

## LOCAL INSTITUTIONALIZATION, DISCONTINUITY, AND GERMAN TEXTBOOKS OF PSYCHOLOGY, 1816–1854

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In the context of social and intellectual developments and the changing role of German universities in the first half of the nineteenth century, which led to the local institutionalization of the discipline of psychology at German universities, the structure and content of textbooks of psychology are discussed. Textbooks in the first half of the nineteenth century had a pedagogical function in training teachers, in socializing students into the field, and in providing students and readers with knowledge about the subject matter, methodology, and topics of psychology. The textbooks, representative of influence, philosophical-psychological orientations, and different decades in the first half of the nineteenth century, are reconstructed with regard to the definition of psychology, the ways of studying the soul, and how to conceptually organize the field. The textbooks by Herbart, Beneke, and Waitz, which were written within a natural-scientific programmatic vision for psychology, are contrasted with the traditional philosophically intended textbooks of Reinhold, Mußmann, George, and Schilling. Fischhaber's textbook for *Gymnasien* is summarized. Issues regarding the continuity of psychology are discussed, and discontinuous developments in the history of German psychology are identified. © 2007 Wiley Periodicals, Inc.

Contemporary textbooks on the history of psychology share the view that the nineteenth century was crucial in the transformation of psychology from a philosophical to an empirical discipline and in the separation of psychology from philosophy (see also Green, Shore, & Teo, 2001; Richards, 1996; Windelband, 1892/1958). However, the majority of historical research focuses on the second half of the nineteenth century, when German psychology has been identified as beginning with Gustav Theodor Fechner's (1801–1887) *Elements of Psychophysics* in 1860 or with Wilhelm Wundt's (1832–1920) foundation of a psychological laboratory in Leipzig or with his textbook *Principles of Physiological Psychology* in 1874. Historians also emphasize Hermann Helmholtz's (1821–1894) pioneering works on perception in the 1850s and 1860s or Hermann Ebbinghaus's (1850–1909) publication on memory in 1885.

Thus, the first half of the nineteenth century and earlier periods appear only as precursors to experimental psychology. This is most clearly expressed in Boring's (1950) classical study, where he discussed only Immanuel Kant (1724–1804), Johann Friedrich Herbart (1776–1841), and Rudolf Hermann Lotze (1817–1881) as early nineteenth-century psychologists. Yet, Kant belonged more to the eighteenth than to the nineteenth century, and Lotze published his most important works in the second half of the nineteenth century. More importantly, philosophical conceptualizations of the first half of the nineteenth century were significant for later researchers, as Willy (1899) has pointed out in his critique of the continuity of speculative thinking in psychology. More recently, historiography has accumulated knowledge that specifically includes the first half of the nineteenth century (Eckardt, 2000; Gundlach, 2004; Hatfield, 1990; Leary, 1978; Sachs-Hombach, 1993a; Smith, 2005).

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<sup>1.</sup> Monographs on nineteenth-century psychology are still produced that focus on the second half (see, for example, Benetka, 2002).

The first half of the nineteenth century was also significant for the educational institutionalization of psychology (Gundlach, 2004). Against the background of this event, historical questions emerge regarding psychology as it was taught to students of philosophy and teacher candidates during that time. This paper attempts to contribute to a description and understanding of what was taught in psychology to students at German universities in the first half of the nineteenth century. In order to achieve this goal (a) the institutional and intellectual embeddedness of German textbooks of psychology are discussed, (b) the structure and content of German textbooks is described and summarized, and (c) historical continuity is addressed.

#### LOCAL INSTITUTIONALIZATION AND PSYCHOLOGICAL PROGRAMS

More recently, historians have discussed the origin of psychology, the general continuity or discontinuity of psychology, discipline formation, or whether psychology deals with natural or social categories. In response to traditional historiographies, critical historians such as Danziger (1997) suggested that psychology, as a distinct *field of study*, did not exist before the eighteenth century. Richards (1996) argued that there was no *discipline* of psychology prior to the mid-nineteenth century, and he reserves the term Psychology (with an uppercase *P*) for the *discipline*. Smith (1997) argued that psychology was not a separate subject until it developed into a discipline and an *expert occupation*, which occurred in the twentieth century (p. 19).

Challenging the idea of the construction or formation of psychology in the eighteenth or nineteenth century, Hatfield (1990, 1995) reconstructed the discipline of psychology as beginning at least in the sixteenth century and undergoing transformation and remaking in the eighteenth and nineteenth centuries. He argued for continuity because "psychology as a natural science was not invented during the eighteenth century, but remade" (Hatfield, 1995, p. 188; for a detailed overview, see Smith, 2005). There is evidence showing that continuity theorists are right in pointing out that psychological topics have been studied for a much longer time, but there is also evidence that discontinuity historians are correct when they show that psychology as a discipline was *formed* (depending on the criteria) in the eighteenth, nineteenth, or twentieth century. In order to do justice to those different foci, Gundlach (2004) emphasized a distinction between the discipline [Fach, Disziplin] of psychology and the field [Gebiet] of psychology. More importantly, it should be noted that the institutionalization of psychology in the meaning of establishing an academic discipline at universities, a discipline that followed legal and academic rules—occurred at different times in different geographical or national contexts. In that sense it might be indeed difficult to write the history of what is considered psychology according to "one plot" (see Smith, 2005, p. 89).

Instead of a universal institutionalization, one finds what I would like to call *local events* of institutionalization. Gundlach (2004) in his research on the institutionalization of German psychology points to such a significant event. Psychology was a *topic* of philosophical reflection and psychology was part of the philosophical curriculum,<sup>2</sup> but it did not exist as an institutionalized academic discipline before the *early* nineteenth century. In his argument, the institutionalization of psychology occurred in the context of the transformation of German universities at the beginning of the nineteenth century when the *Philosophical Faculty* in the University system was assigned a new role. With the establishment of state-funded and controlled *Gymnasien*,<sup>3</sup> chairs of philosophy were asked to teach courses on psychology and pedagogy for a particular audience: *Gymnasium* teachers-in-training.

<sup>2.</sup> This explains earlier textbooks, for example, in the eighteenth century.

<sup>3.</sup> Gymnasium can be translated as classical high school.

Because psychology was understood as the scientific basis for pedagogy, teacher candidates were required to take exams in the discipline of psychology. Gundlach lists August 21, 1824, as the birthday of the discipline of psychology, when Prussia established psychology as a *Prüfungsfach* [examinable discipline] at its universities.<sup>4</sup> According to Gundlach, in making psychology a field of examination, psychology became *institutionalized*, first in Prussia and then in other German states. *Empirical psychology* was also taught at *Gymnasien*, a fact that should be attributed a secondary role in the institutionalization of psychology (Gundlach, 2004). It also explains the existence of textbooks of psychology for *Gymnasien* (see also Eckardt, 2000).

The German term *Lehrbuch*, literally meaning *teaching book*, denotes that a textbook was intended and used for academic educational purposes.<sup>5</sup> The textbooks discussed in this article should be understood in the context of the philosophical curriculum and the establishment of psychology in the first half of the nineteenth century in the German states. They were chosen based on the variety of philosophical influences that existed at the time and represent various decades of the first half of the nineteenth century. To be more precise, the textbooks of psychology discussed in this article were published between 1816 (Herbart's textbook) and 1854 (George's textbook).<sup>6</sup>

The reason for this temporal restriction is that Volkmann's psychology textbook of 1856, which Boring (1950) suggested "remained the only up-to-date textbook of psychology in German until Wundt published the *Physiologische Psychologie* in 1874" (p. 261), and Lindner's (1858) textbook of psychology indicate a shift in textbook culture in the second half of the nineteenth century by systematically presenting empirical studies in physiology and other natural sciences and discussing their relevance for psychology. For example, Lindner (1858) specifically addressed the relationship between brain activity [Hirnthätigkeit], the nervous system, and mental life (pp. 19–25). The textbooks (in chronological order) are also representative in terms of the scope of psychological topics: Herbart (1816), Fischhaber (1824), Mußmann (1827), Reinhold (1835), Beneke (1845), Waitz (1849), Schilling (1851), Beneke (1853), and George (1854). These psychological textbooks included discussions on the definition (subject matter) and method of psychology, and they present a conceptual organization of the field (the descriptions below concentrate on these three domains).

