowski says, that we permit c to grow arbitrarily large – to approach infinity. There result is that the hyperbola flattens; its asymptotes bend towards the x axis. At the limit, the t axis vanishes and x' conforms to x . Basically, if you change the parameter, c , you modify the group of transformations. Minkowski is simply asking what happens when you allow c to grow infinitely large. The group that results from c becoming infinitely large Minkowski labels G_8 . In other words, G_8 is the set of transformations associated with Newtonian physics.

Minkowski then makes the following point regarding G_8 and G_c . He stresses that G_c is more mathematically intelligible than G_8 and so it is possible that a mathematician could have anticipated that natural phenomena would have the invariance group G_c and not G_8 . "Such a premonition would have been an extraordinary triumph for pure mathematics."²⁰ What I want to stress here is that, according to Minkowski, the real invariance group of phenomena could have been presented as a possibility within the context of pure mathematics and, on the basis of simplicity within this context, decided upon.

Another way to look at this is that even though the recognition of G_c over G_8 actually blossomed from the soil of experimental physics, this was by no means necessary; it was simply a historical contingency. Although mathematics missed this great opportunity and so can now only display "staircase-wit," it has had its senses sharpened and is able "...to grasp forthwith the far-reaching consequences of such a metamorphosis of our concept of nature."²¹

Minkowski then stresses that to call the recognition of G_c over G_8 simply a "relativity postulate" is far too weak of a term. For this recognition ultimately means that phenomena are given as a four-dimensional space-time world. (Of course we can, with limited freedom, project this given world in terms of a separate space and time.) To fully express the connotations of this

recognition, Minkowski suggests that we call it the postulate of the absolute world or the world-postulate.²² This postulate permits treating all four values, 3 space and 1 time, on the same footing.

I now diverge from Minkowski's paper in order to make a few remarks on this four-dimensional structure. Since "three dimensional existence passing through time" is replaced by a "four-dimensional existence," an "object existing over time" should be thought of as a trail or path within the four-dimensional structure, like a vein in a block of marble. The world at an instant is a three-dimensional cross-section of this four-dimensional structure.

The complete details of the four-dimensional view, of course, transcend immediate experience. Even if we grant that space and time are inseparable in our experience that does not mean that they should be thought of as identical. To do so entails that space-time is some kind of "solid block," existing all at once. Thus, temporal flow is merely subjective.²³

Now for the critical property of this four-dimensional world: suppose that we have two distinct events (flashes of light) A and B. They will have a spatial separation and a temporal separation. Normally we would presuppose that the spatial separation is absolute and the temporal separation is absolute. That is, regardless of the relative motions of observers, they would come to an agreement on these separations. This presupposition of agreement is equivalent to saying that there is such a thing as a "global instant." Geometrically, this is equivalent to saying that there is only one way to cut the four-dimensional block into a series of three-dimensional cross-sections.

The invariants of spatial and temporal separations are abandoned in the Minkowski structure. This is equivalent to abandoning the unique decomposition of the four-dimensional world into three-dimensional cross-structures. Another way to see this is that various inertial observers will report different values for the spatial and temporal separations of events A and B. What the various observers will agree upon is the *interval* between A and B. The interval is simply the square root of the observed temporal separation squared minus the observed spatial separation squared. According to this space-time framework, to ask for *the* temporal or *the* spatial separation is to ask a meaningless question.

At the end of his paper Minkowski suggests that the world-postulate "lies open in the full light of day." Thus, there will be plenty of opportunities to experimentally confirm it. These future confirmations (of which Minkowski has no doubt) will serve to sooth physicists that are reluctant to abandon the traditional view of space and time. Why will these future confirmations placate old fears? It is because they will serve to reinforce another old idea: "...the idea of a pre-established harmony between pure mathematics and physics."²⁴ I doubt that one could ask for a stronger rationalist sentiment.

Minkowski, Weyl, and Husserl: Perception

The digression into Minkowski's work was to unearth a particular orientation on the foundations of relativity theory. This orientation consists of two components. First, the higher unity, space-time, although not "directly experientable," is not entirely divorced from everyday experience since space and time are always experienced together. Second, the specific structure of this higher unity lay open to the experiences of what could be called a "mathematical consciousness," since mathematics could have anticipated physics.

These two exist within in Weyl's writings. First, he stresses that the four dimensional world, the objective world of physics, is in fact a world that physics "...endeavours to crystallize out of direct experience."²⁵ So, in some sense, this structure is implicit within the experiences of

ordinary consciousness. In a similar vein, Weyl stresses that there must be a primordial link between the world and consciousness. This link appears within consciousness as a "felt causality," which is our deepest connection to the world; it is prior to that connection we call "perception."²⁶

Second, Weyl also has a version of how the "mathematical consciousness" could have anticipated the results of physics. As we have seen, Minkowski formulated the geometric structure of special relativity and then claimed that it could have been anticipated by mathematics, that it turns out to be a mathematically simpler structure than the Newtonian system. Weyl claims that a similar event has occurred with respect to the mathematical foundations of general relativity. In its first, Einsteinian formulation, it was presupposed that parallel transfer of vector direction on Riemannian manifold could only be formulated infinitesimally. But this, Weyl insists, only goes "half way:" the notion of parallel transfer also has to be formulated infinitesimally for vector length as well. Upon doing this, a pure infinitesimal geometry will finally have been achieved and the old Euclidean demon of "comparison at a distance" finally exorcised. It was not anticipated because of the pull of prejudice on the human mind. In principle, according to Weyl, mathematicians could have directly seen his own extension of Riemannian space long before he himself in fact saw it. But mathematicians did not see it since the "mathematical consciousness" is ultimately tied to human existence, a domain of historical, non-essential contingencies.²⁷

Since there is a deep connection between the concepts ultimately surfacing in physics and human everyday experience and mathematical experience, it comes as no surprise that Weyl would turn to a philosophy like that of Husserl's, which was always concerned with the experiential origins of scientific concepts.²⁸ Indeed, Weyl, at least during the time of writing *Space-Time-Matter*, held that his mathematical investigations into the nature of space was very similar to Husserl's phenomenological investigations of essences.²⁹

Husserl's discussions of perception are notoriously complex, although his basic results are in fact quite clear. Suppose that we wish to consider our experiences of a table. The table is never present "all at once." The table is only present to consciousness in terms of its profiles. Two things must be stressed. First, Husserl admits that the real table exists; it is not a creation of human consciousness or of any consciousness whatever. Hence he rejects both subjective idealism and Berkeleyan idealism.³⁰ Second, Husserl rejects any realism that understands there to be an object existing in itself "...with which consciousness or the Ego pertaining to consciousness has nothing to do."³¹ A real, spatio-temporal object is always something that must be experientiable by consciousness, not merely in the logically possible sense but could be presented to consciousness in intuition. However, a spatio-temporal object is such that it cannot be entirely present to consciousness – not even to a divine consciousness. It is a fundamental error to assume that there could be such a consciousness to which a spatio-temporal object could be completely present.³² In Husserl's words:

It is neither an accident of the own peculiar sense of the physical thing nor a contingency of "our human constitution," that "our" perception can arrive at physical things themselves through mere adumbrations of them. Rather it is evident and drawn from the essences of spatial physical things (even in the widest sense, which includes "sight things") that, necessarily a being of that kind can be given in perception only through an adumbration.³³

This view of things, entailed by an analysis of perception, concludes that it is nonsensical to understand the thing as something existing all at once. In themselves things are profiles. This

profile metaphysics dovetails with the world-view expressed in special relativity understands an object not as an enclosed thing, existing all at once, persisting through time, but as a series of cross sections of the four-dimensional world. And so we have an answer to one of our two previous questions, namely, "why does Weyl hold that relativity's four dimensional view is a particular instantiation of the intentional world view?" Again, because both of these views essentially present the same picture of the external world.

Weyl writes that in every perception lies the "thesis of reality."³⁴ But to understand what is meant by this thesis, we cannot simply presuppose that there is a reality "out there." Rather, the meaning of this thesis must be understood based on the "data of consciousness." To abandon simple realism and turn towards examining this data of consciousness, we are in essence following Husserl's phenomenological reduction.³⁵

Now, what emerges after we introduce the phenomenological reduction? Weyl clearly states that we can bring the essence of the supposed external object to intuition.³⁶ When we do so for supposed external objects, Weyl says, we can never be sure that the current experiences of that object provide us with certainty. That is, we can never be sure that experience is providing us with a "...conclusive right to ascribe to the perceived object an existence and a constitution as perceived."³⁷ There is always the possibility that future experiences will force us to alter our conclusions. Nonetheless, Weyl, maintains that there is an essence regarding external objects that is ultimately grounded on our experiences:

It is the nature of a real thing to be inexhaustible in content; we can get an every deeper insight into this content by the continual addition of new experiences, partly in apparent contradiction, by bringing them into harmony with one another. In this interpretation, things of the real world are approximate ideas. From this arises the empirical character of all our knowledge of reality.³⁸

And so we have an answer to the other of our two questions, namely, "what does Weyl mean by calling the world and its objects 'intentional objects of acts of consciousness?'" Again, it is the rational conclusion of mind and the world that Weyl stresses, not the creation of the latter by some kind of the former.

The main point is that via an examination of our experience we can make not only epistemological but ontological claims. Again, Weyl is not making any kind of claim regarding the creation of the world via consciousness. As I read him, he is stressing that epistemology and ontology cannot be radically separated. A true understanding of the essences given in experience will dovetail with the results of science. Indeed, to suggest that epistemology and ontology are inextricably bound is a version of the idea of pre-established harmony.

Conclusion

I end on a brief note. First, the details of this paper are indeed sketchy, but I hope to have made the point that reading Weyl as trying to embed his understanding of relativity theory into Husserl's phenomenology clarifies many of Weyl's obscure comments. This reading reveals that Weyl, despite his scattered philosophical comments, is actually a fairly systematic metaphysical thinker. A study of his mathematical work in *The Continuum* will reveal a similar approach to the foundations of mathematics.³⁹

Moreover, this reading of Weyl, I suggest, helps us to further our understanding of Husserl. By his approval of Weyl's grafting relativity onto phenomenology, we gain an insight into just how closely science and philosophy can operate, a close cooperation that Husserl himself stresses.⁴⁰ Husserl insists that his phenomenological analyses of the foundations of human experience in no way prevent such cooperation. It comes as no surprise how pleased he was with Weyl's work.

Notes

1. Weyl, *Space-Time-Matter*, tr. H.L. Brose, New York: Dover Publications, 1952.
2. Clearly I am glossing over distinctions within the subjective category. But that is not crucial to my discussion. What is important is that many properties formerly assumed to have an independent ontological status were eventually stripped of such an honour.
3. Weyl, *Space-Time-Matter*, p. 4.
4. For discussion of this see Michael Friedman, *Foundations of Space-Time Theories: Relativistic Physics and the Philosophy of Science*, Princeton: Princeton University Press, 1983, Ch.1.
5. It must be stressed that Weyl's views regarding the relationship between science and philosophy changed over time. The above embedding of his applies to Weyl's thinking between the years 1918 to about 1922. And even during this time, his views were not monolithic.
6. Dirk van Dalen, "Four Letters from Edmund Husserl to Hermann Weyl," *Husserl Studies*, I (1984), pp. 1-12, at p. 4.
7. Here I am excluding an important contributor to Weyl's thinking, Henri Poincaré. Space restricts me from examining Poincaré's contributions here. For such an examination, see my "Weyl's Appropriation of Husserl's and Poincaré's Thought," *Synthese*, Vol. 132, No. 3 (2002), pp. 273-301.
8. For a discussion of this tradition in detail, see my "Husserl as Part of the Göttingen Scientific Tradition," *Science et esprit*, Vol. 52, No. 2 (2000), pp. 193-214.
9. Weyl, *Space-Time-Matter*, p. 4.
10. See Weyl, *The Continuum: A Critical Examination of the Foundation of Analysis*, New York: Dover Publications, 1987, p. 94.
11. Weyl, *Space-Time-Matter*, p. 5.
12. Indeed, Weyl says as much. See *Space-Time-Matter*, p. 319.
13. For differing interpretations of Husserl on perception see Hermann Philipse's "Transcendental Idealism" and Kevin Mulligan's "Perception," both in *The Cambridge Companion to Husserl*, Cambridge: Cambridge University Press, 1995.
14. This has been translated and reprinted in *The Principle of Relativity: A Collection of Original Memoirs on the Special and General Theory of Relativity*, by H. A. Lorentz, A. Einstein, H. Minkowski and H. Weyl; with notes by A. Sommerfeld; tr. W. Perrett and G. B. Jeffery, New York: Dover Publications, 1952, pp. 35-65.
15. Minkowski, "Space and Time," in *The Principle of Relativity*, pp. 73-91.
16. *Ibid.*, p. 76.
17. *Ibid.*
18. *Ibid.*
19. *Ibid.*, p. 77.
20. *Ibid.*, p. 79.

21. *Ibid.*

22. *Ibid.*, p. 83.

23. Einstein himself rejected the treatment of time as simply another coordinate akin to space. See Albert Einstein, *The Meaning of Relativity: Including the Relativistic Theory of the Non-Symmetric Field*, Princeton: Princeton University Press, 1956, Chapter 2, "The Special Theory of Relativity."

24. Minkowski, *Space and Time*, p. 93.

25. Weyl, *Space-Time-Matter*, p. 217.

26. *Ibid.*, p. 6

27. *Ibid.*, p. 148.

28. Again, I stress that there was a nexus of reasons pushing Weyl towards Husserl's thought; I am only here stressing one of them. Felix Klein, for instance, was concerned with the experiential foundations of mathematical concepts. So too, was David Hilbert. Most of these thinkers in Weyl's background were concerned with fighting the nominalist advance in to mathematics, spearheaded by the likes of Mario Pieri and Guiseppe Peano. For more on this see my "Husserl as Part of the Göttingen Scientific Tradition."

29. Weyl, *Space-Time-Matter*, p. 147.

30. Husserl, *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy*, First Book: *General Introduction to a Pure Phenomenology*, tr. F. Kersten, The Hague: Martinus Nijhoff Publishers, 1983, pp. 128-9.

31. Husserl, *Ideas*, p. 106.

32. See section 43 of *Ideas*, entitled, "The Clarification of a Fundamental Error," pp. 92-4.

33. Husserl, *Ideas*, pp. 90-1.

34. Weyl, *Space-Time-Matter*, p. 5.

35. *Ibid.*, p. 4.

36. *Ibid.*.

37. *Ibid.*, p. 5.

38. *Ibid.*

39. For more see my article "Weyl's Appropriation of Husserl's and Poincaré's Thought," *op. cit.*, and my "Husserl and Weyl: Phenomenology, Mathematics and Physics," in *Husserl and the Sciences: Selected Perspectives*, ed. Richard Feist, Ottawa: University of Ottawa Press, 2003.

40. Husserl, *Ideas*, p. 169.

Chapter VI

Are There Really Appearances? Dennett and Husserl on Seemings and Presence

David L. Thompson

Two things are requisite for mental intuition. Firstly the proposition intuited must be clear and distinct; secondly it must be grasped in its totality at the same time and not successively . . . If we wish to consider deduction as an accomplished fact . . . then it no longer designates a movement, but rather the completion of a movement, and therefore we suppose that it is presented to us by intuition when it is simple and clear, but not when it is complex and involved . . . Hence what I have to do is to run over them repeatedly in my mind, until I pass so quickly from the first to the last that practically no step is left to the memory, and I seem to view the whole all at the same time. Descartes, *Rules for the Direction of the Mind*, Rule XI

Introduction

Early in the last century, Husserl adopted a "Cartesian" approach to the foundation of science that he based on the presence or givenness of phenomena to intuition. Within the last decade, Daniel Dennett has developed a theory of consciousness that challenged Descartes' notion of intuition on the grounds there are no real seemings. It would therefore appear that the two would be diametrically opposed to each other. It only seems that way, or at least, that is the thesis I will defend in this paper. My claim will be that the apparent opposition occurs only when both "seeming" and "presence" are construed in a nonconstructive manner, as they traditionally are. I will argue that Dennett and Husserl creatively reinterpret these two key terms as modes of construction. When so understood, apparent opposition between the two thinkers on this point disappears. The real significance of the discussion, however, doesn't lie in the apparent dispute between our two authors: Fundamental constructive reconceptualizations of mind, consciousness and reality are at stake.

I will proceed by offering a brief exposition of Husserl's phenomenology, followed by an overview of Dennett's philosophy of consciousness. Then I will compare them under two headings, Qualia and Presence, before adding a conclusion about the significance of the issue.

Exposition of Husserl

In the natural, pre-philosophical attitude, we take it for granted that the things we perceive in the world are real. From the first stirrings of philosophy however, as early as Thales, we have distinguished between the reality of things as they are in themselves and the appearances which they present to us. It appears to us that the sun rises, but in reality it is the earth that turns. In reality, this table is composed mostly of empty space between molecules, but it seems to us to be solid. How things appear depends on our perspective, that is, on our perceptual systems, our position, our size, and so on. The term "reality," in contrast, refers to how things are in themselves, how they are without regard to perspective, or in other words, how they would be for a being without spatial, temporal or perceptual limitations – that is, for God, or for a purely rational scientist.

Husserl sets out to find an absolute foundation for the rational science of reality. Ironically, his first, and most crucial, methodological step is to suspend the natural attitude to reality, a step he calls the *epoché* or phenomenological reduction.¹ The natural, taken-for-granted belief that what we experience is real is neither confirmed nor denied by the *epoché*, but simply suspended. Husserl then proceeds by describing what we experience without concern for the question of its reality. The pure appearances we investigate he calls phenomena, from the Greek word for appearance, and the investigation of them is phenomenology. Insofar as I restrict myself to describing how things are given to me in intuition – how they appear, without regard to their reality – there is no room for error and so, Husserl claims, we have an absolute foundation for scientific knowledge.

Suspending our implicit thesis of reality is no easy task, and many errors about the nature of consciousness stem from various unnoticed failures to fully suspend this thesis. Husserl's *epoché* is to be applied to all reality, not just physical reality. Thus I can describe my experience of a triangle as having three absolutely straight sides without either committing myself to the reality of a Platonic *eidos* of triangle or denying it. My description of hearing a Beethoven symphony does not involve me adopting or rejecting any theory about the musical reality of the symphony itself over beyond any performance of it. Any belief I have in the reality of mental processes must be as thoroughly suspended as my belief in the physical. For example, if I appear to myself to be depressed, it is the phenomenon of the depression I must describe, even if some psychologist, on the basis of objective tests, declares my *real* mental state to be one of euphoria.

The failure to suspend the reality of the mental may show itself in a common misinterpretation of Husserl. Some people think that Husserl's appearances or phenomena are mental. That is, since the pure appearance of the chair is not physically real, they conclude that it must be mentally real; that is, it must be a thing in my mind. But the belief in the reality of my mind and of things in it must also be suspended by the reduction. In describing the chair as it is given to me, I describe it as it appears, namely over there across the room, not here in my head.

