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Koffka, Köhler, and the “crisis” in psychology

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ABSTRACT

This paper examines the claims of the Gestalt psychologists that there was a crisis in experimental psychology ca. 1900, which arose because the prevailing sensory atomism excluded meaning from among psychological phenomena. The Gestaltists claim that a primary motivation of their movement was to show, against the speculative psychologists and philosophers and *Verstehen* historians, that natural scientific psychology can handle meaning. Purportedly, they revealed this motivation in their initial German-language presentations but in English emphasized their scientific accomplishments for an American audience. The paper finds that: there was a recognized crisis in the new experimental psychology ca. 1900 pertaining especially to sensory atomism; that the Gestaltists responded to the crisis with new experimental findings and theoretical concepts (*Gestalten*) that challenged atomism; in both languages, they raised problems of meaning and discussed the contest with speculative psychology and philosophy only after presenting their scientific case; that they introduced phenomenological observations on meaning and perceptual organization into their psychology but did not develop a theory of meaning or solve philosophical problems; that they argued “philosophically,” that is, using abstract, conceptual arguments; and that this aspect of their cognitive style was not received well by some prominent members of their American audience.

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1. Introduction: Koffka’s dilemma

In the mid-1930s, the Gestalt psychologist Kurt Koffka (1935b, pp. 18–20) offered an account of the origins of Gestalt psychology as a response to a “dilemma” and “crisis” in the experimental psychology of ca. 1900. The crisis was this. Lay people, historians, and philosophers demanded that the “sciences”—in the broad sense of the *Wissenschaften* (roughly: bodies of knowledge ordered by principles)—should handle problems of meaning, significance, and value: the meaning or significance of a historical personage’s life and actions, the meaning of a symphony or work of literature or art, the values that guide everyday actions.

By Koffka’s accounting (and in his own words), “philosophers” and “speculative psychologists” ridiculed the “experimental psychology” of the time for being unable to account for these notions in their “natural scientific” psychology and these scholars claimed that their approaches would provide an account of meaning and significance. In opposition, the experimental psychologists con-

tended that the philosophers and other scholars had failed to provide rigorous explanations that could be “verified” and so could meet the proper epistemic standards of “science” (*Wissenschaft*) in general, and hence that their approach should be rejected. Accordingly:

The dilemma of psychology, then, was this: on the one hand it was in possession of explanatory principles in the scientific sense, but these principles did not solve the most important problems of psychology; on the other hand, it dealt with these very problems, but without scientific explanatory principles; to understand took the place of to explain. (Koffka, 1935b, p. 20)

“Speculative” psychology and philosophy dealt with meaning, but weren’t scientific, where “natural science” provides the root explanatory concepts (*ibid.*). But then-current natural scientific psychology was also lacking:

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experimental psychology had carried on a feud with speculative psychologists and philosophers who, not without reason, belittled its achievements and claimed that the mind in its truest aspects could never be investigated by scientific methods, i.e., by methods derived from the natural sciences. (1935b, p. 19)

The historians joined in, claiming that “no laws of sensation, association or feeling—pleasure or displeasure—could explain a decision like that of Caesar’s to cross the Rubicon” or account for the “data” and “meaning” of “culture” (ibid.). But the experimental (natural scientific) psychologists also had a point:

for ages psychology had been treated in the way the philosophers and historians claimed to be the only true one, with the result that it had never become a true science. Clever, even profound things might have been said about men’s higher activities by speculative philosophers and “understanding” historians, but all these dicta bore the stamp of their authors’ personalities; they could not be verified and could not produce a scientific system. (1935b, p. 19)

Here Koffka allies (unnamed) speculative psychologists and the philosophers with the “understanding” (*Verstehen*) historians; he places their positions, collectively, in opposition to that of the natural scientific experimental psychologists.

Koffka held that each side was right about the other, and hence that a third direction was needed to solve the dilemma or crisis. He credited this direction to Max Wertheimer, who, around 1911 (Koffka, 1935b, p. 53),¹ founded what came to be called the Berlin school of Gestalt psychology, which included Koffka and Wolfgang Köhler (who were in Frankfurt with Wertheimer in 1910–1911). Their program was to make *Gestalten* or “wholes” into the primary entities in natural science, including psychology, and thereby (purportedly) to accommodate meaning into natural science.

In presenting this story of the origins of Gestalt psychology to his English-speaking, primarily American audience, Koffka paused to offer an apologetic confession:

When the first attempts were made to introduce gestalt theory to the American public, that side which would most readily appeal to the type of German mentality which I have tried to sketch was kept in the background, and those aspects which had a direct bearing on science were emphasized. Had the procedure been different, we might have incurred the danger of biasing our readers against our ideas. (1935b, p. 18)

In America, he and Köhler emphasized basic scientific merits in presenting Gestalt theory and avoided their deeper philosophical motivations; in Europe, they (allegedly) had emphasized the problems of meaning, value, and culture—or meaning writ large.

My aim is to assess Koffka’s historical account along several dimensions. First, I consider whether, prior to 1900, natural scientific or experimental psychology was an extant practice that could be said to be in crisis and, if so, what the crisis was and how the Berlin Gestaltists responded. Second, I elaborate (in sec. 3) the categories within which Koffka framed his story. He distinguished speculative psychologists, philosophers, and “understanding” historians, on the one hand, from natural scientific, experimental psychologists, on the other. What could he mean by these categories? I take him to be distinguishing distinct disciplines or disciplinary practices² to the general subject matter he considered should be treated by any psychology, viz., human behavior and its meaning or significance. Third, I assess Koffka’s historical claim that he and Köhler altered their presentation of Gestalt psychology for the American audience. I then discuss ways in which the Gestaltists did and did not argue philosophically in their theoretical presentations and offer an assessment of their achievements.

2. A crisis in psychology ca. 1900

To ask whether a “crisis” occurred in psychology ca. 1900, one must assume that psychology existed prior to that date. Moreover, since several different practices (philosophic and natural scientific) identified themselves as “psychology” at this time, one must ask if all were in crisis or only a specific type.

By the last decades of the nineteenth century, experimental psychology was an identifiable and rapidly growing practice in Germany, which early on looked to the work of G. Fechner, H. Helmholtz, and W. Wundt for exemplars.³ Beginning with Wundt’s psychological institute at Leipzig (founded privately in 1879 and made official in 1883), eight free-standing institutes or seminars in “psychology” or “experimental psychology” were founded prior to 1900 (Berlin, Munich, Münster, Würzburg, Bonn, and Kiel, plus a psychophysical collection at Halle), and three more existed as divisions of the philosophy seminar (Göttingen, Breslau, and Freiburg). As regards formal institutionalization, psychology outpaced philosophy; of these eight universities, only Leipzig possessed a philosophy seminar.⁴ The heads of the psychological institutes were appointed in philosophy chairs, but with the understanding that they were to pursue experimental psychology (e.g., Bringmann, Bringmann, & Ungerer, 1980, p. 127; Lenz, 1910–1918, v. 3, p. 203).⁵

However, the new experimental psychology was not the only pretender to the name “psychology.” Especially in Germany, a range of other disciplinary practices—self-avowedly not based on experimental methods—also appropriated the name “psychology,” including Brentano’s phenomenological or “descriptive” psychology and various philosophical psychologies such as those of the

¹ There are other instances of what may be termed, generically, as “gestalt psychology” (e.g., Bühler; see Sturm, this issue). My focus is on the Berlin school, and specifically on Koffka, Köhler, and Wertheimer (and, after 1925, on the first two).