The textbooks can be organized heuristically into four groups: (a) Herbart's (1816) textbook was a unique achievement, extremely influential, and it "struck a new note" (Flugel, 1933, p. 15). It was published before the educational "institutionalization" of psychology. (b) Beneke (1845, 1853) and Waitz (1849) attempted in their textbooks to develop psychology as a natural science. They developed in their textbooks their own psychological visions within what they perceived as a natural-scientific program. However, their call for natural-scientific psychology was more a theoretical commitment than natural-scientific observation and

<sup>4.</sup> Before Bismarckian German unification, it is inappropriate to talk about a single German nation but rather important to understand the wide variety of semi-autonomous states.

<sup>5.</sup> Fischhaber's textbook (1824) was intended for a Gymnasium readership.

<sup>6.</sup> Herbart's book was published before 1824 and used as part of the philosophical curriculum.

<sup>7.</sup> The substantially revised second edition of 1845 is used in this article. The first edition was published in 1833.

<sup>8.</sup> Not part of this analysis were specialized textbooks of the late 1850s on forensic psychology (see, for example, Ideler, 1857; Wilbrand, 1858). There exist various textbooks on anthropology that discuss the natural parts of the mind and that could be considered "psychological," but these were not included in this reconstruction (see Heinroth, 1822; Salat, 1826). It also should be pointed out that academics used works for teaching purposes without labeling them as textbooks. For example, Hegel (1992/1830) used his books for teaching without using the word *Lehrbuch*.

experimentation on their part. Indeed, Leary (1978) suggested that Herbart and Beneke (and Fries)—and I would add Waitz—elaborated "the philosophical justification of psychology as a natural science" (p. 114). (c) Mußmann, Reinhold, Schilling, and George developed their textbooks in the context of important philosophical programs. Mußmann (1827) and George (1854) were Hegelians, the latter also influenced by Friedrich Ernst Daniel Schleiermacher (1768–1834). Reinhold (1835) was intellectually closest to Kant. Schilling (1851) was influenced by Herbart but cannot be subsumed under the natural-scientific justification of psychology. He specifically rejected experimentation in psychology for moral and theoretical reasons (p. 4), described observation as deficient (p. 6), and justified a metaphysical treatment of the soul. (d) Discussed is also one textbook that was written for *Gymnasien*, authored by the influential teacher Fischhaber (1927).

From a historical perspective, it is not surprising that historians of psychology who are familiar with German psychology recognize the names of these "natural-scientific" psychologists (Herbart, Beneke, Waitz) but not those of the "philosophical" group. However, the distinction between philosophical and natural-scientific psychology is not clear-cut, and these traditions cannot be separated neatly in the first half of the nineteenth century. Philosophical reflection also dominated the content of textbooks that intended to be *naturwissenschaftlich*. The term natural-scientific, used by authors themselves (see below), reflected a commitment that challenged the primacy of speculative philosophy and acknowledged the role of the natural sciences in the development of psychology. Traditional philosophical psychologists on the other hand might acknowledge the role of the natural sciences but the primacy of philosophy was never doubted. Indeed, the "philosophical" group often intended to incorporate psychology and natural science into a philosophical program. In terms of academic eminence during their time, a ranking would have to begin with Herbart, followed by Beneke, and Waitz. These are exactly the same names that Smith (2005) uses when he lists them as early examples of a "coherent science of psychology" (p. 62).

## INTELLECTUAL BACKGROUND

German academic psychology in the first half of the nineteenth century was related to the development of philosophy. Authors such as Beneke (1845) and Waitz (1846) even suggested that psychology should be the foundation for philosophy, which partially explains their innovation in psychology. German psychology in the first half of the nineteenth century was still influenced by the ideas of classical Greek philosophy (especially Aristotle), theology, and the psychologies of Gottfried Wilhelm Leibniz (1646–1716), Christian Wolff (1679–1754), and, to a lesser extent, Johann Nikolas Tetens (1736–1807) (see Dessoir, 1911; Hartmann, 1901; Klemm, 1911; Siebeck, 1880, 1884). The German idealists Immanuel Kant (1724–1804), Johann Gottlieb Fichte (1762–1814), Friedrich Wilhelm Schelling (1775–1854), and Georg Wilhelm Friedrich Hegel (1770–1831) were the dominant figures in philosophy at that time. But the latter three also accounted for an *identity crisis* within German philosophy (Schnädelbach, 1984), which produced speculative philosophical systems that were in strict contrast to the successes of the natural sciences.

<sup>9.</sup> The scope of this article allows only for the discussion of some of the general influences. Studies that show detailed and intricate historical influences cannot be summarized here (see Beck, 1969; Sachs-Hombach, 1993a; Siebert, 1905).

<sup>10.</sup> Leary (1978) lists Jakob Friedrich Fries (1773-1843) as an important and influential philosopher who was admired by Herbart.

Leibniz, the German philosopher, mathematician, physicist, historian, and diplomat who co-invented the differential and integral calculus, made the soul the center of his philosophy. According to Leibniz, the world was a network of forces, or soul-like units, that could not be reduced further; he famously labeled them monads (Leibniz, 1720/1930). Given that all monads were created by a supreme monad, Leibniz introduced the concept of a pre-established harmony among the monads, which found its expression in his mind-body parallelism (see also Dessoir, 1911; Fancher, 1996). Leibniz's view of the soul is embedded within his theological goals of unifying the churches and the notion that a soul true to itself would realize God's purpose (see Beck, 1969).

Wolff, who limited the concept of a pre-established harmony to the mind-body problem and gave up the concept of monad because representation would only be possible for souls that had consciousness (see Dessoir, 1911), became a significant thinker for psychology in the eighteenth and early nineteenth century. First he proposed a methodological distinction between *rational psychology* (Wolff, 1740/1972) and *empirical psychology* (Wolff, 1738/1968). Rational psychology was conceptualized as the science of what was possible by the human soul (Wolff, 1734/1972) and was closely linked with ontology, cosmology, and empirical psychology. It covered a deductive analysis of the soul's substantiality, simplicity, immateriality, immortality, as well as the mind-body problem. He understood empirical psychology as the science that identified psychological principles with the help of experiences regarding what actually happened in the human soul. In his empirical psychology, Wolff dealt with the ability of the soul to know, to desire, the interaction of the soul and the body, and the faculties of the soul (see also Dessoir, 1902; Vidal, 1993). This significant division played a role in many of the textbooks discussed.<sup>11</sup>

Second, Wolff invigorated the notion of psychological faculties. The idea of explaining the soul in terms of various *faculties* found its legitimacy in Aristotle's (2001) five faculties (powers)<sup>12</sup> of the soul in his *De Anima*, in which he distinguished the nutritive, appetitive, sensory, locomotive, and thinking powers (see p. 559).<sup>13</sup> But Wolff distinguished between the *power* of the soul and the *faculty* of the soul, the former referring to the constant process of acting, the latter indicating the possibility to act. He argued that for all observable psychological expressions, psychological faculties must be responsible. In his empirical psychology, he divided the faculties into two major areas: cognitive faculties or faculties to know (*de facultatis cognoscendi*) and appetitive faculties or desiring faculties (*de facultatis appetendi*). This division of the faculties into a theoretical area (cognitive faculties) and a practical area (desiring) did not allow him to include feeling as a separate faculty (as Tetens or Kant did).

Indeed, German academic psychology of the eighteenth century can be described as faculty psychology. Within such a program it became a primary task to identify the kinds and numbers of psychological faculties.<sup>14</sup> However, it should be pointed out that psychological studies at that time were more multifaceted than representing a particular research program. Physiologists of the soul already demanded that psychologists should study physiology and the anatomy of the brain, and that instead of a philosophical approach to the soul, a medical method should be preferred (see also Dessoir, 1902). Thus, one can identify important aspects for a natural-scientific psychology. However, the remaking of psychology as a natural science in the eighteenth century

<sup>11.</sup> The distinction between rational and empirical was so significant that the historians of psychology Watson and Evans (1990) argued that the important epistemological distinction between empiricism and rationalism began with Wolff rather than with René Descartes (1596–1650) and John Locke (1632–1704) (see, p. 237).

