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Philosophy
and the
Humanities
10.1 Making the Humanities Scientific

Brentano’s Project of Philosophy as Science

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During the nineteenth century we witness an extraordinary progress and increasing specialization in the natural sciences as well as the growth and professionalization of universities in Germany. At the same time, after the deaths of Goethe and Hegel, the epoch of Romanticism and German Idealism had come to an end. While the sciences diversified and emancipated from their philosophical past, philosophy itself fragmented into competing schools and currents, and in many respects, precipitated into an existential crisis. For a long time in the mainstream historiography of philosophy the nineteenth century was considered to harbor only epigones or predecessors. However, there certainly were central questions specific to the development of philosophy and the humanities in the nineteenth century: What makes science science? What would make philosophy science? What is or should be the relation between the natural sciences and the humanities, the Natur- and the Geisteswissenschaften? The scientific status of philosophy became a mainstream issue at first in nineteenth-century philosophy and concerned the demarcation of academic and institutional fields as well as the fundamental nature of scientific knowledge as such. Many prominent philosophers and psychologists now argued that philosophy needed to become scientific by taking the natural sciences as a model, while before the nineteenth century philosophy in general had been regarded as universal science and the sum of all knowledge. During the nineteenth century, scientists did no longer consider themselves to be philosophers and few, if any, philosophers could claim to be able to embrace the depth and breadth of the former ‘natural philosophy’. There certainly had been debates about the precise subject, method and demarcation of specific subdisciplines prior to the nineteenth century, but these were still considered as internal to philosophy as an encompassing whole, as the overarching quest for knowledge. Before the nineteenth century, few felt the need to articulate the relation between philosophy and science as if these were two independent enterprises or to argue that philosophy would need to become more scientific. Indeed, prior to
the nineteenth century most empirical and experimental scientific research was considered to be part of philosophy. If philosophy was inspired by any models of rigorous science outside itself, those were geometry and mathematics rather than physics or chemistry.

In the second half of the nineteenth century, however, philosophy needed to reestablish its proper role and function: beneath, between or beyond the increasingly diversified natural sciences. What options did philosophy have to become scientific? According to Hegel, philosophy would not really have a domain of its own, but rather a specific method to approach any domain, the method of speculation. Speculation would yield the concepts that would then determine the objects, not from experience, but a priori. The focus is on method and the form of reasoning, on building a top-down system that can account for the whole of reality in a holistic manner. In the second half of the century, however, the view that philosophy would instead have a domain of its own gained currency. The proper domain of philosophy would not be the physical world outside us, but the internal world of the psyche. A truly scientific philosophy would have to be based on a natural-scientific experimental psychology. This idea became so popular in Germany toward the end of the nineteenth century that philosophy chairs were increasingly being offered to experimental psychologists, to the point that when the experimental psychologist Erich Jaensch obtained the chair of philosophy in Marburg in 1912, replacing the neo-Kantian Herman Cohen, the philosophers vehemently protested and sent around a petition to collect signatures in all German universities containing a ‘Declaration against the occupation of philosophical chairs by representatives of experimental psychology’, requesting the institution of separate chairs for psychologists and the repristination of philosophical chairs previously assigned to psychologists.

Many experimental psychologists, including Wilhelm Wundt (who is usually credited with founding the first psychological laboratory), argued that by studying the relations between the external and internal world through experimentation, psycho-physics could establish the essential link between nature and consciousness, and hence ultimately found the humanities on the natural sciences. The view that the mind can be reduced to the brain remains widespread today not only among the general public, but also within the cognitive sciences and philosophy of mind, leading to claims such as: ’Intentionality is a biological feature of the world, on all fours with digestion or photosynthesis. It is caused by and realized in the brain.’ But if the Geisteswissenschaften are in the end founded on the Naturwissenschaften, then what do they actually study? Since we already have a natural science that claims to study the mind and consciousness, i.e., experimental psychology, can the Geisteswissenschaften even claim rightly that they are still studying the Geist? Or is this field restricted to studying merely the products
and expressions of the mind? Do we have to choose between either studying nature with an unscientific, speculative method or ‘giving up the ghost’ and studying the expressions of a mind that ultimately is just an effect caused by the brain, effectively becoming a branch of the natural sciences?

Franz Brentano’s project of the renewal of philosophy as science presents an interesting solution to this dilemma, by providing the best of both worlds.