The difficulty we have in suspending our belief in reality is related to our tendency to think in terms of things. Etymologically, "reality" comes from *res*, the Latin word for thing. In the *Meditations*, Descartes uses *res* to denote a substance, that which depends upon nothing else for its being; a substance is "self-contained." Thus, *res extensa* is a substance because it does not depend upon thought to be what it is.² Thinking in terms of self-contained substances – of "things" – is part of the fallen lot of our pre-philosophical existence in the natural attitude.

The problem is analogous to that of the person whose only carpentry tool is a hammer and so everything looks like a nail to them. If our only philosophical category is "self-contained thing" or substance, then everything must be stuffed into that straitjacket. Let me call this error "thingification," a word that has the sole virtue that you will not easily forget it!

The most flagrant perpetrator of this error is, of course, Descartes himself. Descartes thingifies the objects of consciousness into "ideas" on the basis of his slogan that the mind can only be in contact with itself. Convinced that the mind cannot reach out to physical reality, he substitutes representative ideas as intermediaries. He then invokes God as the guarantor of the relationship between ideas and the objects in the world that they represent. I will label this position "representativism." Ideas, he claims, have content – their objective being – but they also have formal being – that is, they are things in the mind. Representativism is a form of thingification, of reification. Since appearances can have no physical reality, they must be reality of a different sort – "mental reality," thinks Descartes (mistakenly, according to Husserl).

Husserl's reduction would have us suspend belief in *all* reality, whether it be physical, mathematical, Platonic, musical or mental. An appearance is not a thing, physical or mental, and any reality it may claim to have is to be suspended. "Substance," "thing," and "reality" are concepts unsuited to the description of consciousness within the *epoché*.

The error of representativism is due, in part, to a tendency to inappropriately import categories suitable to the analysis of the physical world into our description of consciousness. While it is appropriate to make a distinction between appearance and reality within the natural attitude, it would undermine Husserl's whole point of finding an absolute foundation for knowledge if we were to import this distinction into consciousness. For if appearances are themselves real things then there is a danger that they might appear incorrectly to us. In so far as Descartes' ideas are realities in the mind they must appear to the ego in some way, from some perspective, as it were – possibly an incorrect one. It is essential to Husserl's project that appearances cannot themselves appear by means of further appearances. The apodictic certainty that Husserl aims at within the reduction is possible only because no gap can develop between what appears and some underlying reality. By suspending any claim beyond the appearance, the *epoché* eliminates the only possible source of error. A distinction between a "real" appearance and an "apparent" appearance is nonsense. It makes no sense to Husserl to say that a phenomenon – an appearance – appears one way but in reality is something else. Appearances are units of sense: what they are is what they mean for us, nothing more. They have no self-containedness, no substantiality, no reality. They have no resistance to sense. Appearances are solely what we take them to be. They are nothing but the meaning we give to them, nothing but how we "constitute" them in our experience, as Husserl puts it.³ Apodictic certainty is possible for Husserl only if the being of phenomena is exhausted by what is given. In other words, the reality–appearance distinction cannot occur within the *epoché* without undermining Husserl's project. Within consciousness, as described within the *epoché*, there is no place for "reality."

Similarly there is no place for any "theory" of reality. In describing phenomena we must not only suspend any question about their reality, we must also suspend any theoretical beliefs which we have, philosophical or scientific, about the phenomena. One of the most pervasive beliefs in modern science and philosophy since the 16th century is atomism. Atomism is the belief, endemic to mechanistic philosophy, that the world is made up of simple parts and is to be explained in terms of these parts. Whether or not this is an adequate theory of the physical world, Husserl's method requires that we suspend the theory if we are to give an unbiased description of our experience.

David Hume, for example, claims that consciousness starts with simple impressions. Husserl maintains that, far from describing what we actually experience, Hume is importing a scientific theory about the nature of material reality into his description of consciousness. An unbiased description of what we are given, claims Husserl, would show that we experience structured objects rather than simple impressions. We do not perceive a red impression; we perceive a soft red carpet.

Husserl's claim that what we are given are not simple, atomic sensations but structured, meaningful objects is, of course, his thesis of the intentionality of consciousness; consciousness is always of or about objects (in a very wide sense of "object"). But there is a danger still that if we don't enforce the reduction carefully we may fall back into thingification. The experienced chair – that is, the intentional chair – is not a chair in a self-contained manner; its sense goes beyond the individual object. To be a chair, the object must fit into the wider structure of tables, floors, rooms, human sitting and, more generally, into our whole meaningful world. An individual chair in isolation could not have the sense "chair." I could not mean something as a chair – it couldn't be

experienced as a chair-for-me – without me implicitly co-meaning its context, its background, that is, the "world." In the natural attitude we think of each chair as an in-itself, and the world as a collection of such entities. Once the *epoché* suspends our belief in reality, the chair as experienced cannot be properly described without reference to the "world" in Husserl's special technical sense as the ultimate horizon of all meaning.

To summarize, Husserl's project, to find an absolutely certain foundation for knowledge, requires that there be nothing more to phenomena than how they appear to me, how they are given to me, how they are present to me. In particular, they can have no substantiality, no self-containedness, no reality, no in-themselfness; they must be pure sense, pure for-me. They are nothing but what I constitute them to be.

Exposition of Dennett

Dan Dennett's ultimate aim is entirely different from Husserl's. He shows no interest in establishing science on a firm foundation or finding rigorously certain knowledge. His project is to *explain* consciousness, that is, to offer an account of consciousness on the basis of natural science, which he takes for granted. In this attempt, he stakes out a middle ground between, on the one side, the eliminativists and reductionists who think that in the final analysis there is no such thing as consciousness to be explained and that our only task should be to explain it away, and, on the other side, those, such as Descartes and the New Mysterians, who think that a scientific explanation of consciousness is inconceivable.

Dennett starts by offering an objective, scientific method for describing what is to be explained, namely consciousness. He calls this method heterophenomenology, which he explicitly presents as an alternative to Husserl's phenomenology, or autophenomenology as Dennett labels it. By heterophenomenology, Dennett means the process of interpreting the reports of a speaker as revealing the content of the reporter's heterophenomenological world, as revealing how things seem to the speaker.⁴ Dennett uses two analogies in explaining his method. First, in fictional worlds created by authors, such as Conan Doyle, what the author says goes. So there are trains in Sherlock Holmes' London, but there are no aircraft. The second analogy is with cultural worlds studied by anthropologists such as the (hypothetical) world of a jungle people who believe in the god Feenoman. An anthropologist must take the natives' word about what things are true in their world. The main point of the two analogies is to grant to the heterophenomenological reporter the same absolute right to say how things are in the heterophenomenological world as authors and natives have about how things are in fictional or cultural worlds. To say that such reporters must be given the last word is to say that no one else, not even a scientific observer of brain states, could ever overrule them. We must, of course, carefully distinguish reports about how things seem to the reporter from any theoretical speculations the reporter might make about why or how they seem this way. Scientific or common sense truths about realities have nothing to do with how things may or may not seem to be to the reporter. As Dennett puts it: "you get the last word" ... "You are not authoritative about what is happening in you, but only about what seems to be happening in you."⁵

For example, if we present someone with a red flash of light followed rapidly by a green one to the side of it, she will report seeing a single moving dot that changes colour half way along. Heterophenomenologists accept that this is how it seems to her and do not impose what we know about the scientific reality on her account of her experience. Despite his tendentious labeling of the moving dots as 'theorist's fictions'⁶ in giving the reporter the last word Dennett is practicing

a method very similar to Husserl's *epoché*. He is suspending both the natural attitude and scientific theories. Of course, he is applying the *epoché* not to the consciousness of his own experience, but to the reporter's text; that's what makes it heterophenomenology rather than autophenomenology. Nevertheless, his method has a similar effect to Husserl's: it insulates the heterophenomenological world from scientific theories and causes and from any claims made by realities outside the non-heterophenomenological world.

One of the main functions of the heterophenomenological method for Dennett is to drive a wedge between how things seem to the reporter and any theory the reporter might have about how they come to seem that way – that is, their causes. In the example above, for instance, some people claim that since there is no moving dot in the world, there must be an inner screen or stage on which the moving dot appears – what Dennett labels 'the Cartesian theatre.' For a dualist, this theatre is the mental space where ideas or representatives of reality are present before the inner eye of the mind. But Dennett thinks that not only dualists but many materialists also presuppose that there is some one point (in the brain, for materialists) where everything comes together to be presented to consciousness. The central thesis of Dennett's work, *Consciousness Explained*, is to reject this theory of the Cartesian theatre, while preserving the authority of the reporter over how things seem to her.

Dennett's positive account of consciousness – the "Multiple Drafts Model" – involves identifying how things seem to us with the beliefs we come to have about them, that is, with judgments, or better, with "various events of content fixation occurring in various places at various times in the brain."⁷ His hypothetical opponent, Otto, objects that this is not enough:

I know there wasn't *actually* a moving spot in the world — it's just apparent motion, after all — but I also know the spot *seemed* to move, so in addition to my judgment that the spot seemed to move, there is the event which my judgment is *about*: the seeming to move of the spot. There wasn't any real moving, so there has to have been a real seeming-to-move for my judgment to be about.⁸

Dennett thinks this argument is fallacious. He says, "postulating a 'real seeming' *in addition to* the judging or 'taking' expressed in the subject's report is multiplying entities beyond necessity. Worse, it is multiplying entities beyond possibility; the sort of inner presentation in which real seemings happen is a hopeless metaphysical dodge...."⁹ Challenging Otto's analysis of an optical illusion of pink, Dennett says, "you seem to think there's a difference between thinking [judging, deciding, being of the heartfelt opinion that] something seems pink to you and something *really* seeming pink to you. But there is no difference. There is no such phenomenon as really seeming – over and above the phenomenon of judging in one way or another that something is the case."¹⁰ The notion that something might really seem one way, but be experienced another way is nonsense.

The problem here, thinks Dennett, is our habit of positing ever more central observers.¹¹ In our everyday perception of the world, we proceed by first observing, then judging, and then expressing our judgment in words. The risk of an infinite regress of homunculi, however, prevents us from carrying this paradigm all the way in:

The Cartesian Theater may be a comforting image because it preserves the reality/appearance distinction at the heart of human subjectivity, but as well as being scientifically unmotivated, this is metaphysically dubious, because it creates

the bizarre category of the objectively subjective – the way things actually, objectively seem to you even if they don't seem to seem that way to you! ... Some thinkers have their faces set so hard against "verificationism" and "operationalism" that they want to deny it even in the one arena where it makes manifest good sense: the realm of subjectivity ... We might classify the Multiple Drafts model, then, as *first-person operationalism*, for it brusquely denies the possibility in principle of consciousness of a stimulus in the absence of the subject's belief in that consciousness.¹²

Dennett turns to the same issue of real seemings again when he discusses the "qualia argument." The qualia argument is the claim that, over and above any functional effect a cognitive state might have, it may also have a quality, e.g., redness or painfulness, of which we are conscious. It might be the case, for instance, that you see green whenever I see red, even though all our behavioral reactions, including what we say, agree with each other. This "inverted spectrum argument" presupposes that there is some objectivity to the way things seem to us, and so is another example of the "objectively subjective." Dennett maintains that, "the qualophile's story would make sense if there were a Cartesian theater ... Since there is no such Cartesian theater, however, the thought experiment doesn't make sense."¹³

Dennett's overall project is to explain consciousness, not explain it away. He maintains that his rejection of the category of the objective subjective, of real seeming, is compatible with the absolute authority of the reporter with respect to her heterophenomenological world. How things seem to a reporter is exactly how they are in her heterophenomenological world. His rejection of the claim that there are mental entities which are presented to us on the Cartesian theatre is not a denial that things seem to us in a certain way; it is not a denial that there is consciousness, only a rejection of the conception of consciousness as the observing of a mental reality.

Comparison of Dennett and Husserl

Now let me move to my main point: Husserl's description of phenomena as present to subjectivity and Dennett's rejection of real seemings share a common understanding of mental reality and of the nature of consciousness.

Qualia

The common opposition that Husserl and Dennett have to the notion of mental reality can be seen most clearly in their rejection of the Humean notion of impressions – or, as they are called in recent analytic circles, qualia.

Dennett's interest in qualia is motivated by the fact that, in his attempt to offer a naturalistic account of consciousness, he must overcome a line of argument used against functionalism by the New Mysterians, e.g., Thomas Nagel, Frank Jackson, Colin McGinn, David Chalmers, and John Searle. The claim they make is that even if we could offer a complete scientific, neurological account of all cognitive functions, there would still be something left over, the quality of our sensations, what it's like to be a conscious being, and so on. These features are scientific mysteries totally beyond the reach of science. The redness of a rose for example, or the painfulness of a pain, is said to be something more than the function these experiences have in our cognitive life. The Mysterians claim they can imagine a functionalist account of pain, for example, which would

explain all the behavioral and cognitive functions of pain, even in a zombie who has no feeling of painfulness, nor indeed any consciousness whatsoever. Over and beyond all my reactions to a red stimulus – even my verbal reactions – there is what it is like to be experiencing red. Part of their argument is that they can imagine that my colour qualia could all be inverted, so that I now experience green where I used to experience red, while all my functional relations would remain unchanged. Mary, the all-knowing colour scientist imagined by Jackson, can understand all the functional implications of colour stimuli, but if she has not actually experienced redness there is something she still doesn't know.¹⁴

Dennett rejects the qualophile argument by challenging the claim that we are capable of imagining such scenarios in detail. In an ingenious examination of the inverted spectrum thought experiment, Dennett argues that we cannot isolate pure qualia from the network of dispositions within which they are experienced. The assumption that we can is another instance of belief in the Cartesian theatre. According to Dennett's own Multiple Drafts Model of consciousness, colour stimuli on the retina go to many different parts of the brain and give rise to dispositions to respond and act in various ways – including, of course, to react verbally by labeling the experience. There is no one Cartesian screen on which a quale could be inverted once and for all. He puts the following words into the mouth of his interlocutor, Otto:

Consider the way the pink ring seems to me right now, at this very moment, in isolation from all my dispositions, past associations and future activities. *That*, the purified isolated *way it is with me* in regards to colour at this moment – that is my pink quale.¹⁵

Dennett responds, "Otto has just made a mistake. In fact, this is the big mistake, the source of all the paradoxes about qualia..."¹⁶ We cannot isolate impressions in this way. Dennett proposes instead to identify qualia with the sum total of all these innate and learned associations and reactive dispositions. He says:

What qualia *are*, Otto, are just those complexes of dispositions. When you say "*This is my quale*," what you are singling out, or referring to, *whether you realize it or not*, is your idiosyncratic complex of dispositions. You *seem* to be referring to a private, ineffable something-or-other in your mind's eye, a private shade of homogenous pink, but this is just how it seems to you, not how it is. That "quale" of yours is a character in good standing in the fictional world of your heterophenomenology, but what it turns out to be in the *real* world in your brain is just a complex of dispositions.¹⁷

Dennett's move here, once we make allowances for his naturalism, is very similar to Husserl's attacked on atomism. Qualia are, after all, just the modern instantiation of Hume's simple impressions. Husserl's objection is that all unities of consciousness take their sense from their context, their world, from what they mean for us. It may seem at first sight – that is, before the *epoché* suspends the natural attitude – that there are sensations such as colours which are like individual things-in-themselves within the mind, which are just *there* whether we notice them or not (visible perhaps to God?). A full phenomenological description within the reduction, however, shows that what we actually experience are colours attributed to objects which in turn fit into the larger horizon of sense.

The problem here is an inadequate description of what it is to be given or to be present to consciousness. Hume misunderstands presence as punctual, as if only an undivided point in space or time can be directly experienced – a misunderstanding he inherits from Descartes, as my masthead quotation shows. For Husserl, to say that a phenomenon is present to my consciousness is to say that it has a sense for me, a meaning. A particular phenomenon is present before me as a chair, that is, it has the meaning "chair" for me. But a "chair" is not just a point of colour or a set of points of colour; it has a structure that is three-dimensional and dispersed in space and time. It must, for example, have another invisible side that is related to my ability to walk around it and perceive it from another perspective. Similarly, a phenomenon that occupies only an instant in time could not be a chair; the sense "chair-for-me" correlates essentially to my disposition to repeat the perception of it at a later time. Part of the sense of "chair" is its role in life, its function of supporting me when I sit down. As a meaning unity, the chair as phenomenon is given against a horizon, the background of the world, which is related to my capacities for action and perception. According to Husserl, an adequate description of the experience of a chair requires that we describe its presence as a dispersed structure and not as atomistic, instantaneous, and punctual, as Hume misunderstood it.

Of course, unlike Husserl, Dennett is a naturalist. His dispositions are cognitive processes in the brain that causally explain why things seem to us the way they do. Husserl is a transcendentalist. His horizon of sense is a non-natural – that is, a non-causal – structure of meaning relationships. Nevertheless they agree that consciousness is not a matter of some simple, real entity, a quale or an impression, just being there, juxta-posed to the mind's eye. To be conscious of something is to integrate it into our world.

Presence

I think the similarity of Husserl's and Dennett's arguments about impressions and qualia is based on an even more fundamental agreement: They both agree that a fundamental mistake is made if consciousness is conceptualized as mental reality. What is this mistaken concept of consciousness? It is the notion that the contents of consciousness are *really present*.

In the natural attitude, common sense understands vision as a relationship between the observer and an observed thing that is real. "Real" here means that the existence of the object is independent of the observer or of the observing. Our natural attitude towards a seen object is that it is a thing-in-itself that is present in so far as it occupies a place in space and a moment in time. It would be there even if it were not observed, and its presence to the observer is an external, real and causal relationship which occurs by happenstance, as it were, because the observer happens on the scene. The thing is present like a bump on a log! This kind of presence is contrasted with absence. If a chair is not present in the room, then it is absent from the room. The notions are exclusive: a thing cannot be both present and absent, at least not in the same place and time. Indeed, it is the unity of space and time that defines this kind of presence, so we might perhaps call this "punctual presence," or "juxta-presence." A chair is juxta-present in the room because the chair and the room share the same space and time. In this, optically-based way of thinking, a thing is present to an observer in so far as the two happen to be juxtaposed in space at the same time.

The visual metaphor involves the following implications: there is an object, the eye, which is doing the seeing; the eye offers only one perspective from among many; the object itself cannot be identified with any perspective, that is, there is more to it than appears, in other words, it has reality beyond its appearance. It is exactly this structure that is captured by the Cartesian theatre

and by the Cartesian notion of an idea. The problem with such Cartesian or punctual presence – juxta-presence – is that it is conceived of as an objective relation. It is an external, causal relationship. No one has to *do* anything for a thing to be juxta-present.

However appropriate this analysis may be for visual perception, it leads to problems when it is used metaphorically as "mental presence." The epitome of such punctual, juxta-presence is, of course, the Humean impression; the impression is present just by being in the right (mental) place and time. I think that Husserl too, in his description of consciousness, is initially influenced by metaphors taken from vision. In speaking of the givenness or presence of an object to consciousness, he uses terms such as seeing (*sehen*), intuition, (intellectual) vision, etc. But these terms imported from visual perception carry with them some heavy baggage which Husserl wants to reject: the reality-appearance distinction; the notion that the observer is an object; an understanding of reality as non-perspectival, as independent of the observer; and, especially, the interpretation of presence as spatio-temporal proximity. These are all ultimately misleading since they imply that the only way an object can be validly seen is when the object is *really* there before me, that is, when we share a unity of space and time. The visual metaphor carries with it the implication that presence to consciousness refers to real presence or juxta-presence.

