### Stumpf, Carl (1848–1936)

#### Nikolay Milkov

Nikolay Milkov is with the Universität Paderborn, Paderborn, Germany.

Carl Friedrich Stumpf was born on April 21, 1848, in the municipality Wiesentheid, Franconia, Germany. Between 1859 and 1865 he attended the Gymnasium in Bamberg and in Aschaffenburg. In 1865 Stumpf matriculated the University of Würzburg. The next year he began attending Franz Brentano's lectures. Following Brentano's advice, Stumpf started postgraduate studies with Hermann Lotze in Göttingen. In 1867/1868 he wrote his PhD thesis on "The Relation of Plato's God to the Idea of Good" (1868). In 1868, Stumpf returned to Würzburg in order to continue studying with Brentano. In 1870, he went back to Göttingen where he wrote his habilitation (second dissertation), under Lotze's supervision again, "On the Basic Laws of Mathematics." With the help of Lotze's recommendation, between 1870 and 1973 Stumpf was appointed as a *Privatdozen* (adjunct professor) in Göttingen. Later Stumpf remembered that while in Göttingen, Lotze became his devoted fatherly adviser (1917: 5). Stumpf's first book, *Über den psychologischen Ursprung der Raumvorstellung* (1873), which was praised by such figures as William James and Bertrand Russell, was dedicated to Lotze. Lotze and Stumpf stayed in close contact even after the latter left Göttingen.

Stumpf, however, was explicit that Brentano played a central role in his philosophical development. Later he remembered: "My whole understanding of philosophy, the correct and mistaken methods of philosophizing, the basic and essential doctrines of logic and epistemology, psychology, ethics and metaphysics, which I still maintain today, are his doctrines" (1919a: 144). But Stumpf also noted that "[Lotze's] way of thinking had influenced my own more than Brentano wanted it to be the case, despite the fact that the outline of my epistemology remained that of Brentano" (1924: 4–5). Apparently, Stumpf was under the formative influence of both Brentano and Lotze.

Unfortunately, Brentano was an authoritative teacher who could not stand the theoretical dissents of his students. The effect of this side of his academic character was clearly negative for Stumpf—it narrowed the scope of his philosophical explorations. Stumpf wrote on this account: "I admit that this was one of my motives for developing a considerable amount of time to the area of the psychology of sound and acoustical observation. There I could hope to achieve something useful without taking a position of agreement or dissent with regard to a great number of unpublished views of the teacher" (1919a: 145).

In 1873, at the age of twenty-five, Stumpf was already a full professor in philosophy in Würzburg (Lotze was instrumental for this appointment again) as successor of Brentano who had moved to Vienna. A series of professorships followed, Stumpf changed every five years—from 1879 till 1884 in Prague, till 1889 in Halle, and till 1894 in Munich. In 1894 Stumpf became professor in Berlin where he remained until the end of his career. Between 1907 and 1909 he was a chancelor of that University. In 1878 Stumpf married Hermine Biedermann (1849–1930). He died on December 25, 1936.

These facts suggest that Carl Stumpf was a key figure in the fin de siècle Germanophone philosophy. Unfortunately, after the First World War interest toward him as a philosopher waned. One reason for this was that in the 1920s the attention of the mainstream philosophers shifted in direction of the rising rivalry between analytic and continental philosophy. Besides, Stumpf worked not only in philosophy but also in general psychology, in comparative musicology and in ethnomusicology. Furthermore, in contrast to Brentano but similarly to Lotze, Stumpf didn't set up his own philosophical school. His endeavor was only to motivate his students to make their own explorations in scientific spirit. Finally, because of the outbreak of the Second World War, his major work, *Theory of Knowledge* (1939/1940), remained widely ignored.

In his long academic career Stumpf supervised twenty-three PhD dissertations. Most prominent were his Berlin doctoral students, the upcoming gestalt psychologists Kurt Koffka, Wolfgang Köhler, and Kurt Lewin as well as the novelist Robert Musil. Stumpf also supervised Edmund Husserl's habilitation, *On the Concept of Number* (1887). As a sign of gratitude, Husserl dedicated his groundwork, *Logical Investigations* (1900–1901), to Stumpf.

Stumpf had a wide circle of friends and colleagues. While in Göttingen, together with his close friend, the mathematician Felix Klein, he set up the "Eskimo Society." This was an interdisciplinary society of young Göttingen dons, in which also scholars of physics, chemistry, and mineralogy were presented. In Göttingen, Stumpf also met the renowned psychologists Gustav Theodor Fechner and E. H. Weber. While in Prague, he was closely befriended with another student of Brentano and Lotze, Anton Marty, and had contacts with Ernst Mach and Ewald Hering. In Halle, Stumpf was often together with Georg Cantor and Johann Eduard Erdmann. Starting in 1882, Stumpf had a number of meetings with William James in Germany. The two maintained a vivid mail correspondence for years (1928b).