² On the notion of disciplinary practice (anent metaphysics), see Hatfield (1990); on the use of “actor’s categories” to determine such practices, see Hatfield (1996, 2005); on the application of these approaches in the history of psychology, Hatfield (1995, 1997, 2003b).

³ One might argue that the achievements of Fechner, Helmholtz, and Wundt in sensory psychology served to form a unifying paradigm (in Kuhn’s original sense, both sociological and as an exemplar) for the new, experimental psychology, and that Kuhn (1970, p. 160) erred historically in implying that psychology never emerged from a “pre-paradigm” state; he should instead have said that it emerged in the latter decades of the nineteenth century, but then underwent a “crisis” that yielded a fragmented, non-paradigm-ruled discipline (for several decades, in any event). After Kuhn (1977, p. 295) revised his concept of “paradigm,” no longer requiring a single paradigm per discipline, he should say that, after the crisis of ca. 1900, psychology became multiparadigmatic. Accordingly, this period of psychology would reverse the pattern of going from multiple paradigms to a unified paradigm that Kuhn (ibid.) finds typical of maturing sciences. See Scripture (1899) on laboratory experiments, measurement, and statistics as defining the “new psychology.”

⁴ The numbers of psychological institutes, etc., derive from Ash (1995), table 1, supplemented for philosophy (and corrected for psychology) by Titze (1995) and Minerva (1891–1901). Ash (1995, p. 18) holds that psychology was poorly “institute”-ionalized at this time compared with philosophy; Smith (2010, p. 178) and Kusch (1995, pp. 122–125) claim that psychological research programs were located in “philosophy departments.” The philosophy “seminar” is the closest equivalent to a department, and by 1900, of the eight, only Leipzig had one (founded 1894); at Göttingen and Breslau, the psychological division was co-founded with the philosophy seminar, and at Freiburg the philosophy seminar came first (in 1881). Otherwise, only Giessen, Jena, and Strassburg had philosophy seminars before 1900 (their psychological institutes coming later). At this time, what we call “arts and sciences” appointments were to the “philosophy faculty,” a broader genus than the philosophy seminar (and not be confused with it).

⁵ Ash (1995, p. 27) reckons that, from 1890 to 1910, psychologists rapidly increased their hold on philosophy chairs: “While the number of full professorships of philosophy in Germany increased only 10 percent in those years, from forty-four to forty-eight, the number of those positions held by experimenting psychologists more than tripled in the same period, from three to ten.”

neo-Kantians. These philosophical psychologies (see sec. 3) tended to demote experimental psychology to an extension of physiology, and to locate the true psychology in reflective or phenomenological description of consciousness and thought.

When various figures declared a “crisis” in psychology around 1900, it was experimental psychology⁶ that they had in mind and, within experimental psychology, they singled out the tendency toward sensory atomism (the postulation of punctiform sensations) and associationism. Indeed, within a year of Wundt’s declaration that psychology “is on the way to changing from an area of philosophy into an autonomous [*selbständige*], positive science” (1896, p. 2), the Swiss philosopher Rudolf Willy (1897) had pronounced a “crisis” in the new experimental psychology. Such talk arose again ca. 1910 and again in the decade surrounding 1930.⁷ The early talk of a crisis (or deep trouble) in the new psychology is remarkable for the number of mainstream advocates.

Koffka first responded to this “crisis,” so-described, in his 1926a, 1926b review of Hans Driesch’s *The Crisis in Psychology* (1925), and he and Köhler each repeated the word in later publications. Koffka (1935b, p. 20) subsequently placed the crisis in the first decade of the twentieth century, whereas Köhler (1938, ch. 1) saw it as a persisting state of natural science in recent times; they agreed that Gestalt psychology was the answer.

Köhler and Koffka, in suggesting that there was a “crisis” in psychology during the early twentieth century, need not have been aware that philosophers and psychologists ca. 1900 had also made that charge. But the rumor was abroad. Around that time, many scholars proclaimed that something was seriously wrong with the new experimental psychology as promoted by Wundt, G. E. Müller, and H. Ebbinghaus, among others. These critics charged that the “atomistic,” “associationist” approach that dominated experimental psychology was inadequate as a basis for all of psychology, or perhaps even for any of psychology. Expressions of dissatisfaction came from leading or rising figures within psychology: Wundt himself doubted the adequacy of experimental techniques for studying higher cognition (Blumenthal, 1980), a fact overlooked by some of his critics. Ebbinghaus targeted Wundt’s experimental program on just this score: for failing to bring higher cognitive functions under experimental control, which he claimed to accomplish in his work on memory (Ruger & Bussenius, 1913, p. iii). William James (1890, v. 1, pp. 192–193) expressed grave doubts about the value of experimental psychology (as practiced by, among others, “Weber, Fechner, Vierordt, and Wundt”). Outside these criticisms from psychologists, philosophers were skeptical that the new psychology was adequate for the study of mind (Dilthey, 2010 [1894]),⁸ let alone for solving philosophical problems in epistemology or facilitating the study of logic (Husserl, 1965a [1911]). Willy (1897, 1899) argued against atomizing psychology with its emphasis on psychophysics and for an approach combining exact empirical methods with a more holistic anthropological method.