While Husserl may occasionally, especially in his early work, characterize presence as simply givenness, he never interprets it in a Cartesian or Humean way but struggles to find an alternative understanding.¹⁸ The alternative notion of presence Husserl develops – let me call it "phenomenological presence" – is presence as sense. It is the meaning that I attribute to things that determines how they are experienced, how they are for me. Sense, he insists, must be "constituted," built by me. The bestowal of sense is an act performed by an Ego.¹⁹ To be (phenomenologically) present to consciousness is to have a sense for consciousness, that is, to be constructed in consciousness by a sense-bestowing act.

What Dennett says is very similar:

The absence of representation is not the same as the representation of absence. And the representation of presence is not the same as the presence of representation. But this is hard to believe. Our conviction that we are somehow *directly acquainted* with special properties or features in our experience is one of the most powerful intuitions confronting anyone trying to develop a good theory of consciousness.²⁰

The Cartesian mistake is to try to understand the experience of presence, the representation of presence, in terms of direct acquaintance with a reality within consciousness. Whether Cartesians be dualists or materialists, they are stuck with a misconception of presence as things all coming together somewhere and at some time, i.e., juxta-presence. (There may here be a covert reliance on God, or some Absolute Subject, who is always *there* for mental reality to be present to, even when no human subject is conscious of it.) For Dennett there is no point in the brain where things all come together. Rather there are content fixations in different places and times throughout the brain that result in us having the series of beliefs about things which constructs our heterophenomenological world. There is nothing "real" to presence; there is only the seeming. That's what consciousness is.

How things seem for us – that is, in Husserlian terms, how objects are (phenomenologically) present to consciousness – is what we believe them to be, that is, how we take them to be. For Dennett, things seem to us to be present as a result of "judgments" or content fixations. For Husserl, objects are present to consciousness in so far as consciousness has constituted them with a sense.

For Dennett the heterophenomenological world of seemings has a coherent, integrated structure because each of the brain's content fixations occurs within a vast network of other fixations, dispositions, memories and purposes. For Husserl, an object has a sense only insofar as it is embedded in a background, the horizon of the world, that is, our total network of meanings. Of course, the constitution of sense by Husserl's transcendental ego, or even by transcendental intersubjectivity, seems a far cry from the construction of the heterophenomenological world by fixations of content due to causal, neural networks in the brain. In reality, however, the two analyses are not as different as they appear.

Conclusion

I wish to emphasize once again, in conclusion, the radical disparity between Husserl's project and Dennett's project. Husserl sets out to find a solid foundation for science in the investigation of consciousness. Dennett wants to explain consciousness on the basis of science. What they have in common is their conception of the nature of consciousness, or at the very least, their agreement about what consciousness is not. The naive notion – that we are conscious of mental realities – shared by common sense, science, Descartes and much philosophical debate, is rejected by both of Husserl and Dennett. There is nothing "real" in consciousness, says Husserl; there is only how things appear to us. That is, as Dennett puts it, there are no real seemings.

Notes

1. Edmund Husserl, *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy, Book I*, tr. F. Kersten, The Hague: Martinus Nijhoff Publishers, 1982, p. 59.

2. R. Descartes, *The Philosophical Works of Descartes*, tr. E. Haldane and G.R.T. Ross, New York: Cambridge University Press, 1911, Vol. 1, *Meditation II*. Since Descartes believes that extended substance depends upon God, this way of putting it is not quite correct. Perhaps he would have done better to say that something is real or substantial insofar as it is considered from the viewpoint of God.

3. Husserl, *Ideas, Book I*, p. 204.

4. D. C. Dennett, *Consciousness Explained*, Toronto: Little, Brown & Company, 1991, pp. 72-78.

5. *Ibid.*, p. 96.

6. *Ibid.*, p. 97.

7. *Ibid.*, p. 365.

8. *Ibid.*, p. 134.

9. *Ibid.*, p. 134.

10. *Ibid.*, p. 364.

11. *Ibid.*, p. 316.

12. *Ibid.*, p. 132.

13. *Ibid.*, p. 393.

14. Frank Jackson, "Epiphenomenal Qualia," *Philosophical Quarterly*, 32 (1982), pp. 127-136.

15. Dennett, *Consciousness Explained*, p. 386.

16. *Ibid.*

17. *Ibid.*, p. 389.

18. His struggle is highlighted, but seriously confused by Jacques Derrida, *Speech and Phenomena and Other Essays on Husserl's Theory of Signs*, tr. David B. Allison, Northwestern University Press, 1973. A much more successful interpretation is offered by Lilian S. Alweiss, "The Presence of Husserl," *Journal of the British Society of Phenomenology*, 30 (1999), pp. 59-75.

19. Of course, within the *epoché* we must be careful not to misunderstand this meaning-bestowing Ego as itself any kind of reality, any kind of thing (or substance) – as Descartes mistakenly thinks. It is not the "empirical ego" – my self as a real object that Psychology might study – but the "Transcendental" Ego whose acts constitute or construct what I experience.

20. Dennett, *Consciousness Explained*, p. 359.

Chapter VII
Other Bodies and Other Minds in Edith Stein:
Or, How to Talk about Empathy

Judy Miles

In this paper, I will defend Stein's discussion of empathy from certain feminist critics who have claimed that it is incorrect to describe empathy as "projection." My aim here is to show that it is not only correct to talk about empathy as "projection" but that doing so helps to solve certain philosophical problems about the Other that any other view of empathy would leave untouched.

Empathy is defined in the *Oxford English Dictionary* as "the power of projecting one's personality into (and so fully comprehending) the object of contemplation." This definition has its origin in the aesthetics of the 19th century German psychologist Theodor Lipps and it was his work that served as the basis for Edith Stein's 1916 phenomenological analysis of empathy. Lipps promoted a theory of "Einfühlung" (translated as "empathy") that accounted for how we can comprehend an aesthetic experience or a work of art. He claimed that we "project ourselves into" the work in order to understand it. Arnulf Zweig summarizes Lipps' approach by saying that "Empathy, according to Lipps, is an act of sympathetic projection into objects or persons distinct from the agent." 1 Stein points out in her autobiography, *Life in a Jewish Family*, that "What Husserl, judging by his brief indications, thought of as 'empathy' and what Lipps designated as such apparently had little in common."2 Since Husserl never detailed exactly what empathy is, Edith Stein set out to do so. She spells out her method in the first paragraph of her dissertation:

All controversy over empathy is based on the implied assumption that foreign subjects and their experience are given to us. Thinkers deal with the circumstances of the occurrence, the effects, and the legitimacy of this givenness. But the most immediate undertaking is to consider the phenomenon of givenness in and by itself and to investigate its essence."3

Stein concludes this section by saying,

All these data of foreign experience point back to the basic nature of acts in which foreign experience is comprehended. We now want to designate these acts as empathy, regardless of all historical traditions attached to the word. To grasp and describe these acts in the greatest essential generality will be our first undertaking.4

So empathy for Stein is the act of grasping foreign experience and she aims to describe what this grasping consists in. She describes the essence of empathy by comparing it with other acts:

Let us take an example to illustrate the nature of the act of empathy. A friend tells me that he has lost his brother and I become aware of his pain. What kind of an awareness is this? I am not concerned here with going into the basis on which I infer the pain. Perhaps his face is pale and disturbed, his voice toneless and strained. Perhaps he also expresses his pain in words. Naturally, these things can all be investigated, but they are not my concern here. I would like to know, not how I arrive at this awareness, but what it itself is.5

Stein then goes on to compare empathy with outer perception. We certainly have no outer or direct perception of another's pain. Our experience of our own pain is what Stein calls a "primordial" or first-hand experience. Our awareness of another's pain is non-primordial or second-hand but the experience we have of becoming aware of his pain (our awareness of our awareness of his pain) is itself, of course, primordial for us. So the empathized experience – the pain of the Other in this case – is non-primordial for us. But his pain – that which we are trying to grasp – is of course primordial for the person with whom we are empathizing. Hence, empathy is a non-primordial experience that announces a primordial one. Our own experiences, too, can be non-primordial for us when they are given in memory, expectation or fantasy. Stein describes this in the following example:

I actively bring to mind a former joy, for example, of a passed examination. I transfer myself into it, i.e., I turn to the joyful event and depict it to myself in all its joyfulness. Suddenly I notice that I, this primordial, remembering 'I', am full of joy. I remember the joyful event and take primordial joy in the remembered event. However, the memory joy and the memory 'I' have vanished or, at most, persist beside the primordial joy and the primordial 'I'. Naturally, this primordial joy over past events can also occur directly. This would be a mere representation of the event without my remembering the former joy or making a transition from the remembered to the primordial event. Finally, I may be primordially joyful over the past joy, making the difference between these two acts especially prominent.⁶

Notice that this is all about one's reflection on one's own experience. The very same procedure, however, occurs when the object of reflection is someone else's joy. Stein continues:

Now let us take the parallel to empathy. My friend comes to me beaming with joy and tells me he has passed his examination. I comprehend his joy empathically; transferring myself into it, I comprehend the joyfulness of the event and am now primordially joyful over it myself. I can also be joyful without first comprehending the joy of the other. Should the examination candidate step into the tense, impatient family circle and impart the joyful news, in the first place, they will be primordially joyful over this news. Only when they have been 'joyful long enough' themselves, will they be joyful over their joy, or perhaps as the third possibility, be joyful over his joy. But his joy is neither given to us as primordial joy over the event nor as primordial joy over his joy. Rather it is given as this non-primordial act of empathy that we have already described more precisely.⁷

Several contemporary women writers have raised objections to this way of talking about empathy, however. We have seen that the Oxford English Dictionary defines empathy as "the power of projecting one's personality into the object of contemplation" and this certainly seems to capture Edith Stein's understanding of the notion. The four authors of *Women's Ways of Knowing*, however, complain that the OED's definition of empathy as "projection" favors the masculine point of view. They write, "this phallic imagery may capture the masculine experience of empathy, but it strikes many women – Nel Noddings, for example – as a peculiar description of 'feeling with.'"⁸ Empathizing requires knowing what the feelings the Other is having feel like, but it does

not require that one simultaneously share those feelings as sympathy does. My objection to these women's objection lies in their claim that the OED's definition of empathy, which involves *mental* projection, somehow favors the masculine experience of empathy. I take them to mean, when they complain about phallic imagery, that since the masculine experience of sexuality involves physical projection that an experience involving mental projection necessarily favors males.

This argument seems to me unsound for at least two reasons. First, it does not follow that empathy, which involves mental projection, has anything to do with the (stereotypic) male experience of sex. I take the kind of "projecting" which empathy involves to be very much like the experience an actress has when "putting herself in character." She contemplates the character she is about to portray and imagines what it would be like to be that person. She imagines herself in the other's place. This is necessary to being able to portray a role convincingly and one's skill at doing this is what distinguishes good acting from bad. If it is correct to model acts of empathy on acts of sexuality, and if empathy is necessary to good acting, then it would seem to follow that women would generally be better actors than men. But acting seems to be one of the few professions in which there never has been any claim of a "gender war" regarding skill. We just don't say that someone is likely to be good at acting because of his or her gender.

My second point about the objection to seeing empathy as projection is that, if one redefined empathy so that it favored the "feminine point of view" (whatever that might be), one would still be favoring one gender over the other. Men could then claim that the definition unfairly favored the *female* experience of empathy and hence disadvantaged *them*. This would not mean that the definition had been improved; it would only mean that men and women had exchanged places as the victims of injustice. This would hardly be progress.

Nel Noddings, however, *does* want to suggest that to redefine empathy in favor of women would be an improvement over the OED's definition. She objects that empathy is defined in the OED as "projection" and claims that this is a false description. She says empathy (again, "feeling with" on her view) is more like reception than projection. "I do not project. I receive the other into myself, and I see and feel with the other."⁹ While the idea of "receiving the other into myself" might seem a kinder, gentler image than that of "projection" I think that Noddings' description is actually the wrong way to talk about empathy and not Stein's or the OED's.

Noddings also wants to object to the claim that we "put ourselves in the other's place" in empathizing. But this just *is* what we seem to do. It's certainly not that the Other is coming into *our* situation, as the description "receiving them into ourselves" suggests. The point is that we are trying to understand another mind outside ourselves – a mind that is outside us and that remains itself *while* being understood by us. The example of an actress "getting into character" serves well again here. When we try to understand another we try to put ourselves in that person's mind or situation. How better to describe this mental activity than by projection? Stein's example of being joyful over someone else's joy is clearly a case of putting ourselves in that person's place – not of bringing them into ours. Furthermore, while Noddings objects to the images the word "projection" creates, there is good reason to object to the image of "taking the Other into myself." It suggests that the Other is being enveloped by me and that the Other's identity is being altered or even obliterated *as* the Other. But this is precisely what we *don't* want to bring about. We don't want to be changing the Other in the process of trying to comprehend the Other for then empathy would not be a way of knowing another mind; it would simply be a way of altering it. This is the philosophical beauty and utility of Stein's view of empathy, namely, that it allows one to

understand a mind outside our own while permitting that other mind to remain a subject – to remain *itself*.

So what now is the advantage of saying we are "receiving the Other into ourselves" over saying we are "projecting ourselves into" the Other? Simply that of getting away from the word "projection." I think this redefinition is well intentioned at best and absurd at worst.

So what does all this amount to? What does it really matter whether empathy is described in terms of projection or reception? Well, the point I have just made about empathy (as traditionally defined) leaving the Other intact is one very important implication of the definition. What is so useful about the traditional notion of empathy is that it is a way of perceiving the Other's mind without altering it at the same time. There needs to be such a provision for us to communicate at all, and it seems that empathy, as traditionally conceived, is the best way of describing this process. W.V. Quine's paper "Promoting Extensionality" summarizes some of his most relevant points concerning the role empathy plays in language acquisition. I will conclude by showing how Quine's examples of empathy provide further reason for seeing empathy in the way Stein has described it.

The context of Quine's comments about empathy is that of propositional attitudes. Claims like 'x believes that p', 'x hopes that p', 'x says that p', and the rest – are in conspicuous violation of extensionality. We may well believe that p and not that q, though both be true.

What is worse, even scandalous, is that these idioms violate the substitutivity of identity: the putting of equals for equals. How can something be true and false of the same thing under different names?

Yet these idioms are useful to the point of indispensability. Moreover, I think they are rooted in the earliest stages of language. I picture the earliest idiom of propositional attitude as 'x perceives that p', where 'p' stands for an observation sentence such as 'It's raining', 'That's milk', 'That's a dog'. When the mother is monitoring the child's utterance of such a sentence, she has to empathize with him. She imagines herself in his place, facing in the same direction, and then checks whether she, thus oriented, feels moved to volunteer the sentence herself. In short, she checks, however inarticulately, whether the child really perceives that it's raining, that it's milk, that it's a dog. This much in the way of an idiom of propositional attitude, all unspoken, is essential to the very handing down of language from generation to generation; for observation sentences are the child's entering wedge to language.¹⁰

Quine goes on to say that when Frege was confronted with the problem of the failure of substitutivity of identity, he concluded "that in those idioms the recalcitrant terms have changed their reference and taken to referring to what would normally be their meanings, or senses, rather than their normal objects." Quine claims that empathy can help answer a philosophical question about this failure of substitutivity and his example suggests that he also sees empathy in terms of putting oneself in the other's place. He continues:

A better solution is suggested by the mother's relation to the child in monitoring his observation sentence; namely empathy. When someone ascribes a propositional

attitude to someone, he impersonates that person to some degree. The subordinate clause of the construction is uttered from the subject's point of view, somewhat as if from the subject's mouth. No wonder substitutivity of identity fails; the subject, poor fellow, didn't know the things were identical. Likewise for failure of extensionality: the subject would have been unprepared to interchange the two coextensive clauses in question, simply because he didn't know they were coextensive.¹¹

I do not have time to discuss the full implications of Quine's claim that empathy may be the answer to the puzzle about the failure of substitutivity but I wanted at least to mention his examples because his suggestions are such interesting ones and because they offer further evidence that empathy is ordinarily understood to be projection and not reception.

I now want to anticipate an objection Nel Noddings might have to my own. I suspect she would deny that the Other *is* altered or obliterated when taken into oneself.

But even if the Other isn't altered, "reception" just does not seem to be as natural or accurate a word for the process our minds go through in what we typically call "empathy." "Projection," rather, comes up over and over in the literature and in our everyday descriptions of our experience. We "transfer ourselves into the experience of the other" as Stein says or we "put ourselves in the other's place" as an actress says or we "impersonate" or "utter as if from the subject's mouth" as Quine says.

These descriptions have a ring of truth which descriptions of empathy as reception lack.

Notes

1. *Encyclopedia of Philosophy*, New York: Macmillan, 1967, Vol. 4, p. 485.
2. Edith Stein, *Life in a Jewish Family*, Washington, DC: ICS Publications, 1986, p. 277.
3. Edith Stein, *On the Problem of Empathy*, 3d. rev. ed. Washington, DC: ICS Publications, 1989, p. 3.
4. *Ibid.*, p. 3.
5. *Ibid.*, p. 6.
6. *Ibid.*, p. 13.
7. *Ibid.*, pp. 13-14.
8. Mary Field Belenky, Blythe McVicker Clinchy, Nancy Rule Goldberger, and Jill Mattuck Tarule, *Women's Ways of Knowing*, New York: Basic Books, 1986, p. 122.
9. Nel Noddings, *Caring*, Berkeley: University of California Press, 1984, p. 30.
10. W.V. Quine, "Promoting Extensionality," *Synthese*, 98 (1994), p. 145.
11. *Ibid.*

Chapter VIII

Edith Stein and Inter-Subjectivity

Ernest J. McCullough

Philosophers are lined with eyes within
And, being so, the sage unmakes the man.
In love, he cannot therefore cease his trade;
Scarce the first blush has overspread his cheek,
He feels it, introverts his learned eye
To catch the unconscious heart in the very act.
His mother died – the only friend he had, –
Some tears escaped, but his philosophy
Couched like a cat sat watching close behind
And throttled all his passion. Is't not like
That devil-spider that devours her mate
Scarce freed from her embraces?