<sup>12.</sup> English translations from the Greek use the term "power," whereas in the German tradition the term "Vermögen" [faculty] is preferred (e.g., Drobisch, 1842, p. 298–302).

<sup>13.</sup> Berlin edition, de anima, ii. 3. 414a.

<sup>14.</sup> Faculty psychology also produced discourses in the English-speaking world, e.g., Thomas Reid (1710–1796).

(Hatfield, 1995) and, for example, experiments on perception such as visual acuity (see Scheerer, 1987) were *not* considered to be part of the curriculum of academic psychology in the early nineteenth century in Germany.

The eighteenth century also led to the expression of popular psychology. Several psychological magazines were founded and distributed to the educated public, including the *Magazin zur Erfahrungsseelenkunde* [Magazine for Empirical Psychology], edited by K. P. Moritz and published between 1783 and 1793 (see Eckardt, 2000, 2001). Dessoir (1902) also mentioned an *analytic* psychology that focused on the detailed account of inner feelings, as well as the description of personal thoughts, emotions, and desires. As Smith (2005) suggested: "Discipline formation took place in a piecemeal manner; there was no one seminal figure, and its roots were at least as much in 'applied' as in academic settings" (p. 63).

Johann Nikolaus Tetens (1736–1807), a contemporary of Kant, intended psychology as a natural-scientific discipline, which meant for him the acceptance of observation. His position also led him to refute the idea of a reincarnation of the soul. He believed that self-observation should occur at the beginning of a psychological investigation but psychological studies should be concluded with a metaphysical synthesis. He also emphasized that most psychological explanations had only a hypothetical character (see Dessoir, 1902). Accepting faculty psychology, Tetens reduced the soul into basic faculties and became famous for his division of psychological faculties into the basic processes of ideation [Vorstellen], feeling [Fühlen], and willing [Wollen]. However, as Beck (1969) argued, this division was already formulated by Moses Mendelssohn (1729–1786). Thus, Tetens can only superficially be considered the author of the three-faculty theory because he also provided different divisions for the faculties at different times and his terms did not mean the same as Kant's. <sup>15</sup>

Kant was influential in nineteenth-century German philosophy not only in terms of his critiques of psychology (Boring, 1950; Teo, 2005) but also in terms of his support for psychological faculties. Flugel (1933) argued that "Kant's adoption of the major faculties of knowing, feeling, willing ... has perpetuated this division through the textbooks and curricula of the whole century" (p. 14). Kant was influenced by the so-called Leibniz-Wolff tradition of thought, even with his new understanding of the role of the senses and the intellect (see Satura, 1971, pp. 66–67). In addition, Wolff's distinction between rational and empirical psychology became the twofold target of Kant's critiques of psychology (see Hatfield, 1992; Teo, 2005).

The nineteenth century saw the increasing status of the natural sciences. This was reflected in the titles of Waitz's (1849) and Beneke's (1845) textbooks, which shared the notion of psychology as a natural science (see also Drobisch, 1842). However, Waitz (1849) was well aware that natural scientists would label his textbook philosophical. Even the Hegelian George (1854) emphasized the importance of developing psychology as a natural science. Yet, for George, an empirical perspective in psychology would not exclude "true speculation" (p. vi). Kant, who did not belong to the school of absolute idealism, became significant for the rehabilitation of philosophy. The natural scientist Helmholtz (1903) suggested in the middle of the nineteenth century that Schelling and Hegel had ruined philosophy whereas he understood Kant's epistemology in concordance with the natural sciences. Such positive assessments led to the revival of Kant in various neo-Kantianisms beginning in the middle of the nineteenth century (Köhnke, 1991; Teo, 2002; Willey, 1978). However, Kant had no overarching influence on psychological textbooks of the first half of the nineteenth century.

<sup>15.</sup> According to early scholars such as Meyer (1870), Kant developed his critiques according to the idea of basic faculties (Kant, 1968/1781; Kant, 1968/1788; Kant, 1968/1790). See also Satura (1971, p. 39).

#### SOCIO-POLITICAL CONCERNS

The first half of the nineteenth century was rather tumultuous in political terms. The publication of Herbart's (1816) textbook nearly coincided with the final defeat of Napoleon in 1815 by British and Prussian forces at Waterloo. Thereafter, the German states experienced a time of restoration that lasted until 1830 (the July revolution in France), which stimulated various political demands in Germany (see Snell, 1976). Most significant in the middle of the nineteenth century were the revolutionary events of 1848/1849. The two decades following 1848 prepared a new political order in Germany (see Sheehan, 1989), which was realized in 1866, after Prussia defeated Austria and the German states began to form a union. Economically, the German states experienced rapid social development in the first half of the nineteenth century, moving from an agrarian to an industrialized society, and emphasizing manufacturing, commerce, and urban growth.

Social historians might be interested in whether the textbooks of this time addressed political events. With the exception of a few comments, politics was not a concern in the textbooks. This was of course not different from the work of most academics, who were more individualistic than social, more scholastic than political, and more compliant than defiant. The opposition to feudalism, political gatherings, social revolts (such as those by the weavers in the 1830s and 1840s), and even the revolution of 1848 inspired mostly intellectuals outside of the university system such as Karl Marx (1818–1883) and Friedrich Engels (1820–1895). Ramm (1967) argued that an "intellectual speculation about men in society" (p. 463) was the characteristic of German intellectuals in the nineteenth century. However, not much of this reflection can be observed in the writings of psychological authors, who did not challenge the various state bureaucracies (see also Jaeger, 1982) and rather saw social classes as an "unavoidable consequence" of social life (Schilling, 1851, p. 214).

The exception was Beneke (1845), who addressed political, social, and religious tumults as problems that could be overcome with the help of psychology. He shared the criticism of the political left that academia was about theory and not practice, and he complained that German philosophy rather dealt with the concept of *absolute Nothingness* [absolutes Nichts] than with reality (see p. IX). More representative of an academic attitude was Waitz, who confessed that he did not allow the 1848 revolution to disturb his psychological studies "not because he was indifferent toward the political movement, but because he never could decide to be active in matters of which he knew, that he understood little" (Gerland, 1896, p. 631). In addition, addressing political issues led to personal difficulties in academia (see Beneke below).

#### HERBART'S LEHRBUCH ZUR PSYCHOLOGIE

Johann Friedrich Herbart (1776–1841), called to Kant's chair in Königsberg in 1809, was one of the intellectual giants of the nineteenth century who made a significant impact on philosophy, pedagogy, and psychology (see Boudewijnse, Murray, & Bandomir, 2001; Flugel, 1933; Sachs-Hombach, 1993b). Early historians of psychology recognized him as one of the major players in psychology (see Hartmann, 1901; Dessoir, 1911; Klemm, 1911). Herbart receives less attention in contemporary textbooks of psychology despite his role in the demise of faculty psychology, his innovative mathematical and educational psychology, and his conceptualization of the unconscious (an exception is, for example, Benjafield, 1996). According to

<sup>16.</sup> Translations of all quotations from German into English in this article are the author's.

Boring (1950), Herbart should be considered a transitional figure from the metaphysics of German idealism to the experimentalism of Fechner, Wundt, and Helmholtz (see p. 261). Herbart's textbook of psychology was originally published in 1816 and was translated into English.

Herbart (1816), for whom psychology was part of philosophy, emphasized to his (student) readers the necessity to study psychology at the beginning of one's university education (see p. v). He recommended getting acquainted with the basics of psychology, while suggesting that at the same time students should attend lectures on logic and introductory philosophy. Herbart also complained about the lack of support in *Gymnasien* regarding students' philosophical preparation (logic and empirical psychology), and he warned about the decay of philosophical university education. He argued that although mathematics and language were important in the *Gymnasium*, they could not compensate for the neglect of philosophical study. Herbart hoped that his textbook would convey knowledge of psychological facts in a concise way (see p. v). Although he intended to organize his lectures according to his textbook, and thus his primary target group was university students, he also expected that the textbook would be accepted by a wider audience (p. vi)—an expectation that several textbook authors shared.

