The Role of Developmental Concepts in the History of Gestalt Theory: The Work of Kurt Koffka

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Conventional accounts of the history of psychology draw a straight line running from Darwinian evolutionary theory via functionalism to behaviorism and learning theory. They thus suggest, at least implicitly, that empiricist epistemology, evolutionary theory, and the progress of psychology are inextricably intertwined. However, developments such as the broad reception of the work of Piaget, Lorenz, and others have helped scholars realize that maturational lines of thought have also been compatible with both evolutionary theory and the progress of psychology. The purpose of this paper is to indicate the various roots of one maturatonal conception of psychological development, that of Gestalt theory. For reasons of space, the treatment will be limited primarily to the early work of the Gestalt theorist who addressed himself directly to the problem of development, Kurt Koffka, and to his single systematic work on the subject, "The Foundation of Psychical Development" (Die Grundlagen der psychischen Entwicklung), known in English as The Growth of the Mind. As I will try to show, Koffka did more than merely apply an already complete entity called Gestalt theory to an as yet nonexistent specialty called "developmental psychology." Rather, he attempted to synthesize concepts from other sources in addition to Gestalt theory into a consistent theory of psychical development. I will concentrate upon two of these sources in addition to Gestalt theory itself: (1) the "developmental history" proposed by the Frankfurt neuroanatomist Ludwig Edinger; and (2) the conception of "primitive mentality" presented by the Paris philosopher Lucien Lévy-Bruhl. After presenting the roots, the essential thrust and Koffka's initial reception of each of these conceptions, I will describe the uses Koffka made of them in his work.

The concept of developmental history

In contrast to the situation in the Anglo-Saxon world, in Germanspeaking lands the problem of growth and form was an important focus

At this time Koffka was obviously more interested in the implications of Edinger's model for the "psychology of consciousness" than in its significance as a theory of development. Koffka's continued allegiance to conscious experience as the subject matter of psychology, at a time when comparative psychology was gaining adherents, is doubtlessly interesting. Perhaps more important, however, was the fact that Koffka offered no substitute of Edinger's associationistic conception of "gnosis" and the other "new brain" operations. This is surprising; for his critique was submitted to the Zeitschrift für Psychologie one month after Max Wertheimer offered his famous paper on motion perception to the same journal, and was printed immediately following that paper in the same issue. Instead, Koffka concluded his review by reminding psychologists that behind the apparent inconstancy of consciousness "a machine operates uninterruptedly," with effects that become evident only later (Koffka 1912: 278). Clearly, Koffka still equated physiological with mechanical processes. As we shall see, he did not continue to hold these views for long.

The concept of "primitive" mentality

Koffka had pointed out that Edinger's model of "developmental history" had no place in it for reflected experience. It also failed to apply evolutionary theory to culture or society. By 1914, Koffka had apparently found such a principle in the work of Lucien Lévy-Bruhl. That work reflected the growing realization in France that neither positivism nor neo-Kantianism could offer a sufficient basis for an empirically adequate social theory. The school around Émile Durkheim turned this realization into the foundation of a new "moral science;" Lévy-Bruhl attempted the required conceptual reform within the accepted disciplinary framework.

Against the widely held view that "primitive" thought was merely an inadequate copy of Western thinking, Lévy-Bruhl maintained that the consciousness of the simplest societies that we know is fundamentally different from our own, because it is determined by the group, not the individual thinker. The core of this argument is the concept of "collective representations" (représentations collectives), explicated most fully in Lévy-Bruhl's book, "Les fonctions mentales dans les sociétés inférieures, known in English as The Mind of Primitive Man (Lévy-Bruhl 1912). The term has often been mistranslated into German as kollektive

Vorstellungen and into English as "collective ideas." Such translations cover only half of Lévy-Bruhl's meaning. The "representations" are "collective," but they are not, or not only, ideas. According to Lévy-Bruhl, rigid distinctions between intellect and affect, the individual and the group, man and nature, or even the living and the dead do not exist in primitive consciousness. While the men of the village hunt, for example, the women at home perform rituals required to assure the hunt's success. However, they do this not in order to help the men in any Western sense of that word, but because the social rite would be incomplete, thus unsuccessful, if carried out by the men alone. To account for the ontological coherence of this world, Lévy-Bruhl invoked what he called the "law of participation." The existence of such complex unities, he maintained, cannot be explained by claiming, as ethnologists often did, that primitive peoples animistically project themselves or features of themselves onto the environment. Reality is more "full" in primitive consciousness, because abstraction hardly exists.