– Ralph Waldo Emerson (1803-1882) 1

Introduction

Emerson's poem provides an artist's objections to subjective idealism in 19th century philosophy. The critics to whom Edmund Husserl objected most vigorously in his later years were those who read subjective idealism into his transcendental idealism. They did not understand his position, he argued. It was symptomatic of the crisis for science, for philosophy, and for culture generally that such a misunderstanding could exist. The crisis is no less present to us in the seventy years following Husserl's death in 1938, when philosophy seems reduced to the role of a servant to the empirical sciences and divided into a host of seemingly incompatible disciplines each denied the role which Husserl would give it of a unified foundational discipline. The problems of subjectivity, objectivity, and inter-subjectivity become the matters of the greatest moment and concern for Husserl in later works such as the *Cartesian Meditations* and the *Crisis of European Sciences and Transcendental Phenomenology*.² His friends and students – Martin Heidegger, Roman Ingarden, Edith Stein and others – were at odds with him as to the true nature of phenomenology.³

The concerns of Husserl's friends and students centred on three critical issues: his neglect of "being," the tendencies to an objectionable subjective idealism, and his attitude to the history of philosophy and metaphysics. In Stein, these questions lead first to an interest in expansion of his notion of inter-subjectivity. The problem of inter-subjectivity arose to some extent out of Husserl's notions of humans as monads without windows, which Husserl tempers with the notion of empathy.⁴

A brief look at Husserl's approach to metaphysics, consciousness involving causality and natural science, and empathy as a response to the problem of inter-subjectivity take us to Edith Stein's approach to these three topics in reverse order of empathy, consciousness, and metaphysics. The paradox in Husserl of windowless monads conjoined with inter-subjectivity are at the center

of the debate over subjective idealism and realism which so concerned Husserl in his responses to his critics at the end of his life.

Husserl on Metaphysics, Consciousness and Empathy

Early in Husserl's career at Göttingen, he notes that the objectivity of science seems to fall away under reflective scrutiny.⁵ Errors and confusions which result from the reflections result in theories of knowledge and metaphysics in which the contradictions between the real and the ideal constitute the subject matter. The proper escape from these puzzles lies in discovery of the essence of cognition itself.⁶ In his early work he took "ontology" as an alienating expression, but "ontology" returns in *Ideas*,⁷ published in 1913. The return to metaphysics and ontology does not mean, he says, that he reasons from metaphysical postulates but, rather, from a sense independent "sense giving consciousness."⁸ The phenomenological "*epoché*" and "reduction" aims to escape the realist-idealist problem, which Ingarden and others regard as arising from Husserl's method. The *Cartesian Meditations*, written some thirty years later contain the same message⁹ of the rejection of subjective idealism, as does his *The Crisis of European Science and Transcendental Phenomenology*.

In *Crisis*, written in the thirties close to the end of Husserl's life, he points to the collapse of metaphysics¹⁰ with a consequent collapse of faith in humanity itself.¹¹ The new "science of essential Being,"¹² phenomenology, leads to knowledge of essences rooted in the reflective grasp of the essence of consciousness itself. We could, on this understanding, imagine nature and the physical as annulled.¹³ To the objection that this could mean an objectionable subjective idealism, he responds that this misunderstanding arises from making the world philosophically absolute rather than recognizing that the "whole being of the world consists in a certain 'meaning' which presupposes absolute consciousness."¹⁴ Husserl's escape from the charge of solipsism is heavily dependent on empathy as a way to otherness.

In *Ideas*, Husserl writes of the inter-subjective world "mediated through empathy."¹⁵ In the *Cartesian Meditations*, he considers "thereness for me of others, a theory of so-called empathy,"¹⁶ which is expansive. He proceeds in *Crisis* to write of the experience of others in a mediated experience called empathy.¹⁷ The concept of empathy, which played a minor role in the early works, in the later works becomes vital in avoiding subjective idealism. The two preceding concerns, metaphysics and consciousness are dependent on empathy as a way to other minds. The Husserlian background is essential to understanding Edith Stein's approach to empathy and her differences from Husserl.

Edith Stein: Empathy, Consciousness and Metaphysics

Empathy

Before considering Edith Stein's unique philosophical contribution to the problem of empathy, a relevant contemporary concern with the problem should be addressed. The large *Oxford English Dictionary*¹⁸ does not have an entry "empathy" in its general contents. The fourth edition of the *Oxford Paperback Edition* defines empathy as "the ability to identify oneself mentally with a person or things and so understand him or her feelings or its meaning."¹⁹ This definition seems to accord best with Husserl's definitions. The *Oxford Universal Dictionary* of 1955, however, provides what seems to be an idealist conception: "the power of projecting one's

personality into and so fully understanding the object of the contemplation."²⁰ A recent Webster's dictionary (1997) provides both the first sense of identification and a second sense of imaginative projection.²¹ This ambiguity in the dictionaries is present both in Husserl and in Edith Stein.

The topic of empathy was proposed to Stein by Lipps²² because of Lipps' particular interest in intersubjectivity and because of Lipps' work on the concept of empathy. Stein's original thesis was followed by her work three years later in *Philosophy of Psychology and the Humanities*, prepared for an application for a position in philosophy at Gottingen.²³ The paradoxical nature of "fellow feeling" and of sympathy in Hume and other empiricists arise when knowledge is limited to impressions and ideas but seems to have an inter-subjective sense in fellow feeling and sympathy. Empathy, too, suffers from this paradoxical setting in monads without windows in Husserl. There is room for a refined understanding of empathy with this background when it is neither "primordial"²⁴ nor given in objective experience. Stein argues that while empathy is not primordial in outer perception, ideational, or reflective experience, it is primordial in present experience (but not in content).²⁵ Empathy, although not primordial in content, is a kind of act of perceiving²⁶ which is "there for me."²⁷ In summary:

Empathy... is the experience of foreign consciousness in general, irrespective of the kind of experiencing subject or of the subject whose consciousness is experienced.²⁸

Having defined empathy, various alternative conceptions are rejected: Lipps' "inner participation including the remembered and the expected"²⁹ and Witasek's view of empathy as idea.³⁰ Stein's final contention is that the perceived world and the empathetic world are different perspectives of the same world.³¹ Empathy becomes the foundation for all inter-subjective experience. The ambiguities remain however when contrasted with Husserl's account in which the whole constitution of the world is present in my psyche in the monadic being of the world.³²

Recognition of the paradoxical quality of Stein's account in her thesis is seen when she does use terms such as "projection."³³ Recognition that the doctrine was unclear and unfinished was quite evident to Stein herself and to her friend Roman Ingarden.³⁴ She notes that Husserl himself made no comments on her thesis and she recognized that there is a need to ground her work – particularly as her work was related to Husserl's doctrine. She looked at her study of intersubjectivity as a lifetime project, only lightly outlined in the original thesis. Her work in *Philosophy of Psychology and the Humanities* begins to carry out this project, and deals directly with the problem of the consciousness and the soul in the causality realized in sensate consciousness, in relation to the body, and in relation to the community.

Soul in Causation, Embodiment and Community

Stein's work on the soul, the *Philosophy of Psychology*, is an attempt to develop some of the background for the original thesis.³⁵ A key issue is the expanded notion of causality, which Husserl had already provided – a view radically different from empiricist notions of conjunction, dependency and necessity.³⁶ Descartes had already argued that the physical reality extrinsic to the mind cannot enter into the mind even in causal action.³⁷ Husserl seems to break this restriction with some qualifications³⁸ which lead to apparent inconsistencies. Stein attempts to deal with these inconsistencies.

Stein points to the serious criticisms which David Hume made of ordinary notions of causality.³⁹ She maintains that the "natural world which served as the starting point for reaching phenomenology's field of research, doesn't exhaust the totality of the correlates of consciousness."⁴⁰ She objects to the Humean linked phases of objects, arguing that consciousness lies in a continuum⁴¹ of unities merging in a flow of specified duration. In contrast, mechanical causation begins with an "originating occurrence."⁴² In experiential causality

the origin may be seen in a fact that a shift enters the life sphere. Sensate causality relates to the state of the individual while physical causality relates to necessity in the natural order. Experiential causality is crucial in describing motivations and the acts of individuals, in free acts of agents.⁴³

Not only does Stein move away from the sequential, dependency and necessity model but also she moves away from the Cartesian dualist model of body and mind to a unitive view of the person.

Body

The early development of the unitive model put Stein at odds with Husserl. She notes in a letter to Ingarden in 1917 that a key difference with Husserl lay in her claim that the body is necessary for empathy.⁴⁴ In fact, from 1917 to 1919 – when she composed *Psychische Kausalität* – she took a more original position in psychology. She worked closely with Husserl and undoubtedly profited from his critical presence, but proceeded in her own way. She made clear the originality in a striking passage which points to the person as a psycho-physical individual who is essentially relational, an embodied spirit.⁴⁵ Her later works give matter a role as the principle of individuation, but by itself it has only potential being. In order to exist, it must have an "essence form" (*wesenform*).⁴⁶ In this view, she presents a more traditional unity of soul and body which provides a unitive sense of the person, a substantial unity of body and soul. The body is seen thus as essential to sensate causality and to the wholeness of the person, but also to the community with others, hence the body is essential to empathy. As well the species into which the individual falls is relational and essentially communitarian.⁴⁷

Community

The recognition of persons as psycho-physical beings places individuals in the context of community – not as isolated monads, but as interrelated by nature. The human person is both essentially social and essentially political. Stein followed her work on psychology and community with "*An Investigation Concerning the State*," completed in 1921 and published in 1925.⁴⁸ Having provided a ground for inter-subjectivity in sensate causality and in embodiment, her philosophy moved towards a political doctrine of her own. There is "an impinging of causal occurrences from one individual to the other which is made possible by a 'communal' life feeling."⁴⁹ The communal life feeling is located in the psycho-physical unity of body and soul.

The genesis of the community lies in the reciprocal dependence of individuals in the community. Persons, as essentially relational, are what Stein calls, using a happy phrase, "person detectors."⁵⁰ The relational is a qualitative aspect of each individual.⁵¹ Husserl's neglect of the political, perhaps arising out of his monadic view of individuals, is however complemented by Stein's work which he probably endorsed since he supported its publication.

Metaphysics

Husserl's skepticism about metaphysics as traditionally taught,⁵² is in contrast with Stein's later work on Aquinas and her personal commitment to deepening her historical understanding. Her work on *Potency and Act* (later titled *Finite and Eternal Being*) place her squarely within classical metaphysics. Her aim was to put traditional historical work in focus, with the aim of bringing together modern phenomenological and scholastic thought.⁵³ Husserl's influence had been valuable in shaping the conceptual tools which were applied effectively by Stein in her original studies. As years passed, the relationships of phenomenology to past thought led her into creative work in epistemology and metaphysics. By 1932, she endorsed a positive definition of Metaphysics,⁵⁴ was in close touch with Jacques Maritain,⁵⁵ and was called to conferences on the relations of phenomenology to Thomistic thought.⁵⁶ She continued to confess her ignorance of the history of philosophy and her need to grow in an understanding of the traditions.⁵⁷ She maintained her close relations with Husserl until his death,⁵⁸ had a late, brief, unsatisfactory encounter with Heidegger,⁵⁹ but read his works carefully.

Stein's reflections on the relationships of sciences to each other brings a more precise understanding of the interrelations of the sciences. Her work in metaphysics became more and more indebted to historical and theological reflection in which metaphysics is a ground for rational understanding of the world.⁶⁰ This understanding is enlightened by the natural and supernatural with a phenomenology at ease in the harmony of metaphysics and theology.⁶¹ Her early focus on epistemology and theory of knowledge shifts to a placement of epistemology as a part of a general ontology or metaphysics.⁶² Metaphysics becomes the primary discipline. A phenomenological world based on the subject alone would remain "a world of the subject"⁶³ even a transcendently subjective world.

Conclusion

The Greek word *eupatheia* (ἠδὴαἰεἰά) has a primary meaning of enjoying oneself, of making merry, and of enjoyment of luxuries. The Stoic sense was one of innocent emotions. The sense of empathy in Edith Stein embraces some of the sense of joy in attention and identifying with another as a "person detector." Reviewing the dictionary options, it appears that both the identification with another and the imaginative and reflective projection on another could qualify as empathy, but the first sense avoids the subjective and idealist and appears to be the primary sense of the term as it is used by Edith Stein. The other person is experienced directly and judged to be another presence, but not "participated in" in content, by the empathizing person. Projection, in its more reflective quality, is a secondary sense of the term in Stein. The marriage of direct access to persons through empathetic judgment and the phenomenological approach to reflection and to the content of empathy brings two rich traditions in harmony. Husserl's contribution to a deeper grasp of the other through the phenomenological method is essential to Stein's final position. Empathy as an act and disposition has enormous importance in a world in which, as Charles Taylor puts it, we appear to be atomic individuals, determined by events and only of value as useful.

Stein's replacement of the atomic individual with a more relational sense of the person puts her philosophy of the person outside the model of the windowless monads presented by Husserl. Philosophy should not be conceived in a purely professional way as an isolated community open to Emerson's critical comment as plying a "trade" which the philosopher never escapes, even in love. Stein's clear alternative notion of causality leads to a richer notion of the freedom of the

agent in causal relation with other agents. The foundations for a political theory based on freedom and responsibility and lived in a community emerges from this doctrine. Finally, her metaphysical understanding of the person gives value to each person which is not limited to the useful or utilitarian. Ultimately, the full realization of otherness comes only with the relation to the Transcendent Other.

In the days before her transportation to Auschwitz, where she experienced the extremes of national self-assertion, Edith Stein worked on an article for the *Thomist* (focusing on Dionysius the Areopagite) and on her final opus, *The Science of the Cross* (on John of the Cross).⁶⁴ In this latter work, she presents the alternative to the philosopher's eyes which "are lined with eyes within... to catch the unconscious heart in the very act." The senses provide the images from which symbolic theology leads to the Transcendent Other since there is an "objective commonness" between the world of sense and the spiritual world, the world of beauty. Ultimately "all harmony and all commonness of beings subsists through it, (the Transcendent beauty) for it guides everything to itself through love and unifies everything in this striving."⁶⁵

Notes

1. Emerson, "<Philosophers are lined with eyes within>" See *Ralph Waldo Emerson: Collected Poems and Translations*(Library of America), ed. Paul Kane and Harold Bloom, New York: Library of America [dist. by Penguin Books USA], 1994. Emerson's concerns with intersubjectivity are reflected in a number of other literary works. Camus's *The Outsider*, Sartre's *No Exit*, Dostoevsky's *Letters from the Underground* and countless other literary works reflect the same concern. One might characterize it as the problem of the "hermeneutic circle."

2. Edmund Husserl, *Cartesian Meditations*, tr. Dorion Cairns, The Hague: Nijhoff, 1977, and *The Crisis of European Science and Transcendental Phenomenology*, tr. David Carr, Evanston: Northwestern University Press, 1970.

3. Edith Stein, at one point Husserl's assistant, had moved towards a more historical approach to philosophy and towards establishing a relation to Thomas Aquinas. Ingarden had ascribed a subjective idealism to Husserl [Roman Ingarden, *On the Motive Which Led Husserl to Transcendental Idealism*, tr. Arnor Hannibalsson, The Hague: Nijhoff, 1975, pp. 70-71]. Heidegger proceeded on a highly aphoristic and original metaphysics of being.

4. See Philip Buckley, *Husserl, Heidegger, and the Crisis of Philosophical Responsibility*, Dordrecht: Kluwer, 1992, p. 113: "The subject can be seen as completely self sufficient, self actualizing, self subsisting entity. On the other hand, Husserl also stresses relationships of 'empathy' and thorough such relationships the monads do indeed have windows."

5. Edmund Husserl, *The Idea of Phenomenology*, tr. William Alston and George Nakhnikian, The Hague: Nijhoff, 1964, Lecture 1, p. 17.

6. *Ibid.*, pp. 17-18. "If then we disregard any metaphysical purpose of the critique of cognition and confine ourselves purely to the task of clarifying the essence of being an object of cognition, then this will be a phenomenology of cognition and of being an object of cognition and will be the first and principle part of phenomenology as a whole." Thus, consciousness of and object and an object of consciousness are the first concerns of phenomenology.

7. Edmund Husserl, *Ideas*, tr. W.R. Boyce Gibson, New York: Collier Books, 1975, p. 61.

8. *Ibid.*, p. 153.

9. *Cartesian Meditations*, p. 3.

10. *Crisis*, p. 12.

11. *Ibid.*, p. 4.
12. *Ideas.*, p. 40.
13. *Ibid.*, p. 151.
14. *Ibid.*, p. 153. Ingarden maintains that there was a radical shift in Husserl's philosophy away from realism. [Ingarden, *On the Motive*, p. 8] to a more subjective idealism.
15. *Ibid.*, p. 387
16. *Cartesian Meditations*, p. 92
17. *Crisis*, p. 231. He associates this with the psychologist's "empathy of his original sphere of consciousness... he also already has a universal inter-subjective horizon" (p. 243). He goes on to write of the intentional interpenetration "Each soul experiences the world and has empathy experiences, experiences consciousness of others as (also) having a world the same world that is each apperceiving into his own apperception."
18. *Oxford English Dictionary*, New York: Oxford University Press, 1972.
19. *The Oxford Paperback Dictionary 2000*, Oxford: University Press, 2000.
20. *The Oxford Universal Dictionary*, 3rd edition, Oxford: Oxford University Press, 1955, p. 601.
21. *Webster's Universal College Dictionary*, New York: Gramercy Books, 1997, p. 262 "The identification with or vicarious experience of the feelings thoughts etc of another." A second meaning is in the imaginations ascribing to an object.
22. Edith Stein, *Life in a Jewish Family*, Washington: ICS Publications, 1986, p. 269. Lipps (1851-1914) was a psychologist and philosopher at Munich. Stein had to study Lipps in preparation for her thesis.
23. Edith Stein, *Philosophy of Psychology and the Humanities*, ed. Marianne Sawicki; tr. Mary Catharine Baseheart and Marianne Sawicki, Washington: ICS Publications 2000, p. xx.
24. Edith Stein, *On the Problem of Empathy*, Washington: ICS Publications, 1989, p. 7: "ideation, intuitive comprehension of essential states valuing, and our own reflective experiences are primordial, memory, expectations and fantasy are not."
25. *Ibid.*, p.10. There are three levels of accomplishment: mergence of experience, fulfilling explication, and objectification of facts.
26. *Ibid.*, p. 11.
27. *Ibid.*, p. 19.
28. *Ibid.*, p. 11.
29. *Ibid.*, p. 13. This is a confusion, in Stein's view, of first experience and the transition from the non-primordial to the primordial.
30. *Ibid.*, pp. 19-20. They are not primordial in content, nor objectively present but still "there for me." They are present directly in the continuity of being.
31. *Ibid.*, p. 64.
32. *Cartesian Meditations*, p. 131. The objective world is "my actual and possible..."
33. *Empathy*, p. 20. Consider the following: "To project oneself into another means to carry out his experiences with him as we have described it." The difficulty may lie in the translation. References to "projection" appear (p. 59) with respect to the relations to animals. Again, when I emphatically project myself onto it, I obtain a new image of the spatial world and a new zero point of orientation.
34. Edith Stein, *Self Portrait in Letters 1916-1942*, Washington: ICS Publications, 1993, p. 15. The first chapter she regarded as "not worth much" Ingarden regarded the concept of the soul as undeveloped and Stein agreed.

35. Cf. *Philosophy of Psychology*. "Humanities" has a special significance in the title since the *Geisteswissenschaften* refers to the science of the spirit, mind, or soul.