Herbart (1816) was caught in a demanding pedagogical situation; he dedicated the first half of his textbook to faculty psychology (which he identified with Wolff's empirical psychology) and after having rejected faculty psychology, he presented his own psychology in the second half (which he related to Wolff's rational psychology; see p. 8). For Herbart, empirical psychology could not substantially increase knowledge, as humans know most about the self and the mind from self-observation. Yet, the established method of "self-observation mutilates the facts of consciousness" (p. 3). Inner experience, having not more legitimacy than outer experience, could not be the basis for developing scientific laws in psychology, because human beings were an "aggregation of contradictions" (p. 6), and mental life was in "permanent change" (p. 7). In addition, this method was not able to distinguish whether the dualism of the mind and body was real.<sup>17</sup>

Herbart argued that the main problem in psychology was that psychologists explained what actually happened in the mind in terms of *faculties* that humans possessed. During this process, psychological faculties were personified and psychology turned into mythology. Based on the concept of psychological faculties, one would be able to distinguish an indeterminate number of classifications. For example, imagination could be divided further into poetic, mathematical, or military imagination; yet, all these classifications were, as historical examples showed, according to Herbart, prone to constant revisions.

From the perspective of faculty psychology, the developed and educated adult human mind was the source for studying human psychological faculties. If certain faculties could not be found in wild humans and in newborns, then faculty psychology had argued that they showed the potential to develop theses faculties. But if the faculty of poetry was just a possibility, which could influence or not, and not a reality, then this faculty did not explain anything. For Herbart, faculty psychology demonstrated that "there are no *general* facts" in psychology and that facts could only be found in the momentary conditions of individuals (p. 12). He also identified inconsistencies of faculty psychology regarding the division of the soul into ideation, feeling, and desiring that actually contradicted an organization that distinguished between higher and lower faculties, for example, in order to distinguish humans from animals.<sup>18</sup>

<sup>17.</sup> In his Psychology as Science, Herbart (1824) repeated his arguments against self-observation.

<sup>18.</sup> Herbart (1825) pointed out that ideation, feeling, and desiring are united and that in the process of ideation (cognition), feeling and desiring are involved at the same time, although the balance between them may change.

Herbart also pointed to specificities of the psychological domain. For example, he argued that psychology was very different from other empirical sciences because rigorous empiricism in psychology would be impossible. If anyone promised such a thing, one would have to be prepared for various frauds. In addition, psychological concepts were developed on an unscientific foundation. Whereas the natural sciences were able to show, according to Herbart, concrete examples for their theories and allowed for systematic abstraction, psychology had no clearly defined objects, its abstraction was unsystematic, and the establishment of laws from observations could only be performed in a fragmentary manner.

Herbart's textbook is unique among all the discussed textbooks, because he devoted half of it to an obsolete traditional psychology (faculty psychology). As an alternative, Herbart promoted in the second half his own system that focused on the mechanics and statics of ideas. Instead of answering questions regarding the nature of the soul, which could not be answered, Herbart wanted to study the "processes" of the soul. The basic processes were ideas [Vorstellungen], and these ideas function as forces [Kräfte]. The *statics of the mind* covers the balance of ideas, whereas the *dynamics of the mind* deals with the movement of ideas. It allowed for studying the fusions and inhibitions of ideas, which would form the basis for studying feeling and desiring within the system. Herbart innovatively formalized these processes into mathematical equations. Herbart's also discussed the notion that an idea weakened by inhibition could be below the threshold of consciousness.

As already emphasized, Herbart (1816) divided psychology into a rational and empirical part. In the first half of his textbook, he presented psychology from the perspective of faculty psychology (empirical psychology), whereas in the second half, he introduced his own psychological system based on the hypothesis of ideas as forces (mechanics and statics of mental life; rational psychology). Herbart believed that empirical psychology, which had been the material for poets, ethicists, historians, and philosophers, could not substantially increase psychological knowledge. Yet he suggested that one could use the concept of a faculty not to produce psychological laws but to clarify psychological phenomena. For example, in his chapter on abnormal conditions, he argued that the source of madness was a sick imagination, in most cases based on a "damaging influence of the faculty of desire" (p. 80). However, he emphasized that such a clarification did not really explain psychological events.

Herbart, based on his rejection of faculty psychology, was very skeptical of a meaningful division and organization of faculties. In fact, he argued that several possibilities existed on how to classify them. He argued that one could divide mental faculties into higher and lower ones, a system with which one could distinguish humans from animals. Sensibility would be a lower faculty, whereas reason would be a higher one. At the same time, he argued that a division into ideation (Vorstellen), feeling [Fühlen], and desiring [Begehren] would cross this division (there is no lower reasoning). In his textbook, he presented lower and higher faculties (Part 1, Section 1, Chapter 2), and then the faculties of ideation, feeling, and desiring (Part 1, Section 1, Chapters 3-5). He provided detailed subdivisions and accounts of discussion in the literature and his assessment. For example, the lower desiring faculties include various drives and instincts. Drives can be subdivided into drive to move, self-love, imitation, social drives, happiness, and so on. He added inclination and passions to the list of lower desires, whereas delay of action and thoughtfulness [Besonnenheit] are examples of higher desires. As part of faculty psychology, he also discussed mental states, the changing nature of mental states, external influences (geographical location, nationality, class [Stand], age, etc.), and abnormal mental conditions (madness, rage, folly, and lunacy) (Part 1, Section 2, Chapters 1–4).

Herbart substituted the concept of faculty for the concept of force and put ideation in the center of his mathematical psychology of the statics and mechanics of mental life. An outline

of this psychology was provided in the second half of his textbook. This part begins with an explanation of his theory (Part 2, Section 1) and discusses the balance and movements of ideas, complexions and fusions of ideas, ideas as the source for emotional states, and the interaction of ideas (Part 2, Section 2). He also discussed the representation of space and time, the development of concepts, self-control and duty as psychological phenomena, the nature of humans, and so on (Part 2, Section 3).

# BENEKE'S LEHRBUCH DER PSYCHOLOGIE ALS NATURWISSENSCHAFT AND LEHRBUCH DER PRAGMATISCHEN PSYCHOLOGIE

Friedrich Eduard Beneke (1798–1854) was another true pioneer of early nineteenth-century psychology and had nearly the same significance as Herbart in terms of his promotion of a natural-scientific psychology and his inauguration of his own philosophical-psychological school (see Siebert, 1905). He was influenced by Jakob Friedrich Fries (1773–1843) and intended to base philosophy on psychology. With this *psychologism*, he understood psychology as the basic philosophical discipline for logic, metaphysics, and ethics, which were all conceptualized as applied psychology.

Involved in various controversies that included a prohibition of his lectures at Berlin University, he became professor extraordinary at Berlin in 1832. This happened despite earlier interventions by Hegel, whom Beneke criticized. Beneke believed that psychology should be based on experience [Erfahrung] and not on the philosophical speculation of German idealism. Beneke's psychology has many parallels with Herbart's system, and thus, it had been suggested that the younger Beneke plagiarized Herbart. The historian Brett rejected this supposition (see Peters, 1962, pp. 563–565). Beneke wrote two textbooks on psychology: The first textbook promoted psychology as a natural science and was originally published in 1833 (the second edition of 1845 will be used for this reconstruction); the second textbook, published in 1853, had a pragmatic focus. Beneke also drew some attention due to his mysterious death: He disappeared on March 1, 1854, and his body was found in June in the Berlin canal where he had apparently drowned.

Beneke (1845) mentioned that although the 1833 edition of his textbook received support outside of the lecture hall, the main purpose of the book remained teaching-related (see p. iii). He argued that the nature and the format of a textbook did not allow for an extensive explanation and justification of his position, but that his in-depth reflections could be found in his other publications. In his textbook on applied psychology, Beneke (1853) hoped that the textbook, although written for his lectures, would find friends outside academia. The lack of extensive explanations and justifications in this textbook (which he regretted in his first textbook) was turned into a virtue. Beneke hoped that the brevity of the exposition rather than an extensive elaboration of topics would convince readers of the usefulness of a pragmatic psychology (see p. iii).