It thus turns out that Brentano and Husserl offer us something that we cannot find among the two main streams of contemporary philosophy, generally classified as continental and analytic. Roughly speaking, the continentalists reject the very ideal of philosophy as a science and perhaps even science itself, whereas the analytic philosophers do not as a rule allow for any other kind of science besides that which is exemplified in its finest form in physics. It is, to be sure, of great importance not to allow philosophy to decay into the dogmatism, relativism, and mysticism of the continentalists. It is, however, of equal importance not to overlook a whole dimension of scientific inquiry. In spite of the many disagreements between Brentano and Husserl, their common concerns may well be the only ones that will ultimately prevail in a genuinely scientific philosophy.

On July 14, 1866, Brentano stepped up to the pulpit to defend his thesis that ‘the true method of philosophy is none other than that of the natural sciences’. This thesis became the north star of his school, rallying his first students to his flag, and remained a central and lasting concern for many of them. This thesis is part of a greater whole and actually follows from another thesis, namely that: ‘Philosophy must deny that the sciences can be divided into the speculative and the exact; because if this is not correctly denied, then philosophy itself would have no right to exist.’ Here a more general claim is made about the nature of science and philosophy: there is just one kind of science and philosophy is part of it. Philosophy is not done by speculative construction, but by humble, detailed investigation. As Brentano told his students some years later: ‘We are taking the first steps toward the renewal of philosophy as science, not by conjuring up ‘proud systems’ out of thin air, but by humbly ‘cultivating fallow scientific ground’.’ Thus Brentano instilled in his students a strong sense of scientific rigor and his students did not consider themselves to practice ‘armchair philosophies’, but to do science.

There is no doubt anymore that also in philosophical matters no other teacher can be found than experience, and that it is not a matter of revealing the whole of a more complete Weltanschauung as a product of genius,
but that a philosopher, like any other researcher, can only make progress in his field conquering it step by step.27

Brentano explicitly addresses the question whether we are justified in applying the methods of the natural sciences to the problems of the human sciences. First of all, Brentano observes that the natural sciences, in all their variety, do not simply use one single method everywhere. The method always must be appropriate to the object of inquiry. While mechanics uses deduction from first principles and paleontology has historical elements, the ultimate source of knowledge is always experience. Direct experience is decisive.28 For Brentano, the true golden age of philosophy lies before us, if we manage to develop a method in analogy to the natural sciences.29 This depends on an analysis of experience and hence on the development of a new philosophical psychology as a science of consciousness.

Nowadays, what Brentano himself is probably still best known for is his reintroduction of the concept of intentionality into philosophy:

Every mental phenomenon is characterized by what the Scholastics of the Middle Ages called the intentional (or mental) inexistence of an object, and what we might call, though not wholly unambiguously, reference to a content, direction towards an object [...] or immanent objectivity. Every mental phenomenon includes something as object within itself, although they do not all do so in the same way. In presentation something is presented, in judgement something is affirmed or denied, in love loved, in hate hated, in desire desired and so on. This intentional in-existence is characteristic exclusively of mental phenomena. No physical phenomenon exhibits anything like it. We could, therefore, define mental phenomena by saying that they are those phenomena which contain an object intentionally within themselves.30

Intentionality is also at the root of his methodology and of his claim that the true method of philosophy is that of the natural sciences. While philosophy would use the method of natural science, its main domain would not be natural, but mental phenomena: a full-blooded science of the mind that does not require a reduction to the physical in order to be scientific. Brentano defined his psychology as a descriptive science: empirical, but not necessarily experimental; subjective, but not introspective.

While the striving for scientific philosophy is of course something that Brentano and Husserl have in common with other philosophers, such as the logical positivists, it is to be noted that they differ from many of these others
insofar as they see consciousness as the subject matter of such philosophy. When we speak of science in English, what is primarily meant is natural science. It may accordingly be difficult to understand how Brentano and Husserl could have advocated or advanced scientific philosophy without seeing natural science as its foundation. As difficult as this is for the contemporary Anglo-American understanding, it must time and again be emphasized that consciousness, completely devoid of any sort of physicalistic reduction, is an object of science for Brentano and Husserl. This science, moreover, they regard as absolutely central to all the concerns of philosophy.31

Using intentionality as a criterion we can distinguish natural and mental phenomena: physical phenomena and psychical phenomena, or in other words, phenomena of external and internal perception. Physical phenomena would be color, tone, warmth, etc.; psychical phenomena would be the seeing of the color, the hearing of the tone, the feeling of the warmth, etc. Hence, the Geisteswissenschaften would be the sciences that deal primarily with the mind, with consciousness, with its acts, contents, objects and its expressions. This would also include most of the social sciences: ‘Clearly social phenomena belong among the mental phenomena, and no other knowledge can be drawn upon as ordering authority but the knowledge of psychical laws, that is, philosophical knowledge’.32