Following both Lotze and Brentano, Stumpf held that philosophy is a part of science. To be more exact, it is a very general science and thus forms a continuum with all sciences. As Stumpf put it, philosophy is

*Nachwissenschaft* (after-science)—it investigates the common laws of all sciences (<u>1906</u>: 43). To this purpose, it uses the achievements of the so called "neutral sciences"—phenomenology, theory of *Eidologie* (forms), and general theory of relations, which serve as *organon* of sciences (26 ff.).

In his inaugural address as a rector of the University of Berlin, Stumpf celebrated the Renaissance of philosophy of his time after the "catastrophe" caused by German idealism. In the mid-nineteenth century, philosophy started a transformation that included cooperation with the special sciences, in particular, with psychology. This change of heart took place thanks to such scientifically oriented philosophers such as Gustav Theodor Fechner and Lotze. Both of them were not only philosophers but also scientists: Lotze was also Professor of Medicine and Fechner Professor of Physics. To Stumpf, it was important that "philosophers learn and are trained in a specific craft [*Handwerk*] which means that they have to have experience in some concrete area of either humanities or natural sciences" (<u>11907)</u> <u>1910</u>: 179). Only experts trained this way can produce philosophy that operates with exact concept formation and strict proofs. Precisely this way of working makes Leibniz a great philosopher also today. Following this motto, Stumpf started the German Leibniz Academic edition (the edition is still not completed) and wrote an enthusiastic preface (<u>1923</u>).

As a young philosopher, Stumpf was seriously working in philosophy of mathematics, which as already mentioned, was the subject of his habilitation (<u>11870] 2008</u>). In it, he followed Lotze's idea that mathematics (not only arithmetic, as another student of Lotze, Gottlob Frege, maintained) can be reduced to logic. At that, Stumpf held to Lotze's belief that non-Euclidean geometry is "nonsense." Soon, however, Felix Klein convinced him that new developments in mathematics made this position problematic. In consequence, Stumpf decided not to publish his dissertation. It is also probable that Stumpf *met* Frege in Göttingen who, between 1871 and 1873, was a doctoral student in mathematics there. Be this as it may, there are close similarities between Stumpf's 1870 arguments against John Stuart Mill's philosophy of mathematics and those of Frege in his *The Foundations of Arithmetic* (1884), to say the least.

Closely following Brentano, in his epistemology Stumpf severely criticized Kant's formalism. Kant didn't adopt the discrimination between form and qualia based on scientific (psychological) discussion but through voided a priori metaphysical deliberations. But nothing can be epistemologically true and psychologically false (<u>1891a</u>: 482). Kant's formalism was patently detrimental for the development of both philosophy and psychology. Against Kant's "predilection for constructions," Brentano and Stumpf introduced the discipline of descriptive psychology,

which explores the ultimate phenomena of the human mind as a Cartesian science. The phenomena themselves are the content of mental acts, or functions, such as perceptions.

Brentano and Stumpf adopted an idiosyncratic analytic method in their descriptive psychology, making it, in this way, an analytic psychology (Stout 1896). In short, Stumpf held that "through analysis of 'impressions,' we reach the ultimate elements of concepts [phenomena] that we use in the ordinary thinking; elements that in the scientific thinking are combined in different ways, according to their needs" (1891a: 491). In contrast, Kant's method was, in Kant's own sense (1800: § 105), regressive. He was not interested in the origin of space, time, and causality but in what these concepts contribute to the actual scientific discourse.

Stumpf's final objective was to bring to light the "absolute contents" of our perception. In this connection, he argued against the conception of relativity of perception, defended by Fechner. According to the latter, every perception receives its meaning through its connections with other perceptions. In contrast, Stumpf held that tones, smells, colors, tastes, are sums of absolute qualities (<u>1883</u>: 137). According to Stumpf, the concept of space is already given in our perception: we cannot imagine space without a color, neither a color without space. Space is perceptible and inseparable from color and sound (<u>Fisette 2019</u>). Moreover, space and color are parts of the same (one) content of perception and are ontologically dependent on it. The implication is that there is no absolute space and time in Kant's sense; and also that sensations (the sense-data) have structures—they are not simple qualities.

This idea of Stumpf profoundly influenced Edmund Husserl's theory of *fundieren* (grounding): there are concepts that exist autonomously and other kinds of concepts that are ontologically dependent on autonomous concepts, an idea that was unknown to Brentano. Husserl himself loudly acknowledged his debt to Stumpf on this account (1901).

Stumpf understood the difference between intellectual and emotional acts as that between the simplest and more fundamental acts. He criticized Brentano's position that sense-perceptions (bodily pain, pleasure, etc.) have content. Among feelings, emotions only have content in the form of particular states of affairs. Furthermore, whereas emotions are passive feelings, desire and will are active and have values as content, not states of affairs. Typically, Brentano fiercely attacked Stumpf's position in letters and in print till the end of his life.