It might appear that questions regarding the subject matter and methodology of psychology are shaped by presentist concerns. Yet, during this time period textbook authors themselves addressed these issues. For Beneke (1833/1845) psychology was the natural science of inner experience [innere Erfahrung]. He suggested that the time was ready for a new approach because "only a very small crowd still believes in the speculative gospel" of German idealism (p. ix). Psychology should follow the methods of the natural sciences. This also meant that Beneke rejected traditional faculty psychology. He argued that psychological phenomena, which could be observed in the developed mind, did not allow the conclusion that faculties or powers of these phenomena existed in the undeveloped mind. Equally plausible for Beneke was

that these forms had developed later in life through a long string of diverse processes, without the help of any faculties or powers. Thus, understanding, judging, desiring, and reasoning were not faculties, but rather they developed and emerged over time. For example, humans were predetermined to understand, but their understanding was not preformed as a faculty. Consciousness was not inborn, because there was only an inborn capacity for consciousness (see p. 51). Faculties were not substances but expressions and activities of an underlying basic faculty. The conceptual mistake in psychology consisted in making something abstract into something concrete (see also Dreßler, 1840).

Beneke (1845) covered topics of traditional psychology when he discussed in his first chapter general processes and the basic essence of the human soul, which included a discussion of the mind-body problem. He provided what one could label a natural-scientific description of the soul. As subject matter of psychology [Gegenstand der Psychologie], with which he began his introduction, Beneke identified "everything we apprehend though inner perception and sensation" (p. 1). The subject matter of psychology is "what you find in yourself" (p. 1). Beneke reflected on whether the methods of the natural sciences could be applied to psychology and rejected the suggestion that this would be impossible. Rather, he argued that psychology could use the same methods as the natural sciences.

Beneke is also interesting for his view that his *new psychology* could contribute to the solution of socio-political problems (p. 8). He argued that the limitations of the status quo had been identified adequately, but that there was a lack of understanding on how to solve problems. A "thorough solution" could only be achieved by understanding the basic processes of human nature (p. viii). The natural science of the human mind should be the basic science and would help to satisfy all human needs. Yet, German philosophy "has not found time and desire to deal with reality" and rather occupied itself with concepts such as George's absolute Nothingness [absolutes Nichts] (p. ix).

Beneke (1853), in response to his ethical-political concerns, developed a textbook of pragmatic psychology, specifically designed to help practitioners. Beneke, who defined psychology as the "natural science of the soul," (p. 1), argued that the other natural sciences had practical applications, and thus, that psychology should have those as well—they should be discussed within a discipline of practical psychology. He called it a "prejudice" (p. 1) that psychologists assumed that psychology was too noble to deal with practical matters. Pragmatic psychology dealt with perfections and imperfections of the human soul and the need to develop the former and to prevent the latter. Because the exact clarification of what constituted perfections or imperfections was missing without a deeper understanding of psychological products and processes, it would be necessary to build any pragmatic psychology on the foundation of a psychology as a natural science.

Beneke (1833/1845), who developed a system similar to that of Herbart, began his text-book with an introduction to the general basic processes and the basic essence which included a discussion of the mind-body problem (Chapter 1). This was followed by a discussion on sensation and perception as the basic and simplest expressions of the soul (Chapter 2). Both depended on external and internal determinants. Chapter 3 covered the reproduction of traces [*Spuren*]. It included an interesting discussion on unconscious and conscious cognitive processes. Beneke tried to provide an explanation of how ideas moved from "unconsciousness to consciousness" (p. 82), an issue also discussed by Herbart. Beneke argued that existing theory

<sup>19.</sup> Beneke gives primacy to stimuli that produce perceptions, but he also says that the human soul is never passive (p. 23).

had reflected on the falling asleep and the awakening of ideas and the association of ideas, but not on what was changed when an idea moved from a conscious to an unconscious trace and vice versa. The problem was that observation had no immediate access to unconsciousness. Beneke himself provided a very detailed description of the processes.

Beneke devoted two extensive chapters to how similar and different ideas were combined (Chapters 4–5). He reserved Chapter 6 for desires, and Chapter 7 for feelings. The last two chapters covered psychological development in general (this includes a short section on psychological development throughout the life span) and differences in psychological development (due to traits, nationality, gender, climate, etc.). He concluded the textbook with an addendum on psychopathologies [Seelenkrankheiten]. According to Beneke, an idée fixe emerged when an idea was too strong. A cure was possible when the exaggerated strong idea was weakened. This would be possible, for example, when these ideas were brought into unconsciousness, through, for instance, extensive physical labor. If the formation of ideas was too weak, then one was dealing with stupidity [Blödsinn]. On the other hand, mania was understood as an overly strong excitement, whereas melancholy as an excessively low mood.

Beneke's textbook on pragmatic psychology was based on his first and on his general psychological theory. In fact, it is not easily comprehensible if one is not familiar with Beneke's terminology. However, the textbook was filled with a variety of interesting comments. For example, Beneke called it a nonsensical prejudice that the genius creates out of nothing (pp. 172–173). Instead, he argued that the genius would move beyond the existing and thus his creations must include what existed. The genius must receive not only what all others had received but even more. The notion that the genius created out of nothing was wrong and stemmed from the fact that geniuses, in their highest achievements, created unintentionally and unconsciously. But this was only possible because of the large amount of productive processes that all came together in the creativity of the genius.

## Waitz's Lehrbuch der Psychologie als Naturwissenschaft

Franz Theodor Waitz (1821–1864) was professor of philosophy at Marburg. Although he was influenced by Herbart, he rejected Herbart's mathematical method for psychology. Siebert (1905) considered Waitz to be the most independent thinker of all of Herbart's followers. Waitz, who was interested and working in philosophy, anthropology, and pedagogy, may be better known for his ethnological and anthropological writings, some of which were translated into English (see, for example, Waitz, 1863). In contrast to many anthropological writers of his time, he emphasized the unity of the human race and suggested that civilization depended on historical circumstances rather than on mental endowment. Rejecting idealistic approaches to psychology, his textbook of psychology in 1849 conceptualized psychology (as Beneke did) as a natural science.

Waitz (1849) expected that his readership would be academic (see p. xi). He discarded speculation because it assumed certain concepts without knowing where these concepts came from. Instead, Waitz intended to present a foundation of psychology by basing psychology on physiological facts, which would allow psychology to become independent of philosophy. Waitz also rejected faculty psychology and suggested that inborn mental capacities were in fact inborn physical capacities. His physiological orientation made it also necessary to include a long treatise on animal psychology. (see Waitz, 1846).

Waitz (1849) reflected on the problem of self-observation. He argued that this method divided mental life into an observing and an observed part when in fact mental life was

united. The observer was identical with the observed, which was from a metaphysical point of view impossible, and from a logical point of view a contradiction. Waitz's conclusion was that self-observation necessarily always contained an observation error, which could be improved but never completely overcome (p. 17). He contrasted self-observation with the observation of others. Yet, the observation of others was dependent on the correct interpretation of external signs such as words or facial expressions. Waitz concluded therefore that the observation of others was in "great danger of error" (p. 17), which made it only a secondary method. Psychology for Waitz required introspection, and introspection required criteria in order to make it a safe method. Introspection should be complemented by psychological analysis and synthesis.