While these broadly defined sciences, the Natur- and Geisteswissenschaften, each have their own domain, they are essentially founded on the same empirical method, again broadly understood, based on perception and experience and not on a priori metaphysics or speculation. Sciences are built bottom-up, not top-down. By taking the experience of concrete phenomena as the foundation, Brentano maintains the fundamental unity of science, while making a clear distinction between the sciences of physical and the sciences of psychical phenomena. Indeed, Brentano clearly distinguishes his descriptive psychology from the experimental study of psycho-physics, which he calls genetic psychology. Hence, psychology is not used to found Geist on Natur hierarchically and hence the Geisteswissenschaften keep their autonomy in their own domain.

Psychology is also confronted with another task [besides the formulation of laws that regulate the (causal) coherence of body and soul, which is the task of genetic psychology]: to give clarity about what inner experience shows immediately; hence not a genesis of facts, but at first only a description of the field. This part is not psychophysical, but purely psychological. We must know in advance, what the facts look like: and this is shown by the internal perception of the psychical. When we want to describe this, we summon phenomena through iteration of the physical stimuli; in this sense
we will also have to discuss the body. Otherwise only internal experience is considered.

This field of psychology I call descriptive.33

Descriptive psychology, according to Brentano, identifies three natural basic classes of mental acts: presentations (Vorstellungen), judgments (Urteile) and phenomena of love and hate or emotions (Phänomene der Liebe und des Hasses).34 All of these are intentional acts; no presentations without something presented: ‘There is no psychical phenomenon which is not consciousness of an object’.35 All mental acts would either be presentations or contain presentations in them: judgment and emotions essentially consist in a positive or negative quality added to a presentation.36 What is accepted or rejected in a judgment is the existence of what is presented.37 Perception, both internal and external, would be simply a case of judgment, where we positively accept the existence of what is given in the presentation. In this sense, internal perception is inherently superior to external perception. We can always doubt the existence of the objects of our external perception, because we cannot exclude that we fall prey to illusions or hallucinations, that we are dreaming, etc. ‘Internal perception is actually the only kind of perception in the proper sense, while strictly speaking so-called external perception isn’t perception’.38 Due to the epistemic privilege of internal perception, Brentano considered his philosophical psychology to be an exact science. In the case of internal perception, I have a direct experience and immediate evidence of my own mental acts when I live through them. In this respect, Brentano sharply distinguishes internal perception from introspection, pointing out that inner perception cannot become introspection or inner observation.39 We are directly conscious of our own mental acts while living through them, without the need for another separate act directed at them that would ‘observe’ them, since this would introduce an infinite regress.

The science of mental phenomena would then proceed in the same fashion as the natural sciences: perception and description of concrete phenomena, formulation of hypotheses, discussion based on further data, induction of increasingly general laws, deduction of increasingly specific cases, verification or falsification based on concrete experiences. In other words: pick a problem, consider all the possible explanations, reject all the false ones based on concrete counterexamples taken from experience, until in the end the correct theory remains.40

In this way, Brentano represents both an exception to and a culmination of the nineteenth-century concerns with philosophy as science, advancing a new paradigm that would make it possible to work in philosophy and the humanities scientifically without making them dependent on the natural sciences. Moreover, his theories and teachings turned out to be quite fruitful and influential in phi-
Brentano’s students adapted and spread his theories far and wide, holding important chairs in philosophy at major universities throughout the Austro-Hungarian Empire and central Europe. Carl Stumpf, Brentano’s first student, taught at the universities of Göttingen, Würzburg, Prague, Halle, Munich and finally settled in Berlin, where he established a psychological laboratory and phonogram archive, founding the Berlin School of Gestalt Psychology, influencing, among others, Max Wertheimer, Kurt Koffka and Wolfgang Köhler. Anton Marty spread Brentano’s philosophy for more than three decades in Prague, raising the second generation of Brentanists, among others Alfred Kastil and Oskar Kraus, and exerting a significant influence on the development of Prague Linguistics, since Vilem Mathesius studied with him and Roman Jacobson read his works already before coming to Prague. Alexius Meinong became professor in Graz, where he established a psychological laboratory and founded the Graz School of Gestalt psychology, including Stephan Witasek and Vittorio Benussi. Edmund Husserl’s works gave rise to the phenomenological movement, which inspired much of what is now called ‘continental philosophy’ and in various ways influenced existentialism, hermeneutics and French philosophy: Martin Heidegger, Maurice Merleau-Ponty, Jean-Paul Sartre, Emmanuel Levinas, Jacques Derrida, Paul Ricoeur, Alexandre Koyré, Jan Patocka, and Edith Stein, among many others. Kazimierz Twardowski moved back to his homeland Poland, establishing the first Polish psychological laboratory, and became the father of Polish Philosophy, propagating Brentanist ideas as the teacher of Tadeusz Kotarbinski, Jan Łukasiewicz, Stanislaw Lesniewski, Kazimierz Ajdukiewicz. Finally, Christian von Ehrenfels is still best known for his Über ‘Gestaltqualitäten’ (1890), which contributed to establishing and shaping Gestalt psychology. Other notable figures that studied under Brentano include Thomas Masaryk, Sigmund Freud, and Rudolf Steiner.  