36. *Ideas*, p. 147. In *Crisis*, p. 218 Husserl notes three distinct concepts: physical causality, psychic causality, and a causality between the bodily and the psychic.

37. Descartes, *Meditations, Response to Objection VII*.

38. In *Ideas*, p. 182 (149), Husserl locates causality in the context of time consciousness. Material objects have causal connections. The natural dependence between realities which characterize causality is not characteristic of the connection between consciousness and the material world. Consciousness cannot "experience causality from anything nor exert causality upon anything, it being presupposed that causality bears the normal sense of natural causality as the relation of dependency between realities. p. 139 (49).

39. Stein, *Philosophy of Psychology*, p. 3

40. *Ibid.*, p.7

41. *Ibid.*, p.9

42. *Ibid.*, p. 15

43. *Ibid.*, p. 52

44. Edith Stein, *Self Portrait*, p.13

45. Edith Stein, *Philosophy of Psychology*, pp. 200-201; "Admittedly the person has a 'body and a soul' but that 'having' has a special significance. It behooves the person to live forth out of a mental center."

46. Edith Stein, "Actual and Ideal Being Species Type and Likeness," *Knowledge and Faith*, Washington, DC: ICS Publications, 2000, p. 78: "To come into existence matter needs forming of two sorts. It must be formed by the species the thing to its content (the essence-form [*wesenform*] to be distinguished from empty form) and by the form of the individual into which matter as formed by the species idea."

47. P. Buckley (*Husserl, Heidegger, and the Crisis*, p. 112 , pp. 143 and xix-xx) raises the question of the societal concerns which emerge from the crises which Husserl identifies. Political philosophy is neglected in Husserl. In contrast, others in the same tradition – such as Hannah Arendt and Stein herself – develop full fledged political philosophies. Arendt is influenced by an Aristotelian model while Stein sees the political life as a natural outgrowth of her doctrine of community.

48. *Philosophy of Psychology*, Introduction p. xxi.

49. *Ibid.*, p. 175.

50. *Ibid.*, p. 265, fn. 207.

51. *Ibid.*, p.312.

52. *Cartesian Meditations*, p. 139. "Our monodological results are metaphysical, if it be true that our ultimate cognition of being should be called metaphysical. On the other hand, what we have here is anything but metaphysics in the customary sense, a historically degenerate metaphysics which by no means conforms to the sense with which "first philosophy" was instituted originally."

53. *Self Portrait*, p. 13.

54. *Ibid.*, p. 126.

55. *Ibid.*, p. 124.

56. *Ibid.*, p. 74; p. 189.

57. *Ibid.*, p. 135.

58. *Ibid.*, p. 169

59. *Ibid.*, pp. 83-84

60. Edith Stein, *Knowledge and Faith*, Washington: ICS Publications, 2000, p. 19.

61. *Ibid.*, p. 30. Ultimately both scholastic philosophy and phenomenology realize a unity in the reliance on intuition. They agree on three things: knowledge comes from the senses, there is an intellectual processing, and a receptivity to reason common to both.

62. *Ibid.*, pp. 30-32.

63. *Ibid.*, p. 32.

64. *Ibid.*, pp. xxii-xxiii.

65. *Ibid.*, pp. 133-134: "But he is called not only "Love," but "Beloved" as well. For in the creature he brings forth love for himself." Love is Ecstatic – that is, outside of oneself or the ultimate in unitive otherness.

Chapter IX The Humane Community: Husserl Versus Stein

Marianne Sawicki

In five essays composed during the fall and winter of 1922-23, Edmund Husserl offers his first systematic account of social phenomena. He discusses the relation between individuals and community in general; he considers particular civil, religious, and national communities; he develops the groundwork for social ethics; and he takes a stab at cataloging the history of the West into a series of rational stages. All of these themes are fresh departures for Husserl, foreshadowed only in a few disjointed passages of *Ideas II* composed around 1917. Thus the formulations of those themes in the *Kaizo* articles have been hailed as important advances in Husserl's continuing project of explicating intersubjectivity.

But they must be read in another context as well. The agenda of this socialized phenomenology does not unfold directly out of Husserl's own previous work. Rather, it comes from a vigorous conversation among colleagues in the pages of Husserl's *Jahrbuch*. The *Kaizo* articles are best read as conveying both the emergent consensus of contemporary phenomenologists, and Husserl's own dissent at particular points. In effect, they package and export the work-in-progress of the German phenomenological community, for consumption in Japan.

The work remains provocative today – not because it is "Husserl's," but because of the insights it conveys. For a clear understanding of the issues and their solutions, one should follow the threads through arguments progressively elaborated by various writers. (See table one.) In this paper I must limit myself to just three of these. It is clear that Husserl had Edith Stein's work at hand as he drafted his *Kaizo* articles. We need not pause unduly to wonder which of them "owned" the ideas and which of them "copied." Stein and Husserl had been student and teacher, and subsequently she assisted him with his *Ideas II* and several other projects of 1916-1918. Yet clearly Stein is the one who frames the questions that Husserl takes up in the *Kaizo* articles. My purpose here is to contrast their treatments of these questions, and to suggest a preliminary evaluation.

Table One: Chronology of a Conversation about Community

A) Max Scheler: Last section of *Formalism in Ethics and Non-Formal Ethics of Values*, written about 1913, published in Husserl's *Jahrbuch* in 1916.1

B) Edith Stein: "Individual and Community," written in 1919, published in Husserl's *Jahrbuch* in 1922.2

C) Edith Stein: "An Investigation of the State," written in 1921, published in Husserl's *Jahrbuch* in 1925.3

D) Gerda Walther: "Concerning the Ontology of Social Communities," published in Husserl's *Jahrbuch* in 1923.4

E) Max Scheler: *Concerning the Phenomenology and Theory of Feelings of Sympathy and of Love and Hate*, first published in 1913, but expanded and republished as *Essence and Forms of Sympathy* in 1923.5

F) Edmund Husserl: Five "articles on renewal," written in 1923-24, the first three of which appeared in *Kaizo* in 1923 and 1924, and the last two of which appeared, with Supplements, in *Husserliana XXVII* in 1989.6

G) For context and comparison, see contemporary *non*-phenomenological works such as Ernst Krieck's 1917 *Idea of the German State* and his 1922 *Philosophy of Education*. Krieck later would enunciate key doctrines of National Socialism.⁷

Stein on Individuals, Communities, and States

Stein's essay on "Individual and Community" is the second half of a work that was to have been her *Habilitationsschrift*.⁸ This work builds a case against Husserl's earlier argument that experiences (*Erlebnisse*) lived by one person cannot be lived by another. That argument was summarized in his dictum that there are "no canals" between streams of lived experience.⁹ In the *first* half, Stein had described the mechanisms and the intentions through which experiences flow along for the *individual* consciousness.¹⁰ This provided the basis for the *second* half, in which Stein discovers those "canals." That is, she describes experiences and motivations that can belong to no individual, but only to a community's experience-stream. These include the entertaining of super-individual objects; for example, empirical facts understood as such, or certain values and goals, or experiences that are common to many subjects at once. The sequencing or temporal connection from one such experience to another is always motivational, never causal. Unlike *individual* experiences, whose motivation interweaves with causally produced conditions, *community* experiences involve no causality at all: they are always intentional in that they arise freely out of consciousness.

After describing the various ways in which community experiences achieve their streaming coherences, Stein turns to the question of the community's ontic structure itself. Carefully, she questions how far one may pursue the analogy between it and the structure of an individual personality. She finds that the similarity consists mainly in this: that the community, too, has at its disposal a lifeforce fueling its experiences. Individuals contribute to charging up that force, and they also draw upon it. This dynamism is analogous to the transfers of lifeforce across the physical, sentient, and intellectual levels of the individual person, as Stein has earlier described them. But *the analogy stops there*. Although the community is subject of an experience stream, it is not the subject of free actions nor is it responsible for such.¹¹ Thus it has a psyche and it has a soul or character, but it has no intelligence (*Geist*). The community is not a person.

This line of investigation continues in Stein's essay on the state, where she argues that various social formations are distinguished by the sort of connection that their members have.¹² A mere aggregation or mass of people is held together only through a physical relation of propinquity. By contrast, members of a *community* are subjects to one another. But the state is not a community, nor is the nation, nor the people. Rather, the state is the intention, the sense, of certain acts performed by individuals in a civil community. It has no independent existence, and it does not act on its own. It exists as a byproduct of choices and as an instrumentality for accomplishing social goals. The state's sovereignty, necessary to its being, is only loosely analogous to the freedom of an individual person. One might more accurately say: the state *is* the sovereignty constituted by personal civil acts.

Thus, for its continuing existence the state relies on the freedom of individuals, and persons cannot divest themselves of their freedom by belonging to a state.¹³ Morality and ethics in fact are founded in this. The moral law is personal and obliges persons. It need not coincide with civil laws, which are positive (that is, enacted historically). Stein argues that the entailment of punishment by guilt is something that transpires in the realm of the personal, rather than by civil law. This argument, resting on a distinction between history and ontology, is made in a curious

theological footnote, six pages in length, distinguishing original and actual sin, guilt, judgment, and punishment.

What, then, is the role of the state in history? How can a just society be achieved? Freedom, says Stein, does not undergo gradual development. It simply is. But persons develop toward morality through awakening to freedom, through training in receptivity to values of all kinds, and through progressive use of freedom to realize values.¹⁴ The state can be an instrumentality for achieving these values as historical goals; nevertheless it is not a historical agent.¹⁵

Stein concludes the essay with a discussion of religion and the state. She finds no principle to distinguish the spheres of church and state. A variety of relationships between the two have occurred in history. Theocracy is the social form in which the will of the deity stands in for the laws of the state. In any other social form, conflict is quite possible between church and state. Of itself, the state has no religious value.

This brief sketch of Stein's two essays has made known the themes and the general strategy of argument taken up there. Stein dropped out of close contact with Husserl and her phenomenological friends shortly after she finished the essay on the state. A copy of that essay was left for colleagues to read at the orchard home of Hedwig Conrad-Martius,¹⁶ and obviously a copy went to Husserl for his *Jahrbuch*. Stein was baptized on New Year's Day of 1922.

Husserl on Renewal, Ethics, Community, and Science

Husserl's five essays for the Japanese journal *Kaizo* take "renewal" as their theme, appropriately enough for the pessimistic post-war era. His discussion centers on the requirements of genuine humaneness (*echt Humanität*) to be reached through various sorts of renewal: ethical renewal, cultural renewal, and the re-enlivening of originary religious and scientific intuitions. *Community* is to be a key element in this renewal. In content, diction, and argumentation, these essays resemble Stein's much more than they do Husserl's previous publications. However, his *Kaizo* articles are directed to a more general readership than her *Jahrbuch* articles, and they are briefer (with Supplements, about 125 pages to Stein's 400). They preach more than they phenomenologize.

To begin with, Husserl *uncritically* deploys the analogy between person and community.¹⁷ He regards the community as a "personality of a higher order," many-headed but also headless. It is a band of individuals. While it does not act like a willing subject, there is a community personality that is realized through the decisions and efforts of individual community members. Yet the latter are also carriers and functionaries of the community's will.¹⁸

Before turning in earnest to a discussion of community in the fourth essay, Husserl considers individual conativity for some 40 pages. He asserts that persons are essentially free and they realize values in a motivated forward flow of conscious life comprised of various acts of willing and inclination. Persons also understand one another. Husserl says that individual "I's" come on to one another in relations of reciprocal understanding, or empathy.¹⁹ Their conscious acts thus found communities.²⁰ Ethics is first of all an individual affair. "The ethical life is, according to its essence, a life standing consciously under the idea of renewal, deliberately led and configured by it. Pure ethics is the science of the essence and the possible forms of such a life."²¹ Ethical conscience itself is identified as reason's consciousness of responsibility.²² Freedom is the necessary condition for a human being to come into one's own reason. The ethical life can be described as a continual renewal inasmuch as it is essentially a struggle with a slippery slope.²³

The phenomenon of willing in freedom provides Husserl with his bridge *from* the individual *to* the community. A will toward community is what produces "genuine human" community, by developing it out of something less worthy, more animalistic.²⁴ Individuals bootstrap their communities, so to speak. While nobody lives as a solitary,²⁵ the bond with the others is something that must be developed and brought to humane perfection as a "willing of community."²⁶ (Husserl projects law-driven development of community; Stein, by contrast, envisions development of the individual through education.) The genuine humane community is a community of willing.²⁷ Community is the value willed: the target that motivates the willing and that is actualized by it.

This notion of the intentional character of community employs a phenomenology of willing borrowed from the Munich phenomenologist Alexander Pfänder. The willing individual ego, for Pfänder, first constitutes a possible future state of affairs as an object, then feels itself affected by that object, then values that object and chooses it for a motive, then takes steps to bring the motivating state of affairs into existence. The problem here is where to place community within this motivated sequence. Is it entirely future at the stages where the individual constitutes it, is attracted by it, and accepts it as a motive – as Husserl assumes? Or, has community *already* some role within the acts of the individual who is supposedly choosing and achieving it? This is the key issue.

Husserl allows the pre-existence *not* of an operative community or connectivity among individuals, *but only* of the ideal of what an ethical community ought to be. Analogously to individuals, on his account, communities develop from less to more worthy states, but only with the assistance of philosophy. All the while, the individual members retain their freedom; they do not become functionaries of an imperialistic organization.²⁸

What then, according to Husserl, is the unworthy proto-community out of which the humane community is supposed to develop? Astonishingly, it is the life afflicted with Original Sin. To my knowledge, this is Husserl's only foray into theology.²⁹ What can "sin" mean for Husserl? He writes that the essence of community life includes a categorical imperative: "every single human being lives a life that, lived day to day nonarbitrarily, has a value." But living naively day to day without reflection leads to sin. Original Sin belongs to the essential form of the human being.³⁰ Salvation comes from philosophy, that is, from the community of philosophers. *Only philosophical reflection* can disclose that other human beings are values in themselves, not mere instrumental values. Thus, I realize that the best being, willing, and realizing for myself includes the best being, willing, and realizing of the other – and I will wish for that, thanks to philosophy.³¹

Husserl says that a community has consciousness and self-consciousness. It can value itself and choose other values, including the reconfiguration of itself. "All acts of the community are founded in acts of the individuals who are founding it."³² Just as individuals can bootstrap themselves and turn themselves into ethical subjects, so can a community.³³ It can climb the steps from mere life community, to personal and then to ethical community. But for this to happen, the ideal of an ethical community must *already* be an intentional configuration in individuals.³⁴ That's where philosophy comes in, again. As universal science, philosophy is necessary for the acquisition of the ideal form of ethical-personal community in advance of the realization of such a community.³⁵

Thus it is philosophy that produces self-consciousness in the community. Philosophers, then, are the anointed (*berufenen*) representatives of the mind of reason. Indeed, they are its womb: the intellectual organ in whom the community comes to consciousness of its true self, and who

propagate this consciousness among the laity.³⁶ The role of lay members of the community is "*nachverstehen*," to understand after the philosopher.

Nachverstehen is a kind of re-enactment or re-enlivening of an earlier understanding. Returning to his theme of "renewal," Husserl uses this notion to construct a theory of religious culture. He suggests that Christ re-invigorated the original religious insights of Judaism, and that reading the gospels facilitates such a renewal today.³⁷ Husserl deploys the paradigm of successive renewals to rehearse a history of western religion in three steps, and then of Western science in parallel steps – with special attention to the Middle Ages in both accounts.

There is no satisfying summary or conclusion to the *Kaizo* articles. They start out in mediocre generalizations, and go downhill from there. Mercifully, circumstances prevented the publication of the last two of them during Husserl's lifetime. The most charitable reading is that they make a false start toward a solution to the problem of intersubjectivity, which Husserl would treat somewhat more successfully several years later in the Fifth Cartesian Meditation. Husserl needed the money and Japan was far away. Perhaps he did not want to squander his best material, so he borrowed the themes of community, ethics, and religion from the "public domain" of 1920's phenomenology.

The Priority of Sharing

The alien elements in Husserl's argument – sin, ethics, history, and an outright evolutionary account of religion and science – signify his attempt to transplant all philosophical conversations into his own back yard.³⁸ These exotics are not native to Husserlian phenomenology, particularly the transcendental variety announced in 1913 and elaborated ever after. They are cloned from the gardens of Stein and her student Gerda Walther.³⁹ Thanks to the arguments of the latter philosophers, Husserl now sees the necessity of adjusting his own phenomenology to embrace the problem of community through a new approach to ethics. Unfortunately, however, he does not (yet) follow their lead in re-engineering the foundations and structures of his argumentation. Husserl persists in taking individual consciousness as his starting point, deriving community as person-writ-large. This is consistent with the trend of his argumentation in the oldest portions of *Ideas II* – a work never released for publication by him.

However in portions of the *Ideas II* manuscripts stemming from the period of Stein's collaboration with Husserl, there is a contradictory and ultimately more viable argument.⁴⁰ The individual person cannot be phenomenological bedrock, because the very process of personal individuation must rest on a prior experience of *sharing* that has neither "I" nor "we" for its subject.⁴¹ This sharing is non-individuated "empathy": the co-feeling's sense-content, apart from any "betweenness" of it that is owing to the apprehension of multiplicity and otherness within subjectivity. *Einfühlen* is simply how subjectivity inhabits live experiences.⁴²

With these two contrasting lines of argument running through it, *Ideas II* contradicts itself repeatedly. (This is not artful paradox evoking some mystic harmony; the text is simply incoherent.) Ultimately, in the Fifth Cartesian Meditation, Husserl abandoned the priority of individual subjectivity in favor of the life world.

I conclude these comments by pointing to two gains that have been made.

(1) The historical gain has to do with how we read Husserl. His thought is not one harmonious whole, gradually unfolding from 1900 through 1938. He made some false starts; and he eventually came around to adopt arguments introduced by other people. The antecedents of the Fifth Cartesian Meditation are not his own *Kaizo* articles, but the *Jahrbuch* articles of Edith Stein. Kathleen Haney

has proposed that the account of intersubjectivity in the Fifth Cartesian Meditation (1931) be enhanced by that advanced in Stein's (1916) dissertation on empathy. I am arguing to the contrary, that Stein's published work of 1916-1925 prompted Husserl first to expand his agenda (in the *Kaizo* articles) and then to reverse the direction of his foundational argument (in the Fifth Cartesian Meditation).⁴³

(2) The more important phenomenological gain is this. When we selectively impute to community only those personal structures that it actually exhibits – namely, a temporal coherence of experience – we keep safe from gross lapses into a reifying naturalism in regard to the ontology of race, family, state, religion, and the historical processes of their appearances. Husserl's *Kaizo* phenomenology is a blunt instrument with which to beat the gong of "individual freedom" to exorcise the mythological demon of "original sin" and summon the savior-philosopher, *deus ex machina*. His account of history is naively developmental, and thus inconsistent with his analyses of time-constitution elsewhere. Too much is analogically transposed from the individual to the social plane.⁴⁴

But social formations are not big persons. They are not entities at all. As Stein argued, nation, race, and state are *coherences of flowing experience*. They are continuities of intention, of various kinds. Therefore they do not undergo developmental processes, and they do not exert causality. They belong rather to the futurity of actions. They are the dativities or *sakes* for which we do what we do. If community were person-writ-large (as Husserl implies), then social ethics would become merely the ballooning of the messianic philosopher's exemplary assent to "golden rule" reciprocity. But community is not a big person. *Renewal* is not imitation or replication or hot air; it is *sharing*. That means: renewal entails the re-enlivening of an experience that has been had before. If community "is" as that dimension of action which affirms one's own dependence upon a prior intersubjectivity (as Stein has it), then communal ethics is an aspect of the rationality that constitutes the fundamental share-ability of experience. As such, the ethical imperative beckons to all rational persons alike, regardless of their demographic circumstances. There can be no special ethic for the state, or for a particular nation or race.