Waitz (1849) wrote the most extensive of all the books discussed (685 pages). The text-book is divided into four major sections. The first one covers the *essence of the soul*, which included its activities and the general laws of ideation. The second section covered *sensibility* [Sinnlichkeit]; the third *emotionality* [Gemüth];<sup>20</sup> and the fourth *intelligence* [Intelligenz]. There is no separate section for volition, which was covered under emotionality. It is most interesting, from a historical perspective, that he discussed topics which seem to have had some impact on later psychologists. For example, Waitz discussed in the part on sensibility the spatial perception of the blind. He also had an extensive discussion of perception of Gestalt [Gestaltensehen] (pp. 217–233) in which he provided a variety of examples. He emphasized the role of Gestalt in perception because things enter our mind only as Gestalt. For Waitz it would be useless to think about the material world and its elements [Elemente] without Gestalt.<sup>21</sup>

In the section on emotionality, Waitz discussed topics such as boredom (pp. 315–330), which he distinguished from fatigue. Based on a Herbartian framework that put ideation into the center of reflection, Waitz proposed a "cognitive" theory of boredom. He suggested that boredom emerged out of the conflict between one's old and one's new ideas. Boredom happened when there was too much new material that one had to process [verarbeiten] either because of lack of knowledge or the uselessness of the material. He also identified other types of boredom; for example, one type was connected with expectation. Boredom appeared when one had a high expectation that was not fulfilled. He mentioned as an example reading a book with which one expected to satisfy one's high interests but which only provided basic leisure. Boredom was then the result of this activity. Other interesting discussions included the applicability of mathematics to psychology, why certain emotions of one's psychological activities remain unnoticed, and the emergence of the concept of causality. Waitz's textbook presents a transitional work in discussing results from the natural sciences; however, this is still done from a philosophical perspective.

## REINHOLD'S LEHRBUCH DER PHILOSOPHISCH PROPÄDEUTISCHEN PSYCHOLOGIE

Ernst Christian Gottlieb Reinhold<sup>22</sup> (1793–1855) was a professor of logic and metaphysics in Jena. He was influenced by Kant without belonging to a movement that would become neo-Kantianism. Reinhold attempted to understand consciousness and knowledge from experience [Erfahrung] as well as to recognize divine thought with scientific clarity, purity, and certainty

<sup>20.</sup> There is no adequate translation for the German term *Gemüt*. The term is sometimes translated as mind, soul, or feeling. I suggest that emotionality is a better translation in this context.

<sup>21.</sup> Concerning Carus's Psychologie der Gestalt, see Sachs-Hombach (1993a, p. 65).

<sup>22.</sup> He should not be mistaken for the Kantian Karl Leonhard Reinhold (1758-1823).

(see Siebert, 1905, p. 188). His textbook on psychology, published in 1835, included an introduction to formal logic. He justified the conjoint treatment of introductory psychology and formal logic pedagogically, as both fields were for Reinhold the immediate preparatory and auxiliary sciences for all of philosophy, and the mediate sciences for all fields of scientific knowledge (p. 1). Dessoir (1911) dedicated one page to Reinhold, suggesting that his system offered only mediocre empirical psychology (p. 189).

Reinhold (1835) mentioned that his textbook was intended to accompany his lectures, but he believed that friends of philosophy outside of the lecture hall would be interested in the textbook because it discussed how to overcome the dualisms of empiricism and rationalism, idealism and realism, and materialism and spiritualism (see p. iii). According to Reinhold (1835), the human soul was a force [Kraft], which expressed itself in all those activities that were not physical, although humans knew about those activities only through somatic functions. Introductory psychology covered this force (p. 17). Based on Aristotelian arguments, he suggested that human psychology was characterized through the unity of vegetative, sensual, and mental functions. Reinhold, who was more than sympathetic toward faculty psychology, argued that the concept of faculty had a real value for knowledge and would be necessary for the scientific and popular study of psychology. Because of the introductory nature of the textbook, such an assessment would need no further justification.

Reinhold (1835) divided his introductory psychology into four sections: a general discussion of the human psychological life, conscious ideation or thinking, emotionality [Gemüt], and will and vigor [Thatkraft]. The first section included discussions on the godliness of humanity. The senses, which have no separate section, were subsumed under the section on thinking. But the section of thinking covered also such topics as seriousness, witticism [Scherz], and sharpness [Scharfsinn]. The section on emotionality included discussions of the laughable [das Lächerliche]. The section on will discussed extensively the notion of freedom of the will, but also the concept of compulsion [Zwang]. Because the concept of compulsion would contradict the idea of the freedom of will, George suggested using an alternative term: "psychological restriction to use the freedom of will" (p. 197).

### Mußmann's Lehrbuch der Seelenwissenschaft

Johann Georg Mußmann (1798–1833) was a professor extraordinaire in Halle, where he published various academic works. His early death did not really allow him to develop any originality beyond Hegel, and his 1827 textbook was used to defend German idealism. His motivation to write the textbook was based on his desire for true science. His textbook stands out from others by the usage of "baroque" language. He used the "I-form" more often than what was usual in academic books of his time; he was aware of this and apologized for it (Mußmann, 1827, p. v). He compared his genius to that of Kant, Fichte, Schelling, and Hegel. Mußmann also proclaimed that his textbook was about eternal and pure truth (p. vi).

Mußmann (1827) wrote that he prepared the textbook mainly for his lectures, but that it was also suitable for the thoughtful and philosophically trained reader (see p. xviii). For Mußmann (1827) psychology was an empirical as well as a rational science. Empirical psychology studied the facts of the soul and based its knowledge on inner and outer observation and the study of appearances, expressions, and activities of the soul. Whereas analysis and abstraction of the general and the permanent led to the establishment of a variety of forces, faculties, and laws, syntheses led to a comprehension of the totality of the soul. But psychology was not a science in a Hegelian sense. For the Hegelian Mußmann, a truly scientific psychology would require a conceptually organized totality of empirical facts of the soul.

What Mußmann identified as the method of such a truly scientific psychology was not a method in a traditional sense but a method in a Hegelian sense. It meant the dialectical reconstruction of the psychological. It also meant that a method that might be relevant in an early stage of the psychological would be sublated on a higher level, for example, when the soul appears in the form of consciousness. Mußmann provided an attempt to develop psychology within a Hegelian model of science.

Mußmann (1827) divided his textbook into three parts. A short first part discussed issues surrounding the concept of the soul and problems of basic psychology such as the unity of the soul. In a Hegelian-inspired division, he then discussed subjective psychology and objective psychology. Subjective psychology presented topics such as life (body, feelings, emotionality) dream-life (sleeping, dreaming, wakening), and the senses. This part included an interesting discussion of the body in general, as well as of the role of drives, nature, and traits. Mußmann considered drives [*Triebe*] to be an essential and purposeful part of the soul. Drives were originally and by nature innocent and good. A drive would turn evil when it was moving into a one-sided direction. A drive that was degenerated or imbalanced became the source of suffering. For Mußmann the general drive was a drive to live, which meant in its final designation that it was sexual love [*Geschlechtsliebe*]. His objective psychology was again divided into three parts, namely imagination (artistic faculty, creating, knowing), reason (perception, language, ideation, consciousness, self-consciousness) and will (righteousness, morality, religion).

#### GEORGE'S LEHRBUCH DER PSYCHOLOGIE

Johann Friedrich Leopold George (1811–1873) was professor of philosophy at Greifswald. He attempted to synthesize the philosophical principles of Hegel and Schleiermacher (see Siebert, 1905). He worked on metaphysics, psychology, and on logic as a theory of knowledge. Indeed, his treatment of psychology and the attempt to develop psychological concepts systematically in his 1854 textbook reminds one of Hegel. George (1854) represents an interesting attempt to salvage absolute idealism's speculation, based on empirical experience, with ideas of natural science (p. v). He declared that the soul is part of nature, and that experience and physiology are crucial for the discipline's progress. In his philosophy, he put the concept of *absolute Nothingness* at the top of his speculation (see Siebert, 1905, p. 114). Klemm (1911) suggested that George's psychological theory of space perception had some influence in that field (see p. 350; see also Hartmann, 1901).

According to George (1854), psychology was located in the shift of natural science to ethics. He argued that rational as well as empirical psychology had legitimacy even when they seemed to exclude each other. For George, these two disciplines represented two different methods for psychology. Based on a Hegelian perspective, George intended to determine in a clear fashion the various activities of the soul in order to understand their organization and their dialectical relationship. The result would be a system of forces and activities, which would allow an understanding of their unity, differences, and functions. He labeled such a representation of the subject matter and its complete understanding as speculative. But this type of speculation was for George not in contradiction to the empirical sciences. On the contrary, this type of speculation was based on empirical facts. George also declared that the soul was part of nature, and thus experience and physiology were crucial for the discipline's progress. He attempted a reconciliation of the advances of the natural sciences with Hegel's approach.