At the 1904 International Congress of Arts and Sciences in St. Louis, several psychologists surveyed the state of their discipline. Among these, James Ward, Professor of Mental Philosophy at Cam-

bridge and co-editor of the *British Journal of Psychology*, began his article on “The Present Problems of General Psychology” by quoting the German psychologist Theodore Lipps, that “the psychology of our day needs reforming from its very foundations” (Ward, 1906, p. 637). Ward recounted stark disagreements on how psychology should be (re-) constructed, concerning: atomism vs. functionalism; the fundamentally philosophical or biological character of psychology; and whether description or explanation should be its aim. He proposed as common ground: that “general psychology” aims “to ascertain, describe, and analyze the invariable factors of psychical life, consciousness, or immediate experience” (*ibid.*). E. B. Titchener assessed the achievements of “experimental psychology” by surveying the annual summaries in the *Psychological Review* and the *Zeitschrift für Psychologie*. “The result,” he reported, “was not encouraging” (Titchener, 1906, p. 675). He doubted “that any psychologist, of whatever school, could write a systematic psychology,” concluding that “in spite of the enormous increase of our psychological knowledge, within the last few decades, we are still very far from any complete or rounded science of psychology” (*ibid.*). What would a “complete and rounded science” possess that current experimental psychology did not? Evidently, system and unity.⁹

The French psychologist Alfred Binet soon confirmed Titchener’s description of the diversity of subject matters and methods in psychology, which he affirmed as a good thing (1909). However, soon thereafter he described the results of the Würzburg school—gained through a “method of questioning” that elicited extensive introspective reports—as providing grounds for declaring a “crisis” in psychology, or perhaps a “revolution” (1910, p. 1). The new methods required “the introduction into psychology of the notion of action, act, attitude, movement” (p. 45), which might have revolutionary consequences for sensationalist (atomistic) psychology and also for the older view that human psychology is grounded in rational processes (p. 47).¹⁰

3. The crisis and its context according to Koffka

From the inception of their program of Gestalt psychology in 1910–1912, Wertheimer, Köhler, and Koffka saw themselves as making fundamental alterations in both the methods and theoretical constructs of previous scientific psychology. By the time Koffka responded to Driesch’s “crisis” with his 1926 review, this new Gestalt program was well-established in Germany. Köhler was head of the psychological institute in Berlin, Wertheimer had a less prestigious but stable position in Berlin, and Koffka had established a psychological institute at Giessen.

In his 1926 review, Koffka affirmed Driesch’s (1925) assertion that there was a crisis in psychology’s handling of meaning. He rejected Driesch’s solution based in vitalism and reanalyzed the problem in familiar Gestalt terms: previous psychology was caught up in “machine theory” that construed the primary data of psychology as meaningless “sensory elements,” whereas the Gestaltists recognized as basic phenomena of human experience organized wholes imbued with meaning.

⁶ As an exception, Natorp (1912, p. iv) spoke of a “critical path” as the way to complete the “crisis” (*Krisis*) that marks the divide between what is and is not “science,” along which he would conduct “psychology” as a philosophical discipline examining pure consciousness through phenomenological reflection, vs. empirical, natural scientific psychology as a branch of physiology (1912, pp. 187–188, ch. 8).

⁷ Notably, Bühler (1927) diagnosed a “crisis” in psychology occurring ca. 1890. On Willy, see Mulberger, this issue. Also, Driesch (1925) promoted crisis talk in psychology and Husserl (1965b [1935]) in scholarship generally.

⁸ On Dilthey’s criticisms of a universalistic psychology of elements and association, see Feest (2007). Dilthey belongs among the “speculative” and *Verstehen* psychologists mentioned by Koffka (see sec. 3).

⁹ The St. Louis Congress emphasized “the unity of science” (Wead, 1903, p. 724; Rogers, 1906), a notion frequently invoked around this time (e.g., AAAS, 1896, p. 207; 1897, p. 183; Dodson, 1908, p. 458), sometimes in the guise of a unity between biology and physics and chemistry, or among psychology, biology, and physics—typically not a materialistically based unity but one founded on another type of relation, such as mutual relevance (Parker, 1908, pp. 115, 128–129), or recurring notions of system and organization (Hjort, 1921). Köhler’s 1920 book proposed unity through the concept of *physischen Gestalten* (physical Gestalten). Koffka (1935b, p. 20) invoked a unity built on Köhler’s concept (see Epstein & Hatfield, 1994).

¹⁰ On Binet, see Carson, this issue.

Koffka (1935b) extended his analysis of the “crisis” in psychology to other natural sciences, which also had failed properly to integrate order and meaning into their subject matters. Psychology was in an especially good position to redress this problem, he argued, because in it the three great provinces of the world—provinces that needed to be re-integrated—flow into one another. These provinces are inorganic nature, life, and mind (1935b, p. 10). Koffka considered and rejected two contemporary solutions for integrating these three realms, materialism and vitalism: the first because of its reductive tendency to deny the reality of life and mind, the second because it posits a special vital power, which is not scientifically acceptable. Gestalt psychology offered to integrate matter, life, and mind through the notions of quality, order, and meaning. The science of the inorganic would be supplemented by recognizing the importance of qualitative considerations, such as form in addition to force; the science of life would be supplemented by acknowledging the fundamental significance of order as an objective category possessed by well-functioning living systems; the science of mind would be supplemented by re-introducing meaning and significance. An integrated conception of the world would be found in a psychology that invoked all of these terms in its explanations: qualitatively described physical structures, ordered biological functions, and meaning and significance (Koffka, 1935b, pp. 10–18).

In sec. 1, we saw Koffka describe a difference between the original presentations of Gestalt psychology in Germany and later in America, so as to emphasize scientific merits in the latter, leaving aside problems of meaning and philosophy. Koffka’s portrayal of this savvy introduction of Gestalt theory to the “American public” presumably includes its presentation to American psychologists. He implies that, in Germany but not in the US, Gestalt theory was presented as deeply connected with philosophical questions of meaning. We need to flesh out this historical claim.

For a fuller sketch of his opponents in Germany, who held that “the mind in its truest aspects could never be investigated by scientific methods, i.e., by methods derived from the natural sciences” (1935b, p. 19), Koffka recommended an essay by the German-born American psychologist Heinrich Klüver. In effect, he used Klüver’s account to fill out his own discussion of the relations between *Verstehen* history and speculative psychology and philosophy, which Koffka collectively contrasted with natural scientific psychology.

Klüver’s (1929) essay supplemented Murphy’s *Historical Introduction to Modern Psychology*. It described a fundamental shift in German psychology about 1900 amidst criticism of previous psychology. Klüver endorsed a description by the German sensory psychologist H. Henning: “Until the turn of the century it was believed that one could grasp the mind with number and measure . . . since 1900 there has developed a qualitative psychology which concerns itself less with numbers and more with kinds of experience and qualitative analysis” (Klüver, 1929, p. 417). Klüver characterized the earlier psychology as a collection of bare “facts” and described it as “empirical,” “positivistic,” and “quantitative.” Psychophysics, reaction-time studies, and Ebbinghaus’s memory work would fit the bill. He attributed the emphasis on qualitative analysis after 1900 to interactions between philosophy and psychology, whether through the influence of the neo-Kantians and the phenomenologists or simply by adopting philosophical modes of argumentation (1929, p. 420). The characteristics of qualitative psychology are a concern with “phenomena,” “acts,” “functions,” and an emphasis on “wholes” over “elements.”