In closing, I note that the *contrary* claim was already being advanced in 1922 by the philosopher of education Ernst Krieck. His race-based epistemology and value theory became foundational for the ideology of National Socialism, which he helped to build. Today one again hears talk of racial ethics and race-based ways of knowing, with reckless disregard for the Twentieth Century's past experience with the very intentionality that seems bent upon renewing itself in such a project.

Notes

1. "Der Formalismus in der Ethik und die Materiale Wertethik." Part 2, *Jahrbuch für Philosophie und phänomenologische Forschung*, 2 (1916); cf. *Formalism in Ethics and Non-Formal Ethics of Values: A New Attempt Toward the Foundation of an Ethical Personalism*, tr. Manfred S. Frings and Roger L. Funk, Evanston: Northwestern University Press, 1973.

2. "Psychische Kausalität" and "Individuum und Gemeinschaft," *Beiträge zur philosophischen Begründung der Psychologie und der Geisteswissenschaften, Jahrbuch für Philosophie und phänomenologische Forschung*, 5 (1922), pp. 1-283; repr. Tübingen: Niemeyer, 1970; cf. *Philosophy of Psychology and the Humanities*, ed. Marianne Sawicki, tr. Mary Catharine Baseheart and Marianne Sawicki [*The Collected Works of Edith Stein*, Vol. 7] Washington: ICS Publications, 2000.

3. "Eine Untersuchung über den Staat," *Jahrbuch für Philosophie und phänomenologische Forschung*, 7 (1925), pp. 1-123; repr. Tübingen: Niemeyer, 1970, pp. 285-407 in *Beiträge zur philosophischen Begründung der Psychologie und der Geisteswissenschaften*. An English translation by Marianne Sawicki is forthcoming as a future volume of *The Collected Works of Edith Stein*.

4. Gerda Walther, "Zur Ontologie der sozialen Gemeinschaften," *Jahrbuch für Philosophie und phänomenologische Forschung*, 6 (1923), pp. 1-158.

5. *Zur Phänomenologie und Theorie der Sympathiegefühle und von Liebe und Hass*, Halle: Niemeyer, 1913; *Wesen und Formen der Sympathie*, Bonn: Friedrich Cohen, 1923 (cf. *The Nature of Sympathy*, tr. Peter Heath, London: Routledge & Kegan Paul, 1954).

6. *Aufsätze und Vorträge (1922-1937)*, ed. Thomas Nenon and Hans Rainer Sepp [Husserliana XXVII] Dordrecht: Kluwer, 1989. [The first five essays are the *Kaizo* articles.]

7. Ernst Krieck, *Die deutsche Staatsidee*, Jena: E. Diederichs, 1917; *Erziehung und Entwicklung*, Freiburg i. Br.: J. Boltze, 1921; *Philosophie der Erziehung*, Jena: E. Diederichs, 1922

8. Cf note 2, above. Stein was working on this essay in the summer of 1919, and mentions it in her letter to Fritz Kaufmann of 15 August 1919; see *Self-Portrait in Letters 1916-1942*, tr. Josephine Koepfel, Washington: ICS Publications, 1993, p. 31. [This translation includes material from two earlier volumes in *Edith Steins Werke*, but leaves out some of the correspondence with Ingarden that was published in German in 1991.] The essay must have been completed soon after that, for it was rejected as a *Habilitationsschrift* at Göttingen in late October; See *Self-Portrait*, p. 35. Stein's letter to Kaufmann on 31 May 1920 indicates that Husserl had the essay in hand at that time and was considering Stein's request to publish it in Volume 5 of the *Jahrbuch*; see *Self-Portrait*, p. 43. Publication of Volume 5 was delayed until 1922 because of the dire economic conditions in Germany after the First World War. I discuss Stein's publications of the 1920's and her earlier work for Husserl in *Body, Text, and Science: The Literacy of Investigative Practices and the Phenomenology of Edith Stein*, Dordrecht: Kluwer Academic Publishers, 1997.

9. *Zur Phänomenologie der Intersubjektivität: Texts aus dem Nachlass*. Part One: 1905-1920, ed. Iso Kern [Husserliana XIII] Den Haag: M. Nijhoff, 1973, p. 189. Stein had already challenged Husserl on this point in her 1916 dissertation and subsequently while working as his assistant, according to her correspondence with Roman Ingarden. See *Self-Portrait*, pp. 3-4, 6-14.

10. Examining the interplay of material somatic influences with free choices in what she terms the "psychic causality" of human bodily life, Stein developed a psychology of motivation that has certain similarities to Sigmund Freud's early work on "libido." Stein, however, described the drives and the inclinations phenomenologically, as components of the living stream of experiences, fed by a variable supply of "lifepower" (*Lebenskraft*).

11. *Philosophy of Psychology and the Humanities*, p. 174.

12. This essay of Stein's has received little attention in the secondary literature in German, French, or English. See Note 3, above.

13. Here Stein is expressing a phenomenological impossibility, not a moral directive.

14. "Eine Untersuchung über den Staat," p. 115; cf. p. 399 in reprint.

15. *Ibid.*, pp. 116-117; cf. pp. 400-401 in reprint.

16. According to Stein's correspondence with Roman Ingarden.

17. *Aufsätze und Vorträge (1922-1937)*, pp. 5-8, 22.

18. *Ibid.*, p. 22.

19. Stein had argued for just such relationships in her 1916 dissertation on empathy. Her correspondence with Roman Ingarden indicates that she continued to press this point with Husserl

while working with him on *Ideen II*. These arguments are reflected in the passages of that work that discuss empathy.

20. *Aufsätze und Vorträge (1922-1937)*, p. 8.

21. *Ibid.*, p. 20. Yet there is also the ethics of the community as such, which is not just about how one individual treats another (p. 21). But that notion is not systematically explicated.

22. *Ibid.*, p. 32.

23. *Ibid.*, p. 43.

24. *Ibid.*, p. 44.

25. *Ibid.*, p. 45.

26. *Ibid.*, p. 44.

27. *Ibid.*, p. 52.

28. *Ibid.*, p. 53.

29. Husserl seems to be following Stein's outline and has picked up this theme from her long excursus on guilt and sin. The novelty of this theme for Husserl is underscored in Ulrich Melle's 1995 review ["Selbstverwirklichung und Gemeinschaft in Husserls Ethik, Politik und Theologie," *Tijdschrift voor Filosofie* 57 (1995), pp. 111-128] of Hart [James Hart, *The Person and the Common Life: Studies in Husserlian Ethics* [*Phaenomenologica* 126] Dordrecht: Kluwer, 1992], who has presented a new overview of Husserl's phenomenological project.

30. *Aufsätze und Vorträge (1922-1937)*, p. 44.

31. *Ibid.*, p. 46.

32. *Ibid.*, p. 49.

33. *Ibid.*

34. *Ibid.*, p. 50.

35. *Ibid.*, p. 51.

36. *Ibid.*, p. 54.

37. *Ibid.*, p. 66. Cf. *Aufsätze und Vorträge (1922-1937)*, "Religiöse Wirkung von Legenden, dichterischen Gebilden (1922/23)," *Beilage IV*, pp. 100-103). Husserl's theory of reading resembles that suggested in Stein's 1916 doctoral dissertation on empathy. The gist of Stein's argument had been that the feelings, intuitions, inferences, and other live experiences of one person could be "followed along with" by another. Husserl writes (pp. 100-1, probably phenomenologically rather than autobiographically): "I read the gospel like a novel, like a legend, I feel myself into it (*ich fühle mich ein*), and I become filled with infinite love for this super-empirical pattern, this incarnation of a pure idea..."

38. As an indication that "ethics" and "community" are foreign to Husserl's normal working vocabulary, one may note that they do not appear in the indexes of the major studies by Ricoeur and Bell (see Paul Ricoeur, *Husserl: An Analysis of His Phenomenology*, tr. Edward G. Ballard and Lester E. Embree, Evanston: Northwestern University Press, 1967; David Bell, *Husserl*, London: Routledge, 1991). Even in Carr's, Ströker's, and Zahavi's indexes, community has only a few references (see David Carr, *Phenomenology and the Problem of History: A Study of Husserl's Transcendental Philosophy*, Evanston: Northwestern University Press, 1974; Elisabeth Ströker, *Husserl's Transcendental Phenomenology*, tr. Lee Hardy. Stanford: Stanford University Press, 1993; Dan Zahavi, *Husserl und die transzendente Intersubjektivität: Eine Antwort auf die sprachpragmatische Kritik* [*Phaenomenologica* 135] Dordrecht: Kluwer, 1996).

39. While there is no space here to demonstrate this further, Husserl's debt to Stein and Walther is apparent from a simple inspection of the tables of contents of the women's lengthy contributions to the *Jahrbuch* volumes of 1922, 1923, and 1925. Husserl had these on his desk

before he drafted the *Kaizo* articles. Stein's correspondence confirms that Walther studied under her when Stein was teaching for Husserl as his *Privatdozent* in all but name; see her letter to Roman Ingarden of 7 August 1917, *Self-Portrait*, pp. 19-20. Walther went on to study with Alexander Pfänder, a co-editor of the *Jahrbuch* whose work on motivation was widely influential. Although she was no longer in direct communication with Stein, Walther's work clearly shows the influence of her former teacher.

40. These portions stem from Stein and represent her attempt to rectify flaws in the logical structure of the work. *Ideas II* was never released for publication by Husserl. The text appeared posthumously, in two editions, in the series *Husserliana*. Its account of *the priority of a lone transcendental ego for the constitution of the other* remains fundamentally incoherent with its account of *empathy as a prior condition for individuation of the ego and the ego's subsequent activity of constitution*.

41. That is to say, individuation rests on something *phenomenologically* prior. As a process occurring in history, individuation follows sharing *chronologically and temporally* as well.

42. This is what the term means in its earliest uses in the work of Theodor Lipps, from which it came into Husserlian phenomenology. I trace the uses of this word in my *Body, Text, and Science*.

43. See Kathleen M. Haney, *Intersubjectivity Revisited: Phenomenology and the Other*, Athens, OH: Ohio University Press, 1994. I concur with Haney that the two approaches to intersubjectivity are complementary and convergent. But I think that Husserl's position approached Stein's. The earlier creative proposal does not "enhance" the later copy.

44. Space prevents my pursuing this criticism into Husserl's mature statement of his historical theses in his "Die Krisis der europäischen Wissenschaften und die transzendente Phänomenologie: Eine Einleitung in die phänomenologische Philosophie," *Philosophia* 1 (1936), pp. 77-176; reprinted in *Husserliana* VI.

Chapter X
Edith Stein and Modern Philosophy
Chantal Beauvais

This essay proposes to provide an analysis of Edith Stein's philosophy, particularly as expounded in *Finite and Eternal Being*¹ (*Endliches und ewiges Sein*, hereafter EES), as representing a displacement of the cogito-based sphere of evidence from human experience to the divine experience which is the "last support of evidences".² And, as B. Dupuy adds, Stein's philosophy offers a path between two contrasting ways in which modernity understands the problem of subjectivity.³ We will argue that Stein's vision of transcendental truth announces a theoretical position integrating both the concerns of *astrong modernity* (a desire for absolute foundation) and the concerns of a *weak modernity* (a refusal to give epistemic priority to human subjectivity). The categories "strong modernity" and "weak modernity" are derived from Paul Ricoeur's reflections in *Oneself as Another*, where the cogito is explored in a position of power and in a position of weakness.⁴

Stein's Understanding of Transcendental Truth

In section V of *EES* (pp. 257-301), Stein analyzes the various layers of the meaning of truth (logical truth, essential truth and ontological truth). Beyond purely formal understandings of truth, she seeks something original that renders all truth possible. What appears as the fundamental presupposition of all these layers of meaning was in fact given from the start, but was not immediately visible as such. Stein refers to the synchrony of being and spirit. Each being deploys a communicational space before spirit. This ability to communicate presupposes a kind of reciprocity between being and spirit.⁵ This communicational space is referred to as transcendental truth, which signifies an original coordinating relationship ("*Zuordnung*") of being and spirit. This cannot simply be thought of as a mere conceptual relationship.⁶

Being a being signifies a "to-manifest-itself-to," a "being-able-to-be-grasped-by" spirit. This indicates a deontological aspect of being that does not appear when things are considered strictly formally.⁷ Truth is not an arbitrary experience. On the contrary, truth manifests a certain logical intention in the heart of reality. The world is not simply there, but is to be penetrated by spirit, and spirit is not just a disinterested vision, but activates itself in grasping the multiplicity of meanings offered by the world. The world is structured so as to manifest the meaning of being. The role of spirit is to interpret the meaning of being.⁸ Even if Stein does not mention Leibniz, it is difficult not to think of his "pre-established harmony," as Philibert Secretan rightly notices.⁹ One can also find some striking similarities with some of the ontological claims embraced by Stoicism. Transcendental truth could be interpreted as a deontological relationship that regulates the achievement of being and spirit by one another – a kind of teleological relationship that is aimed at an ultimate manifestation. Stein recognizes that these considerations must be pushed a little further if we are to fully understand truth. One must explore still the meaning of "spirit" ("*Geist*"), the meaning of its "openness" ("*Geöffnetsein*"), and the full meaning of "being's being-revealed for the spirit" ("*Offenbarsein für den Geist*").¹⁰

But Stein is convinced that we can arrive at an understanding of the question that first brought on these developments by substituting the empty spaces displayed by a strictly formal definition with the results of her enquiry. Here are her results:

Spirit = the kind of being that is ordained in a determined fashion to every being

Truth = a kind of ordination of all beings with the kind of being that is ordained with all beings in a corresponding fashion (however not identical).¹¹

Being had already been defined as "that, which is," a "fulfilled thing". Stein wants to know where the "*Zuordnung*" fits in the "that, which is" – in the form (the "that," "something"), or in the content (the "is," "fulfilled")? The response is clear, given the redundancy of "being" in the "being-manifested" of "that, which is." Transcendental truth belongs to the being of beings, to their "is" and more fundamentally to the meaning of being.¹²

This equivalence between meaning, being, and evidence is certainly typical of a phenomenological approach. What we have here is an ontology of revelation. Being is understood in terms of a translucent light that allows us to see beings, without being grasped itself. Being is the ground of all experience. It is difficult at this point not to see certain parallels between Heidegger's earlier phenomenological ontology and Stein's phenomenological ontology. B.W. Imhof and J. Nota seem to have been particularly impressed by the resemblance.¹³ The subtitle title of her work ("*Versuch eines Aufstiegs zum Sinn des Seins*") indicates that her goal is the same as Heidegger's ("*die Frage nach dem Sinn von Sein*"), namely, to understand the meaning of being. Indeed, Stein was impressed with Heidegger's *Sein und Zeit*, and she considers her attempt to formulate the question of being as involving a dialogue with Heidegger.¹⁴ Yet while she agreed with Heidegger's criticism of Husserl's Kantian transcendentalism and his emphasis on the question of being, she draws conclusions that are different than his. She disagreed with his view that the meaning of being could only be given through the *Dasein*. The title of her work, *Ewiges und Endliches Sein*, already announces the nature of her disagreement with Heidegger. For Stein, the *Dasein*'s finitude, its being-thrown-in-the-world requires a complete analysis, i.e., in relation with the opposite – infinitude.¹⁵ This holistic attitude (finitude/infinitude) can also be found in Duns Scotus' account of the disjunctive transcendentals where one member of a pair of opposites can only be understood in relationship with the other.¹⁶

But Stein's interest in ontology and her double opposition to Husserl and Heidegger brings her close to the position held by her colleague of Hedwig Conrad-Martius (1888-1966)¹⁷ from whom she draws quite considerably at times.¹⁸ Against Eugen Fink and L. Landgrebe, who fiercely argued that the Munich and Göttingen phenomenological groups simply misunderstood the master's intentions, Conrad-Martius claims a right for a phenomenology based on a non-Kantian interpretation of Husserl's works. If this particular hermeneutical view remained a minority position, it is not for lack of relevance. On the contrary, argues Conrad-Martius, we owe this fact to the tragic end of many of those who defended this point of view.¹⁹ Stein was definitely influenced by Conrad-Martius. This influence is particularly visible in Stein's views on time, ontology, and more particularly on the transience of being.²⁰

When one takes into account this very complex historical and philosophical context, which is not arbitrarily imposed but specifically determined by Stein herself, one can assert that *EES* is the work of a phenomenologist who came from the Göttingen-Münich Circle who, after having discovered and appreciated the metaphysical vision emanating from the Catholic ethos, endeavours to discover the meaning of being. I will therefore agree with Nota and Secretan for whom Stein's conversion to Catholicism and her consequent interest in new philosophical and theological sources take nothing away from her phenomenological frame of mind. Her referential horizon widens, but her philosophical concerns and approach remain the same.

Edith Stein could therefore be seen as occupying a middle ground between Husserl and Heidegger. Stein believes that being is comprehensible through human discourse. This discourse is auto-referential: "I am". Stein considers subjectivity a mandatory path to being. But with Heidegger, Stein believes that subjectivity is already always rooted in an original donation: a "there is" that cannot be reduced to egological constitution. There is a methodological anteriority of the subject, but not an ontological anteriority. This is, I believe, what can be concluded from this exploration of Stein's understanding of transcendental truth. This brings about the question of situating Stein's work in relation to contemporary debates. I shall argue that Stein's philosophy occupies a middle ground between what we can call, using Paul Ricoeur's categories, strong modernity and weak modernity.