George (1854) in his extensive textbook (588 pages) divided his work into three parts: the sensual soul, the conscious soul, and reason. The sensual soul included perception and affects,

but also temperaments, instincts, a discussion of the genius and other topics. Within the chapter on instincts, he discussed sympathy and its opposite, idiosyncrasy. His discussion of the conscious soul included an analysis of the consciousness of animals. He concluded that animals participate in all activities of consciousness. In his addendum to the second part, George discussed sick consciousness. Again he reflected on whether psychopathologies could also appear among animals, and he agreed that it could. He argued that psychopathologies were disturbances in the function of consciousness and could be triggered though physiological as well as moral grounds. His part on reason covered knowledge, but also desires, inclination, will, and action. The book ended with a discussion of godly reason, personal immortality, and sin, admitting, however, that such issues should be the topic of another lengthier treatise.

## Schilling's Lehrbuch der Psychologie

Gustav Schilling (1815–1872) was professor of philosophy in Gießen and was influenced in his psychology by Herbart. In his 1851 textbook, Schilling not only praised the profoundness of Herbart's research (1851, p. IV), but he even included a short reflection on applying Herbart's fusions [Verschmelzungen] and inhibitions [Hemmungen] to society (pp. 212–214). His psychological theories included religious and spiritual elements. According to Schilling, the brain influences the body as long as the soul lives. Death liberates the soul from the body, and thus psychology must acknowledge the continuation of the soul after death (see also Siebert, 1905, p. 146).

Schilling (1851), influenced by Herbartian ideas, contrasted Herbart's textbook, which was according to his assessment neither suitable for leisurely or superficial readers nor for beginners (see p. iv), with his own. His own textbook, according to Schilling, was written for the everyday user, because it included sufficient theories and experiences, and thus, was more comprehensible than Herbart's textbook. He suggested that the book could not only be used for preparing students for the lecture but also for auto-didactic [Selbstbelehrung] purposes (see p. iv). Schilling hoped that the textbook would introduce novices into the field of psychology and that experts could learn how to provide better overviews of psychology. Schilling argued that because he could not expect a specific knowledge of mathematics at this level, he would not include mathematical discussions in his textbook.

According to Schilling (1851), psychology studied the formation, the lawfulness, and the grounds of mental life (p. 3). He also emphasized the connection of psychology with physiology, psychiatry, and history, and he argued that an understanding of mental life required the inclusion of individual and social aspects. The method for empirical psychology was clearly selfobservation. The observation of others was limited because an understanding of an expressed mental life required a prior self-observation. He distinguished between an intentional and an unintentional self-observation, with the former being more relevant to the study of psychology. The problem with self-observation (where the observer and observed were identical) was that a specific ongoing mental process was interrupted. As soon as self-observation participates in a psychological event, it changes this event and the development of this event, and thus, the event can never be studied in a pure way. Schilling argued that self-observation would never do justice to the complexity of mental life. For example, passions, scientific and artistic creativity, and reflection would be excluded from self-observation. In fact, according to Schilling, self-observation itself would be exempt from self-observation. In addition, uneducated men, children, and women could not and would not want to observe themselves. Thus, self-observation would have to be complemented by scientific theorizing.

Schilling also provided a critique of faculty psychology and called the concept of psychological faculties insufficient and empty. He provided several arguments against faculty

psychology, such as that only individual momentary states, not faculties, could be identified in mental life (for example, I experience anxiety but not the faculty of anxiety); that faculties were insufficient in order to describe mental life and led to false distinctions; that the concept of faculty did not explain mental life; that the unity of the soul contradicted the notion of independent faculties; and that when faculties were understood as real possibilities, psychology was operating under an illogical assumption (see pp. 208–212).

Schilling (1851) divided his textbook into five sections. The first section on the appearances of consciousness included a discussion of perception, ideation, memory, cognition, feelings, desires, actions, psychopathologies, and so on. The second section on the nature and activities of the soul and its connection to the body was metaphysical. He then discussed in his third section lower mental life (sensation, instincts, memory, emotions, passions, drives, etc.) and in his fourth section higher mental life (thinking, reasoning, concepts, judgments, immortality). His fifth section, the most original in his textbook, deals with the influence of the body and the external world on mental life. External influences included external nature (environment, climate) and the role of society (nation, church, history). Because of this external influence, Schilling emphasized the importance of education for the development of mental life. Interestingly, Schilling understood social life in terms of mental life. Accordingly, persons were like ideas that inhibit each other or fuse together (Schilling was a Herbartian), and because certain ideas led and others served in mental life, certain individuals had to lead and others had to serve. Classes were then the "inevitable consequence of processes developing from the cohabitation of many" (p. 214).

## FISCHHABER'S LEHRBUCH DER PSYCHOLOGIE

Because Gundlach (2004) attributes *Gymnasien* a secondary role in the institutionalization of psychology, I would like to describe one exemplary textbook that was used in the *Gymnasien*. It may seem surprising that psychological textbooks existed for *Gymnasien*, but Eckardt (2000) emphasized that several psychological books for *Gymnasien* were used at that time (see p. 162).

Gottlob Christian Friedrich Fischhaber (1779–1829) was a teacher of philosophy and classical literature in a classical *Gymnasium* in Stuttgart. Besides being respected for this function, he was well known as the author of introductory textbooks and as an editor of a philosophical journal. He was a significant teacher and was listed in the *Allgemeine Deutsche Biographie* [General German Biography] of 1877.<sup>23</sup> Fischhaber (1824), influenced by Kant, reported mostly what he perceived as the body of knowledge in the psychology of his time, and included the terminology of faculty psychology.

His 1824 textbook, in which he summarized psychology, was written for a *Gymnasium* audience.<sup>24</sup> Fischhaber intended to simplify the central concepts of the field of psychology through clear definitions. Fischhaber (1824) argued that his textbook allowed him, as a teacher, to organize his lectures and to present the main points of psychology in a clear and organized manner (see p. iii). In order to accomplish this goal, he would use examples, but also theoretical arguments. The organization and content of the textbook would allow students to understand and retain the main issues of this science in a comprehensive manner. Fischhaber also recommended additional readings in each section.

<sup>23.</sup> The Allgemeine Deutsche Biographie provided relevant information on the biographies of several of the textbook authors.

<sup>24.</sup> The contents of the textbook seem very demanding for a Gymnasium readership.

Fischhaber (1824) defined psychology as the science of the soul, which studies the essence and appearances of a mental force that senses, thinks, and desires. The discipline of psychology was developed in order to understand the faculties and the laws of the mental force. Following Wolff, he divided psychology into a rational and an empirical part. Rational psychology, for Fischhaber, studied the nature of the soul, whereas empirical psychology, based on experience, investigated the effects of the soul. Empirical psychology could be divided further into a general psychology (main faculties of the soul) and a special psychology (circumstances which lead to a psychological change). Regarding the purpose of psychology, the field could be divided into theoretical and practical psychology.

He specified self-observation as the method for empirical psychology but argued that the method was prone to problems. One difficulty when studying the soul referred to the fact that one was subject and object of self-observation at the same time. In self-observation, the mind would be active and at the same time one would reflect on this activity. This would pose enormous challenges to the study of the soul. In addition, psychology dealt with "dark" feelings, ideas, and drives that made the introspective study more complicated (p. 9). He recommended three methods for psychology: the empirical method (self-observation), the analytical method (a theoretical process, in which various psychological dimension are separated), and the synthetic method (a theoretical process in which simple principles are combined in order to understand the nature of the soul).

Fischhaber (1824) divided his textbook into five sections. The first section discussed rational psychology in a Wolffian tradition and included reflections on the immateriality of the soul, freedom of the soul, and immortality of the soul. It was an attempt to prove the real existence of the soul based on reason. The second section covered empirical psychology. Interestingly, Fischhaber began with the faculty of feeling. Feelings could be divided according to four dimensions. In relation to human nature, one could distinguish sensual feelings and mental feelings (intellectual, aesthetic, moral, and religious feelings). In relation to oneself or other individuals, one could distinguish self-feeling and empathy. In relation to the effects that feelings produce, one could identify agreeable, disagreeable, and evenhanded feelings. In relation to feelings themselves, one could distinguish simple and complex feelings. His discussion on feelings covered such topics as surprise and hope.