The nineteenth-century idea of scientific progress as a collective achievement obtained through collaborative research led to a division of labor in the School of Brentano. Each of his students chose to mainly concentrate on and work out a philosophical position in a specialized field, either due to Brentano’s guidance or following their own interests, applying the Brentanist methods and principles of descriptive psychology to it and working it out as a part of the greater whole: Stumpf, the philosophy of sound and music; Marty, the philosophy of language; Meinong was originally meant to work mainly on the history of philosophy; Husserl started out by formulating a Brentanist philosophy of mathematics and then went on to develop philosophical logic as a general theory of science, before starting his own phenomenological movement; and so on. However, besides these
various pursuits, Brentano’s students were also still concerned with the overall project of the renewal of philosophy as science and, besides their work in epistemology, logic, and philosophy of science, they also discussed the scientific status of philosophy and its relation to other disciplines, both scientifically as well as institutionally, in various programmatic works. With such an extensive list of notable descendants in such a wide spectrum of fields, one would expect Brentano to be much better known and studied nowadays, but alas this is not the case. His theories spread mostly through his teachings, the division of labor in his School obscured the underlying methodological unity, and the success of the schools and movements founded and influenced by his students overshadowed their common background and shared origin. These factors have led scholars to speak of ‘Brentano’s invisibility’.44

As we can see from the success and influence of his students and their schools, Brentano’s project of renewing philosophy as science has been very fruitful in highly disparate fields. Brentano’s ideal of philosophy as science is to all effects, ‘a program for scientific research’ showing that it is possible to conduct scientific research in the humanities,45 that the Geisteswissenschaften can be understood to be indeed full-blooded sciences in their own right: unnatural sciences.46

Notes

1 For a coeval testimony and analysis, see Friedrich Paulsen, The German Universities and University Study, trans. Frank Thilly and William G. Elwang (New York: Charles Scribner’s Sons, 1906), esp. 58: ‘The second half [of the nineteenth century] was characterized more by a lateral growth. [...] The accompanying phenomenon was the ever-increasing specialization of the fields of investigation, as illustrated by the constant multiplication of departments and chairs in the universities. Everywhere the number of professorships in the philosophical faculty was as much as doubled and trebled in the course of the century. Berlin began with twelve full professorships. It now has more than fifty in this department’.


3 Paulsen, The German Universities, 414, speaks of ‘anarchy’.


5 About this tendency, see Schnädelbach, Philosophie in Deutschland, 13.

Consider, among others, Hermann von Helmholtz, Richard Avenarius, Rudolf Virchow, Wilhelm Wundt, etc.

Paulsen, *Introduction to Philosophy*, 20ff., offers an extensive historical survey as support for the claim that 'Philosophy is the comprehensive sum-total of all true knowledge. The sciences do not exist outside and by the side of it; they are parts of it' (22), and that philosophy has been generally so conceived up to the nineteenth century. Among the examples he adduces, we find of course Aristotle and Plato, but also Bacon and Descartes. According to Paulsen, Kant is the first to break with this traditional conception (27ff.), also see Friedrich Paulsen 'Über das Verhältniss der Philosophie zur Wissenschaft', *Vierteljahresschrift für Wissenschaftliche Philosophie* 1 (1877), 17, 33, thus setting the stage for German Idealism and the opposition between philosophy and science in the nineteenth century.

The opposition between a speculative and an empirical method was repeatedly and emphatically stressed by Brentano, but my approach here is also based on the account given by Paulsen, *Introduction to Philosophy*, 15f.


Compare with Paulsen, *Introduction*, 16f., who points out that restricting the domain of philosophy to either knowledge or inner experience would simply reduce philosophy to one of its parts, i.e., logic or ethics.