Stumpf was adamant that descriptive psychology provides sound foundations for all the humanities. Its task is to reveal and describe their building blocks and to define their concepts. Thus, in a sense, descriptive psychology is as important to the humanities as physics is to natural sciences. This is the case since the humanities are nothing but disciplines that explore (very) complex mental acts. Theory of knowledge, for its part, makes inquiries about the content of judgments (not of concepts) and their relation to truth. In other words, it investigates the justification of knowledge.

Brentano and Stumpf insisted that description is prior to explanation and also to "genetic psychology" in general, which explores mental events as unfolding in time. The very distinction between "genetic" and "descriptive" science was introduced by Lotze, who strongly discriminated between what happens, for example, what changes (namely, what is "genetic"), and what is valid. Following the physiologist Ewald Hering, Stumpf called the descriptive psychology *nativist*. Nativists are those scientists who assume the *Ursprüngliche* (initial) explanation and empiricists are those who embrace genetic explanations (<u>1883</u>: 96). In other words, Stumpf identified "empirical psychology" with "genetic psychology."

In general, psychological exploration is possible in two ways: (1) through inner observations; or (2) through outer observations and experiments. The former approach was followed by Brentano, the latter by Stumpf. This means that Brentano's psychology was empirical without being experimental (<u>Libardi 1996</u>: 36). To be sure, he loudly insisted that his psychology was empirical (<u>1874</u>). In fact, it was only introspectively empirical.

In contrast to Brentano, Stumpf was both a descriptive psychologist and an external (non-introspective) experimental psychologist who checked the results achieved in his nativist analyses and descriptions through experiments, but without committing a "genetic fallacy"—without becoming a genetic psychologist. He considered the two methods complementary: whereas descriptive psychology conceptually analyses and classifies phenomena, experimental psychology explains them. The descriptive psychology, however, has a methodological priority.

Significantly, Stumpf institutionalized his experimental stance. In 1890 he launched the prestigious journal *Zeitschrift für Psychologie und Physiologie der Sinnesorgane*, and in 1898 *Beiträge zur Akustik und Musikwissenschaft*. In 1900 Stumpf founded the Institute of Psychology in Berlin (he directed it until 1922) and also the Society for Child Psychology. In 1912/1913 he established a station for anthropoids in Tenerife and made his former student Wolfgang Köhler its first director. This point gave some interpreters reasons to call Stumpf an empiricist par excellence. Carl Stumpf, however, understood himself as a nativist and as experimental psychologist, not as an empiricist. What he meant when he criticized empiricism was the "genetic" approach in psychology, practised by his colleagues such as Wilhelm Wundt, with whom Stumpf was engaged in heated polemic (1891b).

Stumpf joined Brentano's criticism of Lotze's theory of local signs, which explains the relation between mind and matter in terms of our perception of space and movement. According to Lotze, what we directly see, when perceiving a movement, are only discrete patches of color. What helps us to perceive the event of movement is the effort that we ourselves make by perceiving the movement. Lotze calls this stimulus a "local-sign." It is a means of transforming sense-perceptions into space-values. Above all, Brentano and Stumpf were against the increased role of the free will by judging that Lotze's conception induced. To be more explicit, they were against the involvement of a will-informed action that constitutes our reality. In fact, this was a trace of the influence of German idealism (of J. G. Fichte) on Lotze's conception that Brentano and Stumpf felt to be alien to their objectivist intuitions. At the same time, against Brentano and also Husserl, and following Lotze, Stumpf criticized the conception of psychophysical parallelism according to which mind and matter are aspects of one and the same reality (stuff). Instead, he adopted a dualist position of interaction of mind and body (<u>1919b</u>).

Closely following Lotze and Brentano again, Stumpf advanced at the center of his logic the concept of judgment. It plays a constitutive role already in the most elementary spontaneous comprehension and interpretation of sense-impressions ([1899] 1928: 5). For example, it is active in every space orientation. Stumpf defended a related position already in *Tonpsychologie*: "Judging, as we understand it, does not always consist in deliberations and is not always connected with language, even not with inner speech. In many situations it is immediately andinstantly connected with sense impressions" (1883: 4). We make judgments also when we perceive sounds and melodies.

Following Lotze again (<u>Milkov 2002</u>) in his *Logic* (<u>1888</u>) Stumpf introduced the concept of states of affairs as the content of judgment and, as already seen, of emotions. Significantly, this concept was rooted in a wider understanding of state of affairs as expressing the intrinsic and totally subject-independent relationality of reality (<u>Centi 2011</u>: 78). Stumpf constantly explored how contents relate to one another: how do space and quality relate to one another (*sich zueinander verhalten*)? (<u>1873</u>: 107, 114). This was actually the tenor of the *Raumbuch*.

Finally, Stumpf defended a subjectivist interpretation of probability (<u>1892</u>). His reason for doing so was that the use of the probability concept does not refer to any hypotheses about the external world. Calculus of probability is purely a priori discipline with axioms derived from the very concept (idea) of probability.

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