Fischhaber divided up the sections in a similar fashion. The section on feeling was followed by a section on the faculty of ideation. For example, this section included a discussion on superstition and language. Section 4 covered the faculty of desire. In the context of emerging social unrest, Fischhaber identified an addiction to freedom as a problem. It was defined as an "unreasonable strong desire for freedom" (p. 222). The problem for Fischhaber was that in such cases freedom was not understood as a means for higher purposes but that independence itself was seen as the highest end. He argued that the French revolution was an example of the negative outcomes of such a desire. This desire would reduce feelings for truth, law, and virtue.

In the final section (Section 5) on specific psychology, Fischhaber discussed differences in psychology and psychopathologies. He identified age and temperament as factors in the expressions of the psychological. For example, he distinguished four stages of development and expression: (male) childhood, youth, adulthood, and late adulthood. He also discussed gender as a factor that would influence the psychological. Fischhaber suggested that there was no substantial difference of physical and psychological forces between the sexes (p. 253). Differences could be explained by education, lifestyles, and social prescriptions. The section concluded with a presentation in psychopathologies, which he organized according to feelings (e.g., melancholia), knowledge (e.g., idiocy), and desire (e.g., lack of will).

#### CONCLUSION

According to Gundlach (2004), psychology was established as a *Prüfungsfach* [examinable discipline] in Prussia in the 1820s. The institutionalization of a required course of psychology in a German academic system had several far-reaching consequences for the discipline (see Gundlach, 2004). It required course offerings and examinations and led to a market for textbooks of psychology. In terms of innovation, it meant that course-based academic philosophical psychology was confined to a textbook science and that empirical innovation happened outside of it (for example, in physiological psychology). The textbooks of academic psychology of the first half of the nineteenth century covered in this article did not systematically include the results of the natural sciences, even when some of them were labeled programmatically as "natural-scientific" (Beneke, Waitz).

Although concepts of experimental psychology were influenced by some thought systems of psychology in the early nineteenth century as has been demonstrated, for example, with regard to Herbart by Danziger (1983) and Boudewijnse, Murray, and Bandomir (1999, 2001), even if there has been institutional and personal continuity (Gundlach, 2004), the contents of the textbooks on the background of this local institutionalization show that the "disciplinary and theoretical continuity of the new experimental psychology with a previous, natural philosophical psychology" is not as clear-cut (Hatfield, 2002, p. 209). The empirical attitude of physiology, botany, entomology or Newtonian physics (p. 211) in eighteenth century psychology did not find its way into the psychological textbooks of the first half of the nineteenth century. The textbooks of psychology for which a "thriving market" (p. 212) existed in the second half of the eighteenth century and that contained "some early quantitative experiments on sensory phenomena" (p. 212) did not move the textbooks of the first half of the nineteenth century into a physiological or experimental direction. This move happened only programmatically in Waitz's textbook. The content of the textbooks taught to students of philosophy and pedagogy in Germany showed no continuity from the studies of Bonnet, Godart, and Krüger from around 1750—figures who were identified by Hatfield as early experimental psychologists (see also Sachs-Hombach, 1993a)—to the psychological textbooks of the first half of the nineteenth century.

I am not suggesting that experimental psychology cannot find evidence for "experimental" natural-scientific studies in the eighteenth or early nineteenth century that indicate some type of continuity. However, this article provided evidence that the majority of textbooks used at universities for philosophy and pedagogy students did not include physics-emulating content (see Hatfield, 2002). This holds true regardless of whether one agrees with Gundlach's institutionalization argument or *not*. There was no continuity from eighteenth century "experimental psychology" to the psychology courses taught at universities. The evidence rather seems to corroborate Smith's (2005) argument that "there is no one thing that we can call 'psychology' in either the present or the past, not an institutionalized discipline, not a body of knowledge and not a way of being human in the world" (p. 89).

If one were to endorse a metaphor in order to represent the development through the first half of the nineteenth century, the metaphysical notion of a tree's root, in which everything is derived from unambiguous sources, does not do justice to the historical reality. It might be better to characterize the emergence of textbook psychology at that time through the concept of a fasciculated root, a system of small roots with many sources, or, even better, as a rhizome. As Deleuze and Guattari (1980/1987) have argued, a rhizome is a stem organ in which branches in the air can grow again into the soil, where old parts die out, and where new branches are formed elsewhere. There are psychological developments in the eighteenth century that show continuity into the next century, there are branches that die off, and there are advances that

disappear and reappear much later. Textbook psychology of the early nineteenth century had only a few branches that developed into what we know now as psychology, and natural science was only programmatically a root. There was continuity in some topics but discontinuity in terms of programs and practices. Even Herbart's psychology appears from the perspective of Wundt as pure speculation (see also Sachs-Hombach, 1993a, 1993b).

Continuity in the textbooks can be identified much more in the philosophical Leibniz-Wolff tradition of psychology. In particular, Wolff's division of psychology into a rational and empirical part played an important role, and Kant's division of faculties was endorsed by many. One can make the argument that Wolff's empirical psychology demonstrates continuity to experimental psychology—although that requires some qualitative conceptual maneuvers. However, it is more plausible that Wolff's rational psychology moved into theological psychology (see, for example, Vande Kemp, 2002). From the perspective of theological psychology, Wolff's empirical psychology is less alive than his rational psychology.

An important "root" for psychology of the nineteenth century was Herbart, who provided a "proto-paradigm" for psychology in the first half of the nineteenth century that was nonexperimental. He designed a program that attracted followers, who themselves developed, based on Herbart's core assumptions, their own theories of psychology. Beneke, who was less influential than Herbart, inaugurated his own school of psychology and put psychology into the center of all sciences. But neither Herbart nor Beneke had a direct impact on twentieth-century psychology. Some of the textbooks discussed here show the importance of Kant and German idealism, and in particular of Hegel, but they did not leave a permanent mark in the flow of psychology.

One should emphasize that academic philosophical psychology as it was taught in courses to philosophy and pedagogy students did not agree on the outlook of psychology and that there was no sense of a unified discipline.<sup>25</sup> There was no consensus on the subject matter, methodology, or topics of psychology (even when there were overlaps). Some authors tried to assimilate past and present philosophy, whereas others attempted to do justice to the emerging natural sciences. All of them showed a critical attitude that challenged preceding psychologies. The concepts that laid the foundation for the discipline differed significantly. There was an agreement that psychology should rely on self-observation, even when it was understood as a highly problematic method. The soul was an accepted topic, but details regarding the soul were approached in very diverse ways. Discontinuity into experimental psychology can be observed especially when it comes to the concept of the soul and the discussions of rational psychology, which played important roles in many of the textbooks.

From a theoretical perspective, one could argue that these textbooks, much more than contemporary ones, demonstrate psychology as an emerging discipline: There was no consensus on the meaning of psychology, nor agreement on whether psychology should follow the natural sciences or philosophy. The merger of rational and empirical psychology or the incorporation of Herbartian, Benekian, or Hegelian psychology into the discipline has never been accomplished on a conceptual level. With significant exceptions, those issues were answered in the second half of the nineteenth century in favor of the natural sciences, but such a commitment was nourished only partially by internalist reasons (see Ward, 2002).

Textbooks have been of interest to historians and theoreticians of science since Kuhn (1962) emphasized the role of authority in general and of a textbook in particular for a student's paradigmatic socialization. Although contemporary researchers have negative attitudes toward textbooks because they "water down" the complexity of experiments, empirical studies, and

<sup>25.</sup> A lack of unification was not addressed as a problem.

theoretical reflections, they expect that textbooks and introductory lectures teach students the accepted body of knowledge in a specific area or in psychology in general. In addition, as Morawski (1996) has argued, textbooks communicate to a nonscientific audience how the world should be perceived, defining and inscribing subjectivity. Textbooks tell students how they can think about mental life and themselves, and once that vision has been accepted, it becomes part of their identities. Professors of philosophical psychology in the first half of the nineteenth century taught their students varieties of philosophical psychology, and, once some of those students became *Gymnasium* teachers or philosophers themselves, they taught their students their versions of psychology. But this identity lasted barely longer than a few generations.

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