Klüver divided this qualitative psychology into two streams: one treating psychology as a “natural science” and another viewing it as a “cultural science” or *Geisteswissenschaft*. As representatives of or

influences on the latter type, he named the “cultural” and *Verstehen* psychologist Dilthey, the “cultural” and “type” psychologist Eduard Spranger, the *Weltanschauung* and *Verstehen* psychologist Karl Jaspers, the Southwest neo-Kantian philosophers (Ricker and Windelband), who distinguished the natural from the cultural or historical sciences, and, as an inspiration to some *geisteswissenschaftliche* psychologists, the philosopher Husserl. Anent qualitative yet “natural scientific” psychology, he described the work of William Stern, Felix Krueger, E. R. Jaensch, and Gestalt psychology. It is perhaps not surprising that Klüver, who worked with Wertheimer for three years before going to Stanford for his Ph.D., gave special attention to Gestalt notions. But by 1929, he was established in a position at Minnesota, so we can regard these reflections as his considered position.

Klüver’s account accords with Koffka’s own, including distinguishing Husserl from the natural scientific approach of Koffka and friends. Koffka (1935b) ranged the “speculative philosophers” among the non-experimental approaches. In 1911, Husserl published “Philosophy as Rigorous Science,” which distinguished his phenomenological psychology from both naturalistic, experimental psychology (and its philosophical allies) and the historical psychology of Dilthey and his allies. Husserl implied that his brand of phenomenological psychology could provide the basis for the other two. Koffka, by contrast, claimed that Gestalt psychology could offer both the speculative philosophers and the historically oriented psychologists a unified framework founded on natural scientific methods. That is, Gestalt psychology would secure the fundamental explanatory concepts subsequently employed by philosophers and “understanding” psychologist historians. In his account, the development, from a natural scientific perspective, of this “philosophical” side of Gestalt psychology concerned with meaning was a guiding motivation of Gestalt psychology in its German period, a motivation that was manifest then but hidden in the original presentation of Gestalt notions in America.¹¹

In assessing Koffka’s historical claims in the next section, I compare the presentations of Gestalt theory in primary documents in German and English. In a subsequent section, I consider whether and how Gestalt psychology was philosophical in its aims and whether it was more so in Germany. Finally, I consider the extent to which Koffka and Köhler actually produced solutions to the problem of reintroducing value and significance into natural science more generally through their efforts in psychology. In the end, a historical account of their response to the crisis in psychology cannot avoid the normative question of what they actually succeeded in doing.

4. Gestalt theory: In America vs. previous German literature

Gestalt psychology was introduced to Americans in lectures, journal articles, book chapters, and translated books, mainly by Koffka and Köhler. The first journal article, by Koffka in the *Psychological Bulletin* (1922), focused on problems in perception: a criticism of the physiological “constancy hypothesis,” which supported the meaningless “sensory elements,” or “atomic sensations” against which the Gestaltists rebelled; a proposed solution to Stumpf’s transitivity problem, based on a denial of the constancy hypothesis and an appeal to actual experience; and principles of organization in perception, for which Gestalt psychology is still well known. This article was soon followed by translations of Koffka’s *Growth of the Mind* (1924a) and Köhler’s *Mentality of Apes* (1925), respectively focusing on organized behavior and cognitive organization in child development and on meaning or functional categorization in problem

¹¹ Koffka does not claim that Gestalt psychology replaces either historical work such as depends on *Verstehen* or philosophical work that appeals to phenomenology; rather, it is a matter of which of these approaches provides the fundamental “scientific” basis (in the extended sense of the term *Wissenschaft*) for studying meaning and significance, which might then be applied in other domains. Koffka claims that Gestalt psychology, taking a natural scientific approach, will provide this basis.

solving by apes. These works took swipes at the quasi-behaviorist learning theory of Thorndike (Köhler, 1925, intro. and ch. 1) and the “American” behaviorism of Watson (Koffka, 1924a, pp. 12, 19; also, 1924b, pp. 152–153). Both Koffka (1926a) and Köhler (1926a), Köhler (1926b) contributed to *Psychologies of 1925*, with three articles on (1) mental development, (2) the intelligence of apes, and (3) perceptual organization, figure/ground relations, phenomenological method, and hypothesized brain processes and physical *Gestalten*. In 1924, Koffka published an article in the *British Journal of Psychology* (based on a lecture at Cambridge) on the merits of the Gestalt phenomenological approach over traditional introspection. In this work, he complained of the “remoteness from life” of the method of traditional introspection, which meant that it failed to serve the needs of “the historian and philologist, the educator and psychopathologist” (1924b, pp. 149–150); these remarks presage his 1935 discussion (sec. 1, above) of the failings of psychology per the speculative philosophers and *Geisteswissenschaftler*, but he does not so name either group here. Gestalt psychology provides an answer in part by emphasizing “the meaningful connexion” between the parts of a whole (1924b, p. 159).

These early endeavors put Gestalt psychology on the map in America, as its inclusion as one of six “psychologies” in *Psychologies of 1925* attests. Further, Koffka was a visiting professor at Cornell and Wisconsin in 1924–1925. While visiting, he gave lectures at Princeton, Smith, Harvard, Yale, Illinois, Chicago, Clark, Wellesley, Wells College, and the National Academy of Sciences (Harrower, 1983, pp. 263–270). He was back at Wisconsin in 1926–1927, and, after a bidding war in which his salary reached a figure higher than that of Boring at Harvard (Sokal, 1984, p. 1247), he was appointed to a research professorship at Smith in 1927. Köhler visited Clark University in 1925, and students began to flow back and forth between the US and Berlin.

How does the above-mentioned literature conform to Koffka’s description of the American strategy? It is true that these books and articles are all in what would be termed “scientific psychology,” connoting *natural scientific* psychology. They include criticisms of previous theory as regards the constancy hypothesis and atomic sensations; presentation of initial work in developmental psychology and comparative psychology; thorough discussions of perceptual organization; and methodological remarks about naïve experience over analytic introspection. “Meaning” comes up in the discussions of problem solving, mental development, and perceptual and cognitive organization. The discussion of meaning is supported by phenomenological observation: objects appear to perceivers to be meaningful; perceived meaning affects perceptual organization; functional meaning—what things are good for in relation to current needs and desires—is central to problem solving. The conflict between *Verstehen* psychology and natural scientific psychology is alluded to in Koffka (1924b). Echoes of the conflict over the role of meaning with both the older experimental psychology and the new American behaviorism are evident in Koffka’s talk of “common sense” explanation, which invokes mentalistic notions, by contrast with behaviorist descriptions of infant learning (Koffka, 1924a, pp. 117, 197; 1926a, p. 136). Hence, the focus is on organized wholes and their characteristics in opposition to atomism, but phenomenal meaning is discussed.

These general characterizations also apply to Köhler’s *Gestalt Psychology* (1929b), published in English before German (1933). However, in this 1929 book, Köhler actually writes in a *more* philosophical manner than in any article or book up to this time, including his 1913 theoretical manifesto and attack on atomism and the

more speculative remarks in his 1920 book on physical *Gestalten*. His methodological response to behaviorism is an instance of philosophical reflection on the concepts and methods of the special sciences. His discussion of the externalization of objects attempts directly to solve a philosophical problem; in an only slightly later article published in German (1929a), he claims that this problem is properly solved by psychology not philosophy. In the later chapters of the book (1929b), he addresses meaning as a characteristic of organized wholes more fully than he has to that time, and contrasts his account of insight with Hume’s analysis of experience.