Brentano fruitlessly petitioned the Austro-Hungarian authorities for funding to establish a psychological laboratory in Vienna when he obtained his professorship there. If this had been successful, it would have predated Wundt’s by five years. Instead, only in 1894 would the first psychological laboratory in Austria be established in Graz, by Brentano’s student Alexius Meinong. See Wolfgang Huemer and Christoph Landerer, *Mathematics, Experience and Laboratories: Herbart's and Brentano's Role in the Rise of Scientific Psychology*, *History of the Human Sciences* 23.72 (2010), 85, and Liliana Albertazzi, *Immanent Realism: An Introduction to Brentano* (Dordrecht: Springer, 2006), 26.


This view is unfortunately and inexplicably also sometimes taken in highly official contexts, such as in the Dutch report *Duurzame Geesteswetenschappen* (Amsterdam: Amsterdam University Press, 2008) regarding the national plan for the future of the humanities [geesteswetenschappen]’ that explicitly identifies the proper domain of the humanities as...
the expressions of the human mind [geest], as representations and interpretations of the world’ (13), which is followed by an explicative footnote that quite unambiguously states that ‘the geesteswetenschappen do not address the human geest itself as an object of research’ (52 n. 3), which would then remain the province of psychology.

Or in extremis that it just is our brain. See D.F. Swaab, We Are Our Brains: A Neurobiography of the Brain, from the Womb to Alzheimer’s (New York: Spiegel & Grau, 2014) / Wij zijn ons brein. Van baarmoeder tot alzheimer (Amsterdam: Uitgeverij Contact, 2010); or Wim van de Grind, Natuurlijke Intelligente (Amsterdam: Nieuwezijds, 1997), 16: ‘Thought is an adaptive brain-activity.’


Ibid., 45.


Franz Brentano, Manuscript Q 10: Descriptive Psychologie (Vienna, WS 1887/1888): ‘Der Psychologie ist aber auch noch eine andere Aufgabe gestellt [außer die des Aufstellens
der Gesetze, die den (kausalen) Zusammenhang von Leib und Seele regeln, welches die Aufgabe der genetischen Psychologie ist: Klarheit darüber zu geben, was die innere Erfahrung unmittelbar zeigt; also nicht eine Genesis der Tatsachen, sondern zunächst erst Beschreibung des Gebietes. Dieser Teil ist nicht psychophysisch, sondern rein psychologisch. Vorweg müssen wir wissen, wie die Tatsachen aussehen: und dies zeigt ein innerer Blick ins Psychische. Wollen wir solches beschreiben, so rufen wir Erscheinungen durch Wiederholung der physischen Reize hervor; in dieser Weise wird also auch hier Körperliches zu berücksichtigen sein. Sonst kommt ganz und gar bloß die innere Erfahrung in Betracht. Diesen Kreis der Psychologie nenne ich die deskriptive.'

Brentano, Psychologie, 260; Brentano, Psychology, 152.

Brentano, Psychologie, 133; Brentano, Psychology, 79. A shorter phrasing of the claim that 'There is no psychical phenomenon which is not consciousness of an object' would be 'Nichts vorstellen is nicht vorstellen'; i.e., not presenting anything, is not presenting at all.

Brentano, Psychologie, 104, 111. Specifically for judgments, see Peter M. Simons, 'Brentano's Reform of Logic,' in Topoi 6 (1987), 27.


Brentano, Psychologie, 119: 'Die innere Wahrnehmung [...] ist eigentlich die einzige Wahrnehmung im eigentlichen Sinne des Wortes. [...] Die sogenannte äussere Wahrnehmung ist also strenggenommen nicht eine Wahrnehmung' (Brentano, Psychology, 70). This is what is meant by the expression 'Wahrnehmung ist Falschnehmung', i.e., taking external perception as truthful is to be mistaken.

Brentano, Psychologie, 35; Brentano, Psychology, 22.


Alan Richardson, 'Toward a History of Scientific Philosophy,' Perspectives on Science 5.3 (1997), 434.


‘Unnatural’ is used here to indicate that the field of science, broadly understood, can be partitioned into the natural sciences and the unnatural sciences, i.e., all those sciences that do not study natural objects. This is not meant to characterize them specifically as opposing the natural sciences, but rather as complementing them. It is also meant to underscore that one cannot use ‘sciences’ simply and straightforwardly as a synonym of ‘natural sciences’. The term ‘unnatural’ is therefore used as an umbrella term for all scientific disciplines that are not counted among the natural sciences.