Strong Modernity

In the history of philosophy, we generally agree that modernity begins with the advent of a philosophy focussed both a critical analysis of the limits of human understanding and on the attempt to give the scientific project a solid foundation in order to secure its progress. Cartesian philosophy undoubtedly constitutes the paradigm of modern philosophy. The key notion of Cartesian philosophy, the "clear and distinct idea," also constitutes the type of certainty that modern philosophy seeks: nothing less than total transparency without the shadow of a doubt. This transparency or evidence can only be the given in self-consciousness. One can doubt many things, but one can never doubt one's ability to doubt. In the act of doubting, "interlocutors" – such as familiar objects, the world, tradition and theories – are gradually eliminated in such a way that the only voice that still resonates is one's own voice. Cartesian doubt renders the human subject to himself or herself within the very discourse of doubt. It is when the subject focusses consciously on his or her own thinking activity that his or her doubt has stumbled upon unshakable evidence: the fact of one's own existence. Therein lies the experiential weight of the famous dictum "*cogito, ergo sum*," as Ricoeur rightly points out.²¹

Husserl states that he not only assumes this way of philosophizing but does so more radically than Descartes. One must doubt further, indefinitely suspending judgement, even regarding the existence of the world, in order to extract all the richness of evidence contained in the realm of consciousness. Husserl believes that the "*cogito, ergo sum*" contains all that is needed to give a full account of spirit, being, and the relationship between the two, and that, consequently, the foundation of science is nowhere else but in this evidence-summary.²² In short, "strong modernity" can be understood as an ego-centered theoretical project (*theorein*, "saturated" vision).²³ These kinds of considerations around a "metaphysics of subject" can be detected in Stein's comparison of Husserl and Aquinas, although the context of her reflection is quite different than that of Ricoeur.²⁴

Weak Modernity

As for "weak modernity," if it does not reject the priority that should be granted to the subject's experience, it nevertheless tends to *mediate* this experience through the evidence of language. Phenomenology, according to Ricoeur, was already impregnated with this mediation.²⁵ Moreover, "weak modernity" assumes a critical stance regarding the foundationalist ambition that seeks after the absolute.²⁶ In other words, "weak modernity" seeks to occupy a

middle ground between "strong modernity" that promotes a radically foundational "cogito," and postmodernity animated by an "anti-cogito," deconstructive stance.²⁷

Ricoeur's hermeneutics of the self, as outlined in *Oneself as Another*, can be understood as an attempt to overcome the modernity-postmodernity bipolarity. The main idea promoted by "weak modernity" is no longer the "thinking subject," but a "de-centered subjectivity" which comes to self-knowledge only through the long and indefinite detour offered by Ricoeur's world of meaning objectivities: language, text, and action. Subjectivity's search for self is hence projected into the world, and the ego-centered theoretical project is neutralized. One's experience of finitude is the only condition of the possibility of any understanding. Human subjectivity knows itself and the world through understanding (*verstehen*). The subject no longer seeks after self-understanding, but after the explicitation of the act of understanding in which he or she is rooted. Thus "weak modernity" can be understood as *praktisch* rather than *theoretisch*. More precisely, "weak modernity" is a limited praxis of meaning within an unlimited horizon of meaning.²⁸

Of course this topic is worthy of a more in-depth analysis. But the aim here is not to provide a thorough account of modernity, but rather to show that Stein's ideas require a reflection on the key ideas of modernity. It is impossible to determine Stein's position within modernity without these basic parameters. In a strict sense, Stein's philosophy belongs neither to "strong modernity," or to "weak modernity"; she tries to integrate these two paradigms.

Stein's middle ground between "strong modernity" (phenomenology as rigorous science) and "weak modernity" (hermeneutical phenomenology) exposes her to criticism from both sides. From the point of view of "strong modernity," one may first ask whether Stein is faithful to Husserl's phenomenology. Second, one can wonder if her deontological ontology, where the subject appears to be condemned to a mere acceptance of the world's structure, does not seriously compromise the subject's freedom. As for partisans of a "weak modernity," they may accuse Stein of not drawing all the conclusions one can from the recognition of human finitude. It is impossible to address all of these questions within the scope of this paper. But at the very least we can start looking at the question of Stein's faithfulness to Husserl's phenomenology.

Unfaithfulness to Husserl's Phenomenology?

Regardless of the ongoing debate about Husserl's phenomenology, one can at least show that Stein's project is witness to a series of tensions that it manifests. Recent research has demonstrated that, far from having constituted a coherent system, Husserl left behind a very complex philosophy that contains several tensions. According to J.H. Mohanty, one can find at least the following tensions:

1. between his essentialism and his transcendentalism;
2. on the one hand, a complex made up of his essentialism and his transcendental philosophy, and on the other hand, his posterior historicism;
3. between those three components and the world of life;
4. between his intuitionism and his theory of constitution.²⁹

And, as if this was not complicated enough, Mohanty also states that there is a very complex relationship between a transcendentalism that wants to rid conscience of all empirical residue, and the priority that Husserl nevertheless grants to the empirical and the corporeal order. This particular tension is perhaps the most relevant here.

Stein's double – and apparently contradictory – contribution in this regard resides in the following: to relativize the transcendental subjectivity's claim to absolute evidence in order to provide phenomenology with a better foundation. I believe that this particular relationship between subjectivity and philosophical foundation, intrinsic to her philosophical project, represents the point of demarcation between Stein and her peers from the Göttingen Circle who tended to embrace a form of Platonic essentialism.³⁰ Contrary to Conrad-Martius, Adolf Reinach, and Jean Hering, Stein does not believe that Husserl's *Ideas* represents a radical break with the *Logical Investigations*. But she believes that the exploration of the problem of constitution did not mandate a recourse to Cartesian skepticism. This is obvious in a statement that she made during the *Journée d'études de la société thomiste* (1932), where she was invited by Alexandre Koyré to represent the point of view of phenomenology.³¹ From the onset, Stein's philosophy manifests, like Husserl's, what Ricoeur has identified as the very essence of a reflexive philosophy: "a reflexion carries with it the desire for absolute transparence, a perfect coincidence of the self with itself, which would make consciousness of self indubitable knowledge and, as such, more fundamental than all forms of positive knowledge".³² This is clearly manifest in many of Stein's assertions during the *Journée d'études* in Juvisy.³³

In line with reflexive philosophy, and contrary to Aristotelian-Thomistic philosophy, Stein does not hesitate to adopt the transcendental sphere as a starting point for her "attempt toward the meaning of being". Because of this immanentism, Stein does not feel compelled to simply reject the transcendental reduction. Like her friend and colleague Roman Ingarden – albeit her theoretical position is not as clearly defined as his – Stein believes that the transcendental reduction is methodologically justified.³⁴ But she rejects both a Berkeleyan type of reduction that eliminates objectivity, and a Kantian type of reduction whose champions demonstrate a certain "ignorance crasse" regarding a yielding residue that never ceases despite unending attempts to subsume it in a transcendental function. According to Stein, any rigorous analysis of consciousness dictates a moratorium on transcendental reduction as it yields to a passiveness inherent to all of the ego's constituting activities.³⁵

It is impossible to carry out an absolute doubt. What Stein's view of transcendental truth shows is that doubt is impossible without something that makes it emerge as doubt. As there are no shapes without a background that makes their emergence possible, there are no acts of the spirit without being. The two dimensions, spirit and being, are inseparable and are one another's necessary condition. Therefore, Stein realized sooner than Husserl that one must indefinitely postpone "to project onto an ever more distant horizon as philosophy goes on providing itself with the instruments of thought capable of satisfying it".³⁶ The fundamental orientation of human being and action in the *Lebenswelt* constitutes the condition of possibility of meaning for any act of the subject. The fullness of being always already precedes and exceeds the act of comprehension. It did not take long before the Husserlian indefinite postponement of reason's goal to a further horizon came to be interpreted as the failure of modernity's foundational project. One cannot but agree with Ricoeur's depiction of the "tragic" epic of a phenomenology that started out pretending to give absolute meaning and ended up as the reception of an always-giving gift.³⁷ However, nothing prevents one from thinking that this indefinite postponement, far from declaring the end of reason (as postmodern philosophers generally believe) manifests its "eschaton," i.e., brings into light reason's reason – a desire not only to witness but first and foremost to accomplish the perfect marriage of the order of existence and the order of logic.³⁸ Moreover, one could argue, like Jean Ladrière, that postmodernity, with all its deconstructive power, is nothing less than a classical form of rationalism.³⁹

The postponement of the ultimate moment of truth puts what could be called a totalitarian reason into question. For Stein, reflexive philosophy's humbling situation does not discredit reason's goals, but means that reason will find its accomplishment through the depth of immanence. To use her somewhat mystical language, "seeing" the totality of being will not satisfy reason, but "experimenting" its plenitude will.⁴⁰ Underlined by an ontology of progressive fulfilment of meaning, not only must transcendental truth give an account of artistic truth, logical truth, and scientific truth; it must first and foremost explain the truth of human being as this singular destiny which grasps something of the fullness of beings and of one's being, albeit through partial and discontinuous perspectives. We are touching the spiritual dimension of truth. Truth is also the truth of one's life; it is a truth that we do not find, but that finds us.⁴¹ We hold as true not only what reason makes us see, but what the soul knows to exist. In other words, the domain of meaning is larger than the domain of understanding. This is, perhaps, the essence of Stein's criticism of Heidegger's phenomenology.

As we have seen, Stein's critical attitude towards strong modernity, in the name of subjectivity's finitude, does not lead to the dissolution of the subject that we typically encounter in postmodern philosophy. Can we therefore characterize Stein's philosophy as a kind of hermeneutics, and can we consequently place Stein's philosophy between modernity and postmodernity? One can describe Stein's project as hermeneutical insofar as it constitutes a mediation of subjective reflexivity. However, one must recognize that Stein's hermeneutics is distinctive. Mediation, according to Stein, is effectuated through another's reflective experience – an experience that is divine. And, contrary to hermeneutics in the strong sense (which rejects the existence of an absolute foundation), Stein appears to be using this mediation to further phenomenology's foundational cause. It is difficult to find anything less like Gadamer's philosophical attitude. On the one hand, we have the recognition of the failure of phenomenology's foundationalist project, and on the other hand, we have the transfer of the foundationalist ambition, in the name of human reason's finitude, to a divine transcendental sphere where ego and ipseity are one and the same. Must we, then, conclude that Stein's project is schizophrenic? Perhaps such a conclusion is too hasty.

We must explore Stein's proposed detour, via the divine cogito, to phenomenology. This touches a very important point in Stein's philosophy – her belief that "Christian philosophy" (as she defines it) and the Husserlian concept of "philosophy as a rigorous science" are the same thing. Since a perfect adequation of the realms of meaning and of existence is not possible for human reason, and since the ultimate goal of phenomenology is nevertheless preserved in Stein's philosophy, she allows for theological content to be introduced into philosophical thinking. When Stein was writing EES, there was an extraordinary debate taking place in Europe concerning the concept of "Christian philosophy" and the distinction to be made between the realm of faith and the realm of reason. Stein held a surprising position, especially since she asserts that she is inspired by Aquinas. She claimed that it is appropriate for philosophy to examine and integrate theological content. The source of this content is not important; as long as it is meaningful, it can be offered to reason. The other peculiarity of Stein's position – at least at the time at which she wrote – is that Christian revelation is not to be understood as an achieved totality. Theology is an infinite effort to comprehend and articulate meaning. Thus, Christian philosophy could not pretend to be a wholly realized totality either.

Stein's aim is nevertheless to achieve a "*perfectum opus rationis*".⁴² (Stein seems to believe that this expression comes from Aquinas – though it does not. Stein borrows it from Jacques Maritain,⁴³ who claims to have found it in Aquinas' writings (*ST II-II*, 45, 2). But F.

Gaboriau⁴⁴ and X. Tilliette⁴⁵ have clearly shown that Maritain is wrong in attributing this expression to Aquinas. In the above-mentioned passage in the *Summa*, where he talks about the rectitude of judgement, Aquinas uses the expression "*perfectum usus rationis*," not "*perfectum opus rationis*." The latter expression is probably the result of a mistake in memory on Maritain's part. One might also add that Maritain's understanding of "Christian philosophy" is grounded in the concept of "*perfectus usus rationis*," since it consists in the philosopher's making a proper use of reason. Stein's case is different. She really wishes to accomplish theoretical reason's project – the articulation of the ideal science.) "Christian philosophy" is embedded in the hermeneutical circle. Stein's hope is that this circle will somehow 'evolve' into the full satisfaction of the spirit. Stein conceives of "Christian philosophy" as an absolute knowledge. Like Husserl, she believes that this absolute knowledge is teleological. This is clear from the distinction that she draws between a theocentric philosophy and an egocentric philosophy. Now, one might ask: Why should there be a theological detour if this changes nothing in the infinite openness of the philosophical endeavour? I think that this is because Stein means to transcend the order of beings (i.e., the order structured by categories and transcendentals) towards that which provides order, is self constitutive, and is a fully personal being.

The hermeneutical principle consists in establishing a meditation between subjectivity and an objective otherness in which the spirit acknowledges itself as spirit. Stein conceives of theology as an objective realization of spirit. The Christian God appears in theological discourse as a spirit. God is also perceived as the spirit other than the human spirit. God is not merely conceived as another self, but more radically as "oneself as an other." Why should we then exclude God from the intersubjective community of meaning? This implicit hermeneutical principle is at the root of Stein's analogy of the person. We grasp God's subjectivity in the same way that we grasp another's subjectivity: by recognizing in their language the sign of a personal spirit.

It would certainly be useful to explore Stein's theory of empathy (*Einfühlung*) but, for the purpose of this essay, I will simply say that empathy has nothing to do with a sympathy that would blur the distinction between persons (*Einsfühlung*), but is related to a *sui generis* perception of the other's subjectivity.⁴⁶ Like a human being – and because God is a subject – God invests himself in language as a subject ("I") and as a person.⁴⁷ A reflexive and personal opening awaits Steinian phenomenology in the midst of its quest for the meaning: from the being of meaning, to personal being, to the meaning of being. There is no other way for a rigorously scientific phenomenological ontology.

As Secretan has pointed out, Stein presents an analogy of the personal "I" in contrast to Aquinas' analogy of being.⁴⁸ Stein does not believe in the usefulness of the classical analogy of being that aims at creating a link between God and the world by correlating essence and existence. For Stein, God's unity and simplicity remain outside of analytical thinking and do not lend themselves to the scholastic theory of *analogia entis*. The complexity of our theological language reveals a radical incapacity to think God's unity and simplicity.⁴⁹ On the contrary, one can think of God as an "I" because this experience of the self is part of the human being's realm of experience. However, God's experience of the self is not characterized with nothingness ("Nichtsein").⁵⁰ This common ground of experience in God and the human being is the anchor or the *ens commune* that allows Stein to transfer the absolute instantiation of meaning.⁵¹ While God's language about himself ("I am who I am") manifests a certain similitude with the human experience of the self, it nevertheless also reveals the radical otherness of the divine ego. While the human ego merely brands the contents of consciousness as experiences of the self – without such contents the ego would be reduced to an empty form – the divine ego is a person *a priori*; the

divine self is a plenitude of being always-already personally being.⁵² This is why only the divine egological sphere is truly constitutive of meaning. There is no empirical residue in the divine egological sphere. The giving of meaning as well as the act of being together constitute an entire self-giving. God is the original ground ("Ur") from which meaningful life is possible: for God, being means to live exclusively as spirit.

How are all these theological considerations related to transcendental truth? Transcendental truth manifests an original co-ordination of spirit and being. This co-ordination leads to the being of meaning as the meaning of being. Transcendental truth lets us think of God as a transcendental person – as the condition of possibility of all events. Thus, God is neither truth nor being, because God is the unconditioned from which all the rest comes to being and is conditioned.⁵³

One may conclude that, even in her presumed infidelity, Stein remained faithful to Husserl's project and showed a profound understanding of the key elements of transcendental phenomenology. Moreover, there is no good reason to conclude that Stein's theological hermeneutics is radically contrary to phenomenology. According to Ricoeur, certain developments in Husserl's *Ideas* lead us to think about God as a "radical subject,"⁵⁴ even if this is not explicitly stated.

Stein's philosophical enterprise has been presented as belonging to "weak" modernity. Stein is a *modern* philosopher, because she does not altogether give up a cogito-centered philosophical project. More specifically, her project belongs to weak modernity because she is critical of Husserl's ambition to accomplish this project entirely autonomously. Stein argues that the journey of philosophy must take a theological detour. This is surprising, but it is supported by a philosophy of meaning. Stein does not fear such a detour into a foreign – and forbidden – land, to the extent that theology is apprehended in its intelligible character. Paradoxically, Stein places radical demands upon philosophy, but she insists on the finite capacities of human intelligence. It is obvious that this is not very Thomistic in spirit. Aquinas was much more realistic where human nature was concerned: he did not demand too much, and believed that human nature had everything needed to accomplish its task. In contrast, Stein and Husserl belong to the same 'spiritual family.' Their paths diverge when it comes time to draw the consequences for philosophy of holding both this absolute goal and human finitude as inseparable theses. For Stein, human finitude cannot be conceived or accomplished without infinite being. The human being's effort to understand the world has an origin and a term: infinite being. If truth can be sought, it can be found in the order of the world. Without ontological order and without an infinite being to enact this order, there results a situation of "to each his own truth." For Husserl, human finitude means that the effort to comprehend the world is infinite. There always remains a surplus of meaning to understand. As Gerhard Seel has written, each of these two approaches are theoretically problematic. Infinite being paradoxically gives rise to a being to which lacks the perfection of self-transcending, while historical infinity throws the human being into an "impossible history."⁵⁵

Must we then choose between an unhistorical infinite foundation and a desperate race toward an unreachable goal? Let us say that, on Stein's understanding of the infinite, it does not have the impersonal and inhuman character depicted by Seel (whose inspiration came from the Anselmian proof for the existence of God). On the contrary, Stein's infinite reveals itself as that which, in the human, renders itself more human; it is the aptitude to be a person. As Mary Catherine Baseheart has noted, the infinite is close to the human being, and is given through a grasp of the human being's ontological finitude.⁵⁶ Indeed, one could show that Stein's understanding of the infinite was influenced by a Trinitarian theology and, therefore, that this infinite is indeed capable of self-transcending through forever self-giving.

But this is the subject of another essay.⁵⁷

Notes

1. *Endliches und ewiges Sein. Versuch eines Aufstiegs zum Sinn des Seins* [Edith Steins Werke, Vol. 2] Louvain/Freiburg: Nauwelaerts/Herder, 1950.

2. Jean Ladrière, "Philosophy and Science," *Philosophical Studies*, VII (1958), p. 10.

3. Bernard Dupuy, "Au commencement était le sens. L'herméneutique d'Edith Stein," in *Interpréter. Mélanges offerts à Claude Geffré*, ed. Jean-Pierre Jossua et Nicolas-Jean Séd, Paris: Cerf, 1992, p. 180.

4. Paul Ricoeur, *Oneself as Another*, tr. Kathleen Blaney, Chicago: University of Chicago Press, 1992.

5. "Wir haben früher in anderem Zusammenhang davon gesprochen, daß alles Seiende einen Sinn habe oder – scholastisch ausgedrückt – eine *intelligibile* sei: etwas, was in einen erkennenden Geist "eingehen," von ihm "umfaßt" werden kann. Beides scheint mir mit der transzendentalen Wahrheit gleichbedeutend zu sein. Alle drei Ausdrücke sprechen eine Zuordnung von Geist und Seiendem aus". *EES*, p. 276.

6. Stein's choice of vocabulary is particularly noteworthy here. She does not use the word "Übereinstimmung," but the word "Zuordnung" in order to name this original relationship between being and spirit. This word conveys the idea that the world is not simply "there," but is purposefully there. Moreover, Stein uses "Übereinstimmung" (when translating Aquinas' *Disputed Questions on Truth*) as an equivalent of the Latin expression "convenientia" (this conveys the idea of "Deckung," logical truth). All these exegetical notes show that Stein carefully chose her words, and that she meant to point to a new idea by introducing the word "Zuordnung".