Our procedure requires that we compare the themes and emphases from the early English-language presentations with the original Gestalt literature in German. In accordance with Koffka’s historical claim, we should compare the German presentation up to the introduction to America, focusing on the German literature prior to 1925.

In examining the initial presentation of Gestalt theory in Germany, we should distinguish early materials, published and unpublished, that provide historical information about the motivation and content of Gestalt theory, from the published works that formally introduced Gestalt psychology. The first group includes various materials from Wertheimer, who did not publish a general presentation of Gestalt principles until after Koffka had done so. This early material of Wertheimer’s includes letters and manuscript notes as well as published works on ethnomusicology and ethnopsychology, which merely hint at the philosophical motivation and scientific beginnings of Gestalt thinking in 1906–12 (King & Wertheimer, 2005, Chap. 4). The second group of material comprises the articles and books that set out Gestalt theory from 1912–25, and is our focus. These materials show that in the German context, as well, the initial published presentations of the theory emphasized “those aspects which had a direct bearing on science” (Koffka, 1935b, p. 18).

Wertheimer’s paper on apparent motion, in 1912, was the first publication of explicitly Gestalt ideas. Pregnant with implications for Gestalt theory, this paper established the famous “phi” phenomenon of “pure motion” experienced without a thing that moves. It also suggested that corresponding neural processes might explain the phenomenon. It was not a declaration of the Gestalt approach, although it was the beginning of its scientific basis. In 1913, Köhler published a paper criticizing the constancy hypothesis in contemporary sensory psychology (including Stumpf’s work on tones, Hillebrand and Schumann on vision). Its role was primarily negative: to reveal the weak theoretical basis for positing atomic sensations in standard perceptual theory. It hinted at another approach that would place emphasis on the “everyday perception of things” (W. Köhler., 1971 [1913], p. 137), and it cited Wertheimer’s work on apparent motion as suggesting a more plausible relation between nervous processes and perceptual experience. But it was not a presentation of the Gestalt program. Wertheimer, who had trouble publishing, in 1920 published a Gestalt critique of syllogistic logic as a description of genuine reasoning, which again was not a general declaration of Gestalt principles but which claimed to have implications for philosophy and especially logic, while failing to offer specifics (Ash, 1995, p. 194).

The general Gestalt program originally unfolds¹² in papers published by Koffka and his assistant F. Kenkel, from 1913 to 1915, on apparent motion and optical illusions (see Koffka, 1935b, pp. 693, 694). These papers introduced the notions of describing experience as it is rather than as theory dictates it should be and of intrinsically unified perceptual phenomena that cannot be reduced to constituent parts. Koffka then presented a scientific case for the Gestalt approach

¹² Gabriele, Countess von Wartensleben, a teacher who attended Wertheimer’s lectures in 1913 (Ash, 1995, pp. 123–124), in a 1914 book, listed the main features of Wertheimer’s program: (1) the contents of consciousness are not summations of elements but exhibit a structural “togetherness” as *Gestalten*; (2) experience is rarely a mass of chaotic elements but tends toward *Gestalten*; (3) the process of cognition involves a “springing forth” of *Gestalten*, yielding an “understandable” whole. Although suggestive, in their brevity and locus her statements do not constitute the formal introduction of Gestalt theory.

in two articles in *Die Naturwissenschaften* on “Problems in Experimental Psychology” (1917, 1919). The first covered the Stumpf transitivity problem and its Gestalt solution and discussed apparent motion and geometrical illusions. The second brought the Gestalt implications to the fore, emphasizing that unitary experiences require unitary physiological explanations. Koffka’s book extending Gestalt principles to developmental psychology appeared in German in 1921, and in 1922–23 he published several research papers on perceptual topics (see Koffka, 1935b, p. 694).

In the meantime, Köhler had undertaken his work on chimpanzee insight on the island of Tenerife. In 1917, he published his results in a German monograph. This work used Gestalt notions to describe the reconfiguring of the problem situation when one of the apes solved a problem by seeing its surroundings in a new way. While on Tenerife, Köhler wrote a fundamental theoretical work of Gestalt psychology, *Die physischen Gestalten* (1920). This work, which relies on Köhler’s training in physics and chemistry (Ash, 1995, pp. 112–113), purports to find Gestalt structures in the physical world, as properties of stationary fields in ionic electrolytic distributions and electrostatic field structures. Such fields exhibit the “whole is prior to the parts” structure that defines *Gestalten*; accordingly, Köhler presents his work as having significant philosophical implications across the natural sciences (and so, for the “philosophy of nature”). The final third of the book focuses on psychological topics and the principle of psychophysical isomorphism. This principle crystallized Wertheimer and Koffka’s suggestions about the physiological basis of Gestalt perceptual phenomena into a conception of organized brain processes. These physiological speculations used the character of experience to infer the character of those brain processes, and then invoked the inferred brain processes in causally explaining the experience (see also Köhler, 1924).

With its experimental and natural scientific foundations secured, Wertheimer offered synthetic overviews of Gestalt theory. In 1922 and 1923, he published two foundational articles in *Psychologische Forschung*. The first contrasts Gestalt holism with the mosaic of atomic sensations and attendant associationism and alludes to Gestalt wholes as meaningful. The second details the laws of perceptual organization in perceptual forms or *Gestalten*. The second article contains the familiar Gestalt laws, including proximity, similarity, common fate, objective set, closure, and “good curve” (or good continuation). Koffka (1922) published a synthetic article in English (reviewed above). Köhler did not produce a synthetic overview until his contribution to *Psychologies of 1925*.

In a 1924 lecture, published in 1925, Wertheimer attempted to situate Gestalt theory more generally in its relation to the role of science. He spoke of the disappointment one feels in turning to science, and specifically to psychology, in order to gain a deeper understanding of human experience, only to find that central portions of human experience—he gives insight as an example—are excluded from consideration, allegedly because science is unable to study them. He enjoined that science has previously been fixated on analysis into parts, thereby leaving aside, in psychology, the most fundamental objects: the *Gestalten* that constitute experience. This article did place Gestalt psychology in a larger philosophical context. But the contrast with speculative philosophy and *Verstehen* psychology is again only indirect. The article claims that a natural scientific Gestalt psychology can encompass higher cognitive processes and psychological phenomena, making mind itself an object of scientific investigation.