Even this sketch should make it clear that Lévy-Bruhl's intentions were primarily philosophical, not sociological or ethnological. He drew his picture of "primitive" mentality so starkly in order to impress his Western readers with its radical otherness. For this implicit critique of Enlightenment universalism he was duly criticized by Durkheim and others (Vogt 1976). However, he did not apply the concept to all primitive cultures in the same way: he presented it as what Max Weber would soon call an ideal type, thus implying the possibility of variations within it. Nor did he draw a continuous, evolutionary line between "primitive" and abstractly thinking, "civilized" man. However, by calling the thinking of primitive societies "prelogical," and by giving examples of societies located, conceptually at least, between the most primitive and our own, he made the idea of an evolutionary sequence plausible (Cazeneuve 1973).

In 1914 Koffka reviewed Lévy-Bruhl's work in the first and only number of the Zeitschrift für Religionspsychologie (Journal of the Psychology of Religion), which he founded with Wilhelm Stählin, a pastor who had been a subject in experiments Koffka conducted in Würzburg five years before. The review itself was little more than a thorough and sympathetic summary of the book just mentioned. But in their introduction to the new journal, Koffka and Stählin brought out the evolutionary implications of Lévy-Bruhl's thinking, and related it to current disputes in Germany. The psychology of religion, they wrote, must be rooted not in theological propositions or in speculations about

the "essence" of religion, but in "biological" and historical research (Koffka and Stählin 1914: 2). This was a bold position to take, especially for a minister of the established church in Prussia. Specifying the sort of "biological" thinking they meant, they then alluded to the "original lack of differentiation" of human thought. If this is so, they argued, then it is false to speak of "primitive religion," since the true beginning of religion is the separation of the sacred and the profane, something that would not occur to the mind of primitive man. Thus both Lévy-Bruhl's research and "the progress of psychology" showed that "everywhere the parts were not present before the whole—that therefore psychical like all biological development does not proceed along the road of combination, but rather that of differentiation" (Koffka and Stählin 1914:6).

With this argument, Koffka and Stählin had apparently taken a Spencerian view of cultural evolution; for it was Spencer who wrote that all development proceeds "from an undifferentiated, incoherent homogeneity to a more differentiated, coherent heterogeneity" (Spencer 1867: 369). With respect to the general direction of development their position was indeed Spencerian. For Koffka and Stählin, as for Lévy-Bruhl, however, the original state from which development proceeds may be "undifferentiated;" but it is "incoherent" only from a Western point of view. The reason at least for Koffka's acceptance of that position will become blear only after an exposition of what he and Stählin meant by "the progress of psychology."

Gestalt theory

Koffka and Stählin did not say precisely what they meant when they invoked "the progress of psychology" to support their position. Judging by the date, however, it seems clear that they were talking about Gestalt theory, fundamental principles of which had been presented by Max Wertheimer in 1912. Most relevant to the problem of development was not Wertheimer's famous paper on apparent movement, but another article entitled "On the Thinking of Primitive Peoples I: Numbers and Number Concepts" (Wertheimer 1912a). There Wertheimer took a methodological position similar to that for which Koffka and Stählin had cited Lévy-Bruhl: "It is insufficient to ask what numbers and operations of our mathematics the peoples of other cultures have. The question must be: what units of thought do they have in this field? What

tasks for thinking? How does their thinking approach them?" (Wertheimer 1912a: 323).

Given this approach, it was not surprising that Wertheimer soon discovered number concepts different from those of Western arithmetic. Examples of the difference could be very simple: one horse plus one horse equals two horses; one person plus one person equals two people; but one horse plus one person may equal a rider. However, as Wertheimer pointed out, the difference was not always a matter of applying arithmetic in different ways. A builder goes to find pieces of wood for a house. "One can count them. Or, one can go with an image of a house in one's head and get the pieces of wood that are needed. One has a group image (Gruppengebilde) of the posts, which is quite concretely related to the form of the house" (1912a: 324-325). Wertheimer claimed that this kind of concrete, functional thinking, characterized by "the preponderance of form," often determines the handling of quantities, not only for so-called "primitives," but for "naturally thinking people" in "civilized" society as well.

With this claim Wertheimer made it clear that he was not taking a strong relativist position, as Lévy-Bruhl had done. Instead he was searching for phenomena that could become the basis for general laws of thought, thus preserving a commitment to Enlightenment universalism while opposing one of its central tenets—the primacy of abstract thought. Though he was ostensibly writing only about number concepts, not about "primitive" thinking in general, his long-range intentions were just as ambitious as Lévy-Bruhl's. Immediately after the example of "the preponderance of form" just cited, Wertheimer offered another: "a somewhat blunted triangle is a triangle, not a rectangle or a hexagon, as it would have to be called from a merely mathematical point of view" (Wertheimer 1912a: 326). There is nothing concretely functional about a figure drawn on a piece of paper, and Wertheimer did not claim that we perceive the triangle in this way because we have learned to do so, or because it is in our biological interest. The blunted triangle is a triangle—that is, it is immanent in the phenomenon that it is perceived in this way. In such observations Wertheimer expounded a new epistemology, a form of psychological realism which I have elsewhere called "immanent structuralism" (Ash 1982). His implicit message was that true philosophy must be based on this particular conception of lived reality. Given that message, it is understandable that Wertheimer did not construct an evolutionary sequence from "primitive" to abstract thinking.