7. *EES*, p. 276.

8. "Aber die Bewegung ist auf ein Ziel und ein Ruhen am Ziel gerichtet. Dieses Ziel ist das Anschauen des Seienden," *EES*, p. 363.

9. *Phénoménologie et philosophie chrétienne*, présenté et traduit par Ph. Secretan, Paris: Les éditions du Cerf, 1987, p. 156. There is also some affinity with Hans Urs von Balthasar, *Wahrheit: ein Versuch. Erstes Buch. Wahrheit der Welt*, Einsiedeln: Verlagsanstalt Benziger, 1947, pp. 79-80. This affinity may not be fortuitous, as Balthasar also was a disciple of Przywara.

10. *EES*, p. 277.

11. "Geist = die Gattung des Seienden, die allem Seienden in bestimmter Weise zugeordnet ist; Wahrheit = eine bestimmte Form der Zuordnung alles Seienden zu der Gattung des Seienden, die allem Seienden in entsprechender (nicht in derselben) Form zugeordnet ist." *EES*, p. 277.

12. "Offenbar sein," "zugeordnet sein" – darin steckt ja das Sein selbst. Darin ist aber nicht eine besondere Art des Seins zu sehen, sondern es gehört zum Sein selbst. *Sein ist* (ohne daß damit sein voller Sinnesbestand erschöpft wäre) *Offenbarsein für den Geist*," *EES*, p. 277.

13. B.W. Imhof, "Die Auseinandersetzung mit Martin Heidegger," in *Edith Steins philosophische Entwicklung. Leben und Werk* (Erster Band), Basel/Boston: Birkhäuser Verlag, 1987 (*Basler Beiträge zur Philosophie und ihrer Geschichte*; 10), Jan Nota sj, "Edith Stein und Martin Heidegger," in *Denken im Dialog. Zur Philosophie Edith Steins*, ed. Waltraud Herbstrith, Tübingen: Attempto Verlag, 1991, p. 93-116; "Edith Stein - Max Scheler - Martin Heidegger," in *Edith Stein: Leben, Philosophie, Vollendung; Abhandlungen des Internationalen Edith-Stein-Symposiums, Rolduc, 2.-4. November 1990*, ed. L. Elders, Würzburg: Naumann, 1991, pp. 227-237.

14. *Vorwort, EES*, p.XII.
15. *EES*, p. 52.
16. At times, Stein exhibits a Scotist attitude: e.g., theory of spiritual matter (*EES*, p. 377), theory of a formal principal of individuation (*EES*, p. 446), theory of quidditative neutrality (*EES*, p. 98).
17. "Wir müssen ein Bild gebrauchen: es ist, wie wenn mit ungeheurer Wucht, weisheitsvoller Umsicht und nicht nachlassender Zähigkeit eine durch lange Zeiträume ungeöffnete und fast nicht mehr öffnere Tür aufgesprengt und gleich darauf wieder zugeschlagen, verriegelt und so stark verbarriadiert wird, daß Wiederöffnen unmöglich scheint. Nach dem verheißungsvollen Getöse des Aufbruchs die hoffnungslose Stille verschlossener und verlassener Zugänge!" H. Conrad-Martius, "Heideggers Sein und Zeit," *Schriften zur Philosophie*, Band I, München: Kösel-Verlag, 1963-65, p. 185.
18. "Von Hedwig Conrad-Martius hat die Verfasserin durch nahes Zusammenleben in einer jetzt lange zurückliegenden, aber für beide entscheidenden Zeit richtunggebende Anregungen empfangen. Dem Einfluß ihrer Schriften wird man in diesem Buch wiederholt begegnen". *EES*, p. XII.
19. H. Conrad-Martius, "Die transzendente und die ontologischen Phänomenologie," *Schriften zur Philosophie*, Bd III, München: Kösel, 1963-1965, p. 393.
20. In *Finite and Eternal Being*, Stein refers explicitly to the following works of Conrad-Martius: "Realontologie" in *Jahrbuch für Philosophie und phänomenologische Forschung* VI, 1924; "Farben" in *Husserl Festschrift*, "Die Zeit," "Die Seele der Pflanze," "Existence, substantialité, âme."
21. "If the cogito can arise out of this extreme condition of doubt, it is because someone is doing the doubting"; *Oneself as Another*, p. 5
22. "[...] the cogito is not a first truth that would be followed by a second, a third, and so on but the ground that grounds itself, incommensurable with all propositions, not only empirical ones but transcendental ones as well," *Oneself as Another*, pp. 10-11.
23. See J. Ladrière, *L'articulation du sens I. Discours scientifique et parole de la foi*, Paris: Les Éditions du Cerf, 1984, pp. II-III.
24. "The world which is constructed in the acts of the subject always remains a world for the subject. [Husserl's phenomenology] could not succeed in this way – as was objected again and again to the founder of phenomenology by his circle of pupils – in winning back from the sphere of immanence, that objectivity from which he had proceeded and which it was his aim to safeguard: a truth and reality free from all subject-relativity"; "Husserl's Phenomenology and the Philosophy of St. Thomas Aquinas. Attempt at a Comparison" in *Person in the World. Introduction to the Philosophy of Edith Stein*, by M.C. Baseheart, Boston: Kluwer, 1997, p. 136 (tr. from Edith Stein, "Husserls Phänomenologie und die Philosophie des heiligen Thomas v. Aquino," *Jahrbuch für Philosophie und phänomenologische Forschung*,. In Gemeinschaft mit Moritz Geiger (München), Alexander Pfänder (München), Adolf Reinach (Göttingen), Max Scheler (Berlin), herausgegeben von E. Husserl. Halle a. S., Max Niemeyer Verlag. *Festschrift E. Husserl zum 70. Geburtstag gewidmet. Ergänzungsband zum Jahrbuch für Philosophie und phänomenologische Forschung*, 1929).
25. "And yet, whatever the theory it applies to itself and to its ultimate claims, in its effective practice phenomenology already displays its distance from – rather than its realization of – the dream of such a radical grounding in the transparency of the subject to itself. The great discovery of phenomenology, within the limits of the phenomenological reduction itself, remains

intentionality, that is to say, in its least technical sense, the priority of the consciousness of something over self-consciousness. This definition of intentionality, however, is still trivial. In its rigorous sense, intentionality signifies that the act of intending something is accomplished only through the identifiable and reidentifiable unity of intended sense – what Husserl calls the "noema" or the "intentional correlate of the noetic intention." Moreover, upon this noema are superimposed the various layers that result from the synthetic activities that Husserl terms "constitution" (constitution of things, constitution of space, constitution of time, etc.). Now the concrete work of phenomenology, in particular in the studies devoted to the constitution of "things," reveals – by way of regression – levels, always more and more fundamental, at which the active syntheses continually refer to ever more radical passive syntheses"; P. Ricoeur, *From Text to Action. Essays in Hermeneutics*, tr. Kathleen Blamey and John B. Thompson, Evanston, IL: Northwestern University Press, 1991, p. 13.

26. "The shattered cogito: this could be the emblematic title of a tradition, one less continuous perhaps than that of the cogito, but one whose virulence culminates with Nietzsche, making him the privileged adversary of Descartes. [...] The attack against the foundational claim of philosophy is based upon a critique of the language in which philosophy expresses itself."; Ricoeur, *Oneself as Another*, p. 11.

27. "Exalted subject, humiliated subject: it seems that it is always through a complete reversal of this sort that one approaches the subject; one could thus conclude that the "I" of the philosophies of the subject is atopos, without any assured place in discourse. To what extent can one say that the hermeneutics of the self developed here occupies an epistemological place (also an ontological place, as I shall state in the tenth study), situated beyond the alternative of the cogito and of the anticogito?," *Ibid.*, p. 16.

28. Ricoeur, *From Text to Action*, p. 15.

29. J.H. Mohanty, *Phenomenology. Between Essentialism and Transcendental Philosophy*, Evanston, IL: Northwestern University Press [*Northwestern University Studies in Phenomenology and Existentialism*], 1997, p. 12.

30. Bernard Dupuy is perhaps the only scholar to have perceived this difference between Stein, Reinach, Conrad Martius and Hering. Cf. B. Dupuy, "Au commencement était le sens. L'herméneutique d'Edith Stein," in Jean-Pierre Jossua et Nicolas-Jean Séd, *Interpréter. Mélanges offerts à Claude Geffré*, Paris: Cerf, 1992, p. 179.

31. "Auf die Frage, ob zwischen *Logischen Untersuchungen* und *Ideen* ein absoluter Bruch sei, möchte ich antworten: Das scheint mir keineswegs der Fall zu sein. Die *Logischen Untersuchungen*, besonders die V. Und VI., enthalten Motive, die zu den Fragen der transzendentalen Konstitution führen mussten. Ich glaube, Husserl hätte auch ohne den Weg über Cartesianische Zweifelsbetrachtung dahin gelangen können"; Société thomiste, *La phénoménologie*, Juvisy, 12 septembre 1932, Kain/Juvisy: Cerf, 1932 (Journées d'études de la société thomiste, I), p. 103.

32. Ricoeur, *From Text to Action*, pp. 12-13.

33. "Das Suchen nach einem absolut gewissen Ausgangspunkt des Philosophierens scheint mir psychologisch motiviert und objektiv begründet durch das Faktum des Irrtums und der Täuschung"; Société thomiste, *La phénoménologie*, p. 110.

34. R. Ingarden, *On the Motives Which Led Husserl to Transcendental Idealism*, [*Phaenomenologica*; 64] tr. Arnór Hannibalsson, Den Haag: Martinus Nijhoff, 1975.

35. "Die transzendente Reduktion scheint mir methodisch gerechtfertigt, um die Sphäre der konstituierenden Akte sichtbar zu machen. Es ist aber die Frage, ob gerade das Phänomenon

der Realität die Ausschaltung der Existenz zulässt und nicht vielmehr zu einer Aufhebung der Reduktion zwingt. [...] Die getreue Beschreibung dessen, worauf die reflektierende Analyse als Letztes stösst, zeigt nicht blosses Ich-Aktivität, sondern das Ich, seinen Akt und etwas, das nicht es selbst und das nicht durch seine Willkür geschaffen ist. Husserl selbst hat den Gegensatz von Aktivität und Passivität im gesamten Bewusstseinsleben und speziell in der Wahrnehmung ist eine Mannigfaltigkeit motiviert ineinander übergehender Akte, die das eine und selbe Ding in immer neuen perspektivischen Abschattungen vor uns erscheinen lassen. Die Intentionen, die auf das Ding gerichtet sind, stützen sich auf ein wechselndes «hyletisches Material,» Empfindungsdaten, die für die Wahrnehmung vorgegeben sind, ihren Verlauf und die sie beherrschende Intention motivieren. Die Beurteilung dieses hyletischen Materials scheint mir für die Idealismusfrage von grosser Bedeutung. Ein Idealismus vom Typus der Berkeleyschen ist durch die Herausarbeitung des intentionalen Charakters der Wahrnehmung ausgeschlossen. Ein dem kantischen verwandter transzendentaler Idealismus, der den Aufbau der äusseren Welt als Formung des sinnlichen Materials durch Kategorien versteht, erscheint bestenfalls als eine mögliche Deutung des phänomenalen Bestandes, ohne einen Beweis der Daseinsrelativität der Aussenwelt geben zu können. Auf die Frage nach der Herkunft des ichtzugehörigen und doch ichtfremden Materials muss er die Antwort schuldig bleiben. Er behält einen irrationalen Restbestand. Und schliesslich wird man sagen müssen, dass er den Phänomenen nicht gerecht wird: die Wesens- und Daseinsfülle, die in aller echten Erfahrung in das erfahrende Subjekt einbricht und bewusstseinsmässig alle Fassungsöglichkeiten übersteigt, widerspricht der Rückführung auf eine blosses Sinngebung vom Subjekt her. So scheint mir gerade die getreue Analyse der Realitätsgegebenheit zu einer Aufhebung der transzendentalen Reduktion und zu einer Rückkehr in die Haltung der gläubigen Hinnahme der Welt zu führen"; Société thomiste, *La phénoménologie*, pp. 110-111.

36. Ricoeur, *From Text to Action*, p. 13.

37. "Phenomenology is thus caught up in an infinite movement of "backward questioning" in which its project of radical self-grounding fades away. Even the last works devoted to the life-world designate by this term a horizon of immediateness that is forever out of reach. The Lebenswelt is never actually given but always presupposed. It is phenomenology's paradise lost. It is in this sense that phenomenology has undermined its own guiding idea in the very attempt to realize it. It is this that gives to Husserl's work its tragic grandeur," Ricoeur, *From Text to Action*, pp. 13-14.

38. On the notion of "eschaton" and its accomplishment, see Jean Ladrière, "Théologie et modernité," *Revue théologique de Louvain*, 27 (1996), p. 192.

39. Jean Ladrière, *L'articulation du sens II, Les langages de la foi*, Paris: Les éditions du Cerf, 1984, p. 109.

40. "Der Geist kann sehen und die Seele leer bleiben"; *Die ontologische Struktur der Person und ihre erkenntnistheoretische Problematik*, ESW 6, p. 147.

41. "I took a book entitled Life of Saint Theresa of Jesus written by herself. I started to read it and was totally overwhelmed. I kept reading until the book was finished. I closed the book and said to myself: here is truth" [my translation]. Cf. F. Gaboriau, *Lorsque Edith Stein se convertit*. Extraits des oeuvres d'Edith Stein choisis et traduits par P. Secretan, Genève: Ad Solem, 1997, p. 32.

42. "So ist nach unserer Auffassung *Christliche Philosophie* nicht bloß der Name für die Geisteshaltung des christlichen Philosophen, auch nicht bloß die Bezeichnung für die tatsächlich vorliegenden Lehrgebäude christlicher Denker – es bezeichnet darüber hinaus das Ideal eines *perfectum opus rationis*, dem es gelungen wäre, die Gesamtheit dessen, was natürliche

Vernunft und Offenbarung uns zugänglich machen, zu einer Einheit zusammenzufassen"; *EES*, p. 26.

43. J. Maritain, *De la philosophie chrétienne*, Paris: Desclée de Brouwer, 1933, p. 31.

44. F. Gaboriau, *Edith Stein Philosophe*, Paris: F.A.C. Editions, 1989.

45. X. Tilliette, "Edith Stein et la philosophie chrétienne," *Gregorianum*, 71 (1990), no. 1, pp. 97-113.

46. "So now with empathy itself. [...] We are dealing with an act which is primordial as present experience though non-primordial in content. And this content is an experience which, again, can be had in different ways such as memory, expectation, or in fancy. When it arises before me all at once, it faces me as an object (such as the sadness I "read in another's face"). But when I enquire into its implied tendencies (try to bring another's mood to clear givenness to myself), the content, having pulled me into it, is no longer an object. I am now no longer turned to the content but to the object of it, am at the subject of the content in the original subject's place"; *On the Problem of Empathy*, 3rd rev. ed., tr. Waltraut Stein, Washington, DC: ICS Publications, 1989, p. 10.

47. "Ich möchte nun versuchen, die letzte aller Seinsfragen noch von einem ganz anderen Punkt her in Angriff zu nehmen: von dem Namen her, mit dem Gott sich selbst genannt hat: "Ich bin der Ich bin" [Die hebräischen Worte *Āh' jāh, ascher āh' jāh*]. Es scheint mir höchst bedeutsam, daß an dieser Stelle nicht steht: "Ich bin *das Sein*" oder »Ich bein *der Seiende*«, sondern "Ich bin der *Ich bin*". Man wagt es kaum, diese Worte durch andere zu deuten. Wenn aber die augustinische Deutung zutrifft, so darf man wohl daraus folgern: Der, dessen Name ist "Ich bin," ist das Sein in Person"; *EES*, p. 317.

48. P. Secretan, "Edith Stein on the 'Order and Chain of Being'," in *The Great Chain of Being and Italian Phenomenology*, ed. A. Ales Bello, *Analecta Husserliana*, Vol. XI, 1981, pp. 113-123.

49. "Thomas braucht Wendungen wie: "Gott ist seine Güte, sein Leben" usw., und ebenso: "Gott ist sein Sein". Das sind alles Versuche, etwas in Urteilsform auszusprechen, was sich im Grunde nicht mehr in Form eines Urteils aussprechen läßt. Denn zu jedem Urteil gehört eine Zergliederung zu. Am ehesten ist noch die Aussage möglich: "Gott ist – Gott" als Ausdruck der Unmöglichkeit einer Wesensbestimmung durch etwas anderes als Ihn selbst. Gottes Name bezeichnet Wesen und Sein in ungeschiedener Einheit"; *EES*, p. 317.

50. "Ein unendlicher Abstand unterscheidet es offenbar vom göttlichen Sein, und doch gleicht es ihm mehr als irgend etwas anderes, was im Bereich unserer Erfahrung liegt: eben dadurch, dass es Ich, dass es Person ist. Wir werden von ihm aus zu einem – wenn auch immer nur gleichnishaften – Erfassen des göttlichen Seins kommen, wenn wir alles entfernen, was Nichtsein ist"; *EES*, p. 319.

51. P. Secretan, "L'analogie du "Je suis" selon Edith Stein," in *Analogie et dialectique. Essais de théologie fondamentale*, sous la direction de P. Gisel et P. Secretan, Genève: Labor et fides, 1982, (*Lieux théologiques*; 3), p. 141.

52. "Es gibt bei Gott nicht – wie Menschen – einen Gegensatz von Ichleben und Sein. Sein "Ich bin" ist ewig-lebendige Gegenwart, ohne Anfang und Ende, ohne Lücken und ohne Dunkelheit"; *EES*, p. 319.

53. "Dieses Ichleben hat alle Fülle in sich und aus sich selbst: es empfängt nichts anderswoher – es ist ja das, woraus alles andere alles empfängt, das alles andere Bedingende, selbst Unbedingte"; *EES*, p. 319.

54. P. Ricoeur, *Introduction à Ideen I de E. Husserl*, p. xxx.

55. G. Seel, "Dépassement de soi ou repos en soi," *Le dépassement de soi dans la pensée philosophique*, Actes du colloque des 19 et 20 octobre 1990 pour les soixante-dix ans de Fernand Brunner, professeur honoraire de l'Université de Neuchâtel, avec une bibliographie de Fernand Brunner, Neuchâtel, La Baconnière (*Langages*), 1994, pp. 107-123.

56. M.C. Baseheart, "Infinity in Edith Stein's *Endliches und ewiges Sein*," *Infinity, Proceedings of the American Catholic Philosophical Association*, Vol. 55 (1981), pp. 126-134, at p. 133.

57. In my doctoral thesis, *Le concept Steinien de vérité transcendante* (Université d'Ottawa, 2000), I have advanced a preliminary comparison that attempts to show that Stein's metaphysics has much affinity with that of Duns Scotus in this regard.

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