Also in 1925 (pp. 503–505), Koffka, produced a synthetic overview of Gestalt psychology which mentioned meaning and

the distinction between “explaining” and “understanding” psychology. While leaving ultimate evaluation of this distinction to *Erkenntnistheorie* (i.e., to philosophy not psychology), he contended that criticisms of association psychology by Franz Brentano, Stumpf, Külpe, and others entailed that psychology could not accept the implication of this distinction, that psychological explanation must avoid meaningful “understanding” of behavior or consciousness (p. 504). He also alluded to Hume as a forerunner of sensory atomism (p. 511).

Koffka (1925) is the last of the German-language synthetic pieces up to 1925, and was published only after the initial introduction of Gestalt psychology into America was proceeding apace. In the same year, Köhler presented his work on insight to an American audience in a lecture at Clark University (Köhler, 1926b) and his *Mentality of Apes* appeared in translation (1925). Wertheimer’s 1925 appeal to insight as an example of a natural scientific approach to meaning, along with Koffka’s brief discussion (in German) of explanation and understanding in 1925, may be what Koffka (1935b, p. 18) had in mind in describing contrasting strategies for Germany and America. But given that these works come after the introduction of Gestalt psychology to both Germany and America was well underway, they do not mark a difference in the initial strategies for presenting Gestalt psychology to the two audiences. At best, they show that Wertheimer and Koffka invoked the wider philosophical motivations to both their German and American audiences only after the scientific case had been presented.

From these comparisons, I conclude that Koffka’s description is not borne out by the published literature. In Germany and the US, the Gestalt psychologists presented their new program to the scientific public in a manner that first emphasized “those aspects which had a direct bearing on science,” that is, their brief against atomism, the phenomenal unity of *Gestalten* as meaningful wholes, and psychophysical isomorphism. Only much later, in the 1930s, did they publish explicitly philosophical works on questions of meaning and significance, and these typically were written to bring out philosophical implications of a scientific theory, Gestalt theory.

5. Dimensions of philosophy in Gestalt theory

I do not therefore conclude that Koffka’s statement is baseless. It no doubt reflects his experience with the German situation in the fifteen years from 1912 to 1927. These experiences would include his interactions with Wertheimer, who personally espoused this broader philosophical agenda, and also the conflicts between philosophers and psychologists during this period.

In 1912, a signal event occurred that could explain Koffka’s perception of the struggle between natural scientific psychology and the collocated forces of *Verstehen* psychology and speculative philosophy and psychology on the German scene. In that year, Marburg was seeking to replace Hermann Cohen’s appointment in philosophy. Recall that, at this time, psychologists of all stripes, whether natural scientific or philosophical, nearly always received chairs of philosophy, even if heading a psychological institute. When a move was made to replace Cohen, a neo-Kantian philosopher, with the experimental psychologist Jaensch, the philosophers did not take kindly. A group of leading philosophers, including neo-Kantians and the phenomenologist Husserl,¹³ circulated a petition against appointing any more experimental psychologists to philosophy chairs (Ash, 1995, p. 47).

Great machinations followed, which cannot have failed to impress Koffka, Köhler, and Wertheimer, each of whom was seeking a stable professional situation. As it happens, all three moved

¹³ In 1911, Husserl indicated distaste for appointing experimental psychologists to positions that might be filled by philosophers (1965a, p. 120, note g).

forward in their careers on the strength of their work in psychology. Wertheimer had the most trouble achieving a suitable position. During the war, he transferred his teaching rights from Frankfurt to Berlin, and he subsequently received an unsalaried associate professorship. In the early 1920s, he was suggested for but not appointed to positions in philosophy at Kiel and Cologne (Ash, 1995, p. 214), apparently because he was not strong enough in philosophy proper. In 1928, he was offered but declined a position at Giessen replacing Koffka as head of the psychological institute in the natural-science division of the philosophy faculty. In 1929, he was finally appointed at Frankfurt as co-leader of both the psychological institute (natural science faculty) and the philosophical seminar (philosophy faculty) (Ash, 1995, pp. 212–215).

In sec. 2, we found that, by 1900, psychology was well established institutionally and as an intellectual practice in major German universities. After that date, the founding of psychological institutes and philosophical seminars evens out, but the appointment of psychology professors (and assistants) becomes more common, especially after 1920 (*Minerva*, 1907–1926). Beyond Frankfurt and Giessen, the psychological institutes at Göttingen and Jena were (in the 1920s) located in the natural sciences faculty (Titze, 1995, pp. 225, 327). Of course, attempts prior to the War to replace philosophers with experimental psychologists raised the hackles of the philosophers.¹⁴ Some older psychologists, including Wundt and Stumpf, were recognized in both fields. Others, such as Ebbinghaus (1908, pp. 23–24), marked their science as a distinct, experimental psychology. In this connection, Wertheimer may have wanted to be acknowledged in philosophy as well as psychology. Köhler (1920; 1929, chs. 1–2) and Koffka (1925, p. 497; 1935b; Harrower-Erickson, 1942) identified themselves as experimental psychologists.

Be that as it may, when Köhler presented his work to an American audience, as in his 1929 book, he did change strategy somewhat. His critical target widened. In their German writings, Köhler and Koffka took aim primarily at the constancy hypothesis and the positing of atomic sensations. In his 1929 book, Köhler retained this target, joined to the method of analytic introspection. He added a new target: behaviorism. Although he and Koffka had taken occasional swipes at behaviorism before, Köhler now opened his volume with an extended critique. This polemical material is “philosophical” in its own way: not in solving traditional philosophical problems or evaluating traditional positions, but by marshaling methodological and conceptual arguments to establish a theoretical point of view. Such “philosophical” writing is not restricted to professional philosophers, but is found in the writings of many scientists (and humanists as well) when they are defending new points of view or criticizing established positions from a theoretical rather than a strictly empirical stance (as in Köhler’s 1920 discussions of physical *Gestalten*).

These portions of Köhler’s 1929 book are precisely those that E. G. Boring—who had an on-again off-again relationship with Gestalt psychology—singled out for criticism in a 1930 article. Boring

distinguished between “Gestalt psychology” and the “Gestalt movement.” The former had interesting things to say about perception and behavior. The latter was mainly critical and negative, attacking its foes. The discussions of behaviorism and introspection were in support of the “movement.” Boring characterized this discussion as vague and wondered whom it might actually describe. For introspection, he mentioned his teacher Titchener up to 1910, but observed that Titchener had become more “whole” oriented and phenomenological about 1915. He was unsure which behaviorist actually fit Köhler’s bill. I believe that Boring found this writing vague and unfocused because it couched its criticisms at an abstract, conceptual level. It was philosophical in style. Perhaps here is part of the contrast that Koffka sensed between Germany and America: the American psychologists had less taste for theory. Not for high philosophical theory, such as a critique of phenomenological psychology or *Verstehen* psychology might require (they perhaps had no taste for that at all), but for abstract, conceptual, theoretical argumentation *per se*, even regarding the methods and conceptual foundations of experimental psychology.¹⁵

These remarks raise the more general question of in what sense Gestalt psychological writings are philosophical or engage philosophy. They are so and do so in several ways. I find six dimensions of description for capturing philosophical aspects and implications of Gestalt psychology. In examining these dimensions, I distinguish intending to produce work in philosophy from arguing in a philosophical manner, that is, using abstract, conceptual argumentation. I distinguish both of these from believing that one’s science has philosophical implications (and from having stated or unstated philosophical assumptions). The Gestaltists often argued philosophically and they believed that their science had philosophical implications. When, in later years (1934 and after) they sought to produce work that might count as philosophy proper (e.g., Koffka, 1935a; Köhler, 1938), they began from scientific results and drew out philosophical implications.

The philosophical aspects in my six dimensions are primarily instances of arguing explicitly for abstract, conceptual points concerning the aims, methods, entities, and style of explanation in psychology, that is, of applying philosophical modes of arguing to points about psychology as a science. But some points touch on explicitly philosophical topics, the mind–body relation and the theory of meaning, which would count as instances of engaging specifically philosophical subject matter.

1. Aim of science. The Gestaltists believed that traditional experimental psychology was too positivistic (Koffka, 1935b, pp. 18, 684). It focused on the collection of facts and allowed the seeming requisites of its methods to exclude higher cognition, meaning, value, and significance from scientific consideration. By contrast, they would bring those aspects of human experience within the ambit of natural science. Their criticism of traditional experimental psychology may be unfair to Wundt. It is less so if part of their point is that Wundt’s *Völkerpsychologie* is not natural scientific but *geisteswissenschaftlich*.

¹⁴ It is odd to find Ash (1995, pp. 42–43), quoted above on the rapid increase of experimental psychologists appointed to philosophy chairs, characterizing writings of Rickert and Windelband in which they enforce a distinction between philosophy proper and natural scientific psychology as denigrating to psychology by not recognizing it as a proper branch of philosophy. Indeed, Ash (1995, p. 18) recognized that “philosophy proper” long had had a well-established identity in teaching and exams (for nineteenth-century usage distinguishing philosophy proper from natural science, e.g., Lenz, 1910–1918, v. 4, pp. 75, 200). In the case of Windelband (1909, p. 92), who complains that philosophy chairs were being handed to instrument driven (key pressing) experimentalists, his remarks were appropriate to the context of their delivery in Frankfurt in 1908, where he had taught philosophy as a visitor in 1904–1905 at the newly founded Academy of Social and Commercial Sciences. In 1904, the Academy appointed the experimentalist Marbe to a philosophy position funded by the *Jügel-Stiftung*, which was to support “history, philosophy, and German language and literature” (Wachsmuth, 1929, pp. 28, 50). Frankfurt was soon appointing in “psychology” and in 1914 the psychological institute became part of the natural science faculty of the new university. Ash writes as if experimental psychology might have been accepted into philosophy proper, except for historically contingent political machinations (and in spite of psychologists’ self-pronouncements of distinctness) (also Ash, 1980; Kusch, 1995).

¹⁵ Paradoxically, American psychology from 1930 to 1960, when “operationism” and “neobehaviorism” dominated, has been dubbed the “Age of Theory” (Hilgard, 1987, p. 782). The theory in question was behaviorist learning theory, and it became the subject of philosophical reflections on the notion of theory itself (e.g., Marx, 1951). These reflections were formal in character and anti-metaphysical. They appear antiseptic by contrast with Köhler’s (1929, 1938) and Koffka’s (1935a, 1935b) discussions. For another instance of the American bias against theoretical “systems” (as opposed to local theory), see Woodworth (1938), p. v. By the later 1920s, psychologists may have tired of intense theoretical discussions, which included philosophers, such as surrounded Watson’s behaviorist pronouncements (see Hatfield, 2003a).

2. Methods in psychology. The Gestaltists joined other anti-atomists in emphasizing that ordinary experience does not present itself as a collection of atomic sensations. The other anti-atomists included E. Hering, Mach, James, von Ehrenfels, and Stumpf (phenomenally); the Gestalt psychologists claimed that none of these others had actually introduced properly integrated *Gestalten* into their descriptions (e.g., Koffka, 1925, pp. 498, 521; 1935b, pp. 62–63; Köhler, 1929a, 1929b, pp. 61–63, 187–193, 369). The method of describing phenomenological experience as we have it bears a relation to the phenomenological methods of Brentano and Husserl. However, notwithstanding some friendly mentions of Husserl in Köhler's *Place of Value*, Gestalt phenomenology differed from philosophical phenomenology.¹⁶ Specifically, it did not engage in the “bracketing” of beliefs about the reality of the external world. The Gestaltists were realists, and they saw their configured wholes in perception as capturing real entities in the world.

3. Fundamental entities. Traditional experimental psychologists, including Wundt and even Stumpf, posited elemental, atomic sensations as fundamental entities in the psychology of sense perception and perhaps in other domains as well. There were various attempts to supplement these entities or to alter their character. Mach ascribed spatiality to his psychical elements. Von Ehrenfels added Gestalt qualities to the atomic sensations (Ash, 1995, pp. 88–90). The Gestalt psychologists took the radical step of maintaining that organized wholes are the fundamental entities. Part-sensations are not the basis for organized wholes in any way, but are themselves created out of the organized wholes by processes of abstraction or special attentional attitudes. Late in the presentation of Gestalt theory, Koffka (1925, p. 511; 1935a, pp. 289–290) briefly connected this criticism to Humean sensory atomism (and the constancy thesis).

4. Explanation in psychology. The Gestaltists saw two opponents here. First, the “standard” experimental psychologist's explanations in terms of atomic sensations and laws for combining them. These explanations had the effect, especially in Titchener's hands (e.g., 1909, pp. 25–34), of excluding meaning from the elemental sensations. Wundt included meaning in his apperceptive theory and in his *Völkerpsychologie*, but his opponents often neglected that fact, and the Gestaltists most likely ascribed the latter portion of Wundt's work to the *Geisteswissenschaften*. The Gestaltists countered the atomizing explanatory trends with appeals to organization, field structures, and Gestalt physiological processes. Their published work in both German and English emphasized this conflict. A second sort of opposition came from phenomenological psychology and from *Verstehen* psychology, each of which claimed that natural science couldn't effectively account for ordinary experience and its meanings. From 1924 and after, Wertheimer, Köhler, and Koffka replied by affirming that science can handle higher cognition, value, significance, and meaning.

5. Mind–body relation. The mind–body problem diverged into two streams of discussion in the late nineteenth century (Hatfield, 2010). The first stream continued the traditional discussion of the substantial nature of mind and its relation to matter (e.g., substance dualism, dual-aspect monism). Most psychologists, including Wundt, James, and the Gestaltists, did not engage or try to solve the problem in these terms. A second stream concerned the relation between physiological processes and conscious experience. Many psychologists, including Wundt, James, and the Gestaltists, engaged this question of relating results from two sciences: physiology and psychology. In this context, Wundt (1862, 1874) espoused the constancy thesis for sense perception. Within his

psychology (as opposed to his metaphysics), James posited an empirical parallelism (1890, v. 1, p. 182), and looked for complex neural structures and processes as counterparts to conscious mentation. The Gestaltists posited the relation of isomorphism.

6. Theory of meaning. Philosophers since Kant had proposed various analyses of the structure of thought, focusing on the relations between perception and conception. After the turn of the century, such discussion occurred under the banner of offering a “theory of meaning.” The Gestaltists contended that meaning could be studied, but they did not offer a theory of meaning. At most, they revealed the presence of meaning in experience and charted its effects on perceptual organization. In his most extensive treatment of the problem of meaning, Köhler (1938) took the example of “requiredness.” The main philosophical suggestion in this work was that requiredness might also be found in inorganic nature, in field structures. This amounted to an analogy that he did not develop further into a theory (see also Koffka, 1935a).

The Gestaltists engaged in theoretical reflection that was philosophical in its mode of reasoning. Such theoretical explicitness can be found scattered through the sciences. They did not seek to articulate properly philosophical theories, or to resolve fundamental philosophical issues through scientific advance (save perhaps for Köhler's 1929 remarks about the problem of the external world). They did claim that their scientific results had philosophical implications, which they articulated now and again.

6. Achievements and legacy of Gestalt psychology

Another way of assessing the Gestaltists' response to the “crisis” of meaning is to ask what they actually achieved with respect to integrating meaning, value, and significance into psychological science. Did they show that science can handle meaning? Did they provide a new understanding of the role of meaning in experience?

There are two ways to address these questions: (1) by a direct assessment of their achievements through an evaluation of their arguments and conclusions, and (2) by considering the judgment of history as embodied in the reception of Gestalt theory by subsequent psychology and philosophy.

By the first measure, I believe that the Gestaltists' strongest positive achievements come in their observations and descriptions of perceptual organization. Their critical discussions of sensory atomism, behaviorism, and analytic introspection and their endorsement of a psychological phenomenological method also have merit. As regards meaning, their primary achievements concern the phenomenology of meaning: the ways in which meaning and significance interact with perceptual organization, and the description of insight in organizational terms. They did not advance a theory of meaning. Nor were they unique in applying scientific methods to meaning: James and Wundt also had done so, to name only two. The Gestaltists showed that meaning can be brought into natural scientific descriptions of perceptual phenomena and seen as a causal factor in influencing perceptual organization or in acts of insight. But they did not explain meaning or render its action intelligible in terms of causal processes. Their attempts to do so ended in appeals to isomorphism and brain processes as the ultimate modes of explanation, while in fact the character of these processes had been inferred from the phenomenal properties of direct experience (Epstein & Hatfield, 1994).

As to reception, the primary legacy of Köhler and Koffka lies in the laws of perceptual organization (perhaps first formulated by Wertheimer). These observations and descriptions have entered

¹⁶ Koffka (1935a, p. 294) criticizes Husserl for denying that his discussion of intention and object amounts to a psychological theory. Husserl himself had little patience with the new *Ganzheitspsychologie*, which laid the entire blame for the failure of scientific psychology to get to true fundamentals on the atomism of early experimental psychology (Husserl 1965a, p. 188); according to Husserl (1965a, 1965b), no purely naturalistic psychology could arrive at proper scientific foundations for either philosophy or psychology. On the differences between the Gestaltists' phenomenology and philosophical phenomenology, see Gurwitsch (1964), pp. 163, 168.

the mainstream of the psychology of perception and are found in nearly every textbook. Secondly, their phenomenological method had some influence, though not as much as was warranted.

Koffka's discussion of a savvy strategy for introducing Gestalt theory captures an important fact. Despite its historical inaccuracy as a description of the writings by which Gestalt psychology was first presented in Germany and America, his comparison captures differences in the trans-oceanic intellectual climates to which Gestalt psychology had to adapt. American psychology was, overall, less open to abstract, conceptual argumentation than was German psychology. In that sense, it was more positivistic than German psychology, though not exclusively so, and perhaps less so after the Gestaltists became American professors and established their spheres of influence. In any event, in both climates the Gestaltists rested their initial case on the scientific merits of their position by contrast with the deficiencies of the then-current theories, which they diagnosed in great detail. They left their loftier aspirations regarding meaning, value, and significance in the background. It's just as well. By doing so, they managed to lead with their strength.

We can also ask whether the Gestalt psychologists identified and responded to a scientific crisis in psychology proper, which they resolved through their notions of direct experience and perceptual organization. The Gestaltists believed that the extant psychology ca. 1900 had deep problems in both the method of analytic introspection and the theory of atomic mental elements. They did not retrospectively apply crisis-talk to this problem, despite the fact that authors ca. 1900 had done so. For them, the "crisis" involved meaning, value, and significance. But they diagnosed this crisis as arising in psychology because of its atomistic approach to mental life. Hence, they identified the atomism of early experimental psychology as a fundamental error within scientific psychology. Did they therefore identify but not name another crisis in psychology besides that of meaning, that is, a fundamental crisis of method and theory?

They certainly believed that they had identified problems so fundamental that, were their diagnosis correct and had their solution been directly adopted, we might now speak of the "Gestalt revolution" in psychology.¹⁷ But as it happens, their diagnosis was only partially accepted and their solutions only partly adopted. And that seems consonant with their achievement. They did reveal fundamental problems in previous method and theory, and they contributed new methods and new theories. But they were not exclusive in doing so. The behaviorists also advanced fundamental methodological and theoretical criticisms, which were influential for a while. Other perceptual theorists criticized atomic elements and analytic introspection, including Hering, Mach, and James. American functionalism, stemming from James and Dewey, provided a background for behaviorism but it also continued to fuel and to influence nonbehavioristic approaches in physiological, comparative, and even perceptual psychology (Hatfield, 2003a). Taking a long view that extends into the 1950s and 1960s, the new directions that ultimately arose in psychology were a combination of these factors and more (Hatfield, 2002). Gestalt psychology played a role throughout, but was not predominant.

In retrospect, although not uniquely identifying and solving a crisis within scientific psychology, the Gestalt psychologists' critiques and proposals did influence the subsequent direction of psychology. They identified and addressed fundamental problems within scientific psychology while contributing empirical results and theoretical ideas that remain influential.

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¹⁷ Taking "revolution" in Kuhn's original sense, to indicate the formation of a unified disciplinary matrix through an exemplary achievement (the isolation of "wholes" or *Gestalten* as fundamental). In Kuhn's revised view (cited in a previous note), one might speak of a mini Gestalt revolution and of a Gestalt paradigm shift (as one of many competing paradigms in the period 1910–1940).

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