In his paper on apparent movement, published only a few months later. Wertheimer presented what he took to be experimental confirmation of his viewpoint and hypothesized the existence of neurological "short circuits," or structured brain events corresponding to perceived movement-structures (Wertheimer 1912b). In 1915 Koffka carried these claims still further, articulating the principles of Gestalt theory as a unified system. Perception, action, and the psychiological processes underlying both, he maintained, are all structured in the same way; and all are united in a total, structured experience which is in turn part of the organism's interaction with real objects in the external world (Koffka 1915: esp. 57 ff.). This conception of experience—particularly Koffka's emphasis upon organism-environment interaction, his designation of the stimulus as a real object (not, e.g. a pattern on the retina) and his extension of the Gestalt principle to action-was reminiscent of American functionalist psychology; and he cited Dewey's Essays in

Experimental Logic (1916) directly.

There was, however, one important difference. Dewey treated psychology as "the natural history of thought;" its purpose for him was "to locate the particular situation in which each structure [of thought and behavior has its origin," and to trace "the successive modifications through which, in its response to changing media, it has reached its present conformation" (Dewey 1916: 93, 95). Wertheimer had suggested such a perspective in his distinction between "natural" and arithmetical number concepts. But he had given no indication that he thought of the movement from one to the other as an evolutionary sequence. For Koffka, too, evolutionary history was apparently less significant thant epistemology. In his 1915 paper he cited Edinger's neuroanatomical work only as a source of examples for the universal presence of "Gestalt stimuli." As if to underscore the point, the behavior he chose was that of the snapping fish described above, an "old brain" rather than a "new brain" creature. The implication for any general theory of development was clear, though Koffka did not state it explicitly in 1915. "Elementary" sensations are neither psychologically nor historically primary. Edinger's mechanistic model of behavioral evolution could be retained only by reformulating its epistemological underpinnings on the basis of Wertheimer's Gestalt theory.

Wolfgang Köhler proposed just such a reformulation at the end of his study of so-called "structural functions" in anthropoid apes and chickens. The central finding of that study was that both higher and lower animals on the evolutionary scale were capable of perceiving and learning relationships. Such findings, and Edinger's observations that even frogs and lizards react to structured stimuli, showed, in Köhler's opinion, that "only a portion, and hardly the essential portion of the reactions of even the lowest organisms can be understood as mere juxtapositions and sucessions of absolute stimulus influence in isolation." It followed that models of "developmental history" based on sensationalist or empiricist epistemology were "worthless" (Köhler 1918: 37-38). He made it clear, however, that he did not wish to dismiss either evolutionary theory or the idea of "developmental history," but to reconstruct the latter on a new basis.

In his philosophical masterwork, Köhler then provided that new basis. Even the physical world, he claimed, contains articulated physical systems, the behavior of which cannot be explained as summations of isolated events (Köhler 1920). If such systems exist in the external world, there was no reason to deny their existence in the brain. Köhler went on to suggest that "the osmatic field could just as well be one physical system," and to postulate an "objective similarity between the Gestalt characteristics of psychophysical events and those of the phenomenal field—not only in general, in the sense that we are dealing with Gestalten in both cases, but in the specific character of every Gestalt in each individual case" (1918: 176-177, 192-193; emphasis in the original). Köhler did not draw out the implications of this claim for general biology until the mid-1920s. But it was already clear enough to readers like Koffka in 1921 that if Köhler's claim were correct, "the opposition of mechanism and vitalism has been overcome" (Koffka 1921: 414).

Here again, this time more explicitly, we have what we might call the primacy of epistemology, or even of ontology, over evolution. Köhler continued to make the same point throughout his life-for Gestalt theory, the issue is not the acceptance or rejection of evolution, but what it is that evolves (Köhler 1971). Perhaps now we can begin to understand why Koffka, when he was asked to write a summary of Gestalt theory that could be useful to teachers, titled the result not "principles of developmental psychology" but "the foundations of psychical development." It is to his exposition of these foundations that we now turn.

Koffka's synthesis: a Gestalt theory of development

By 1914, Koffka had been confronted with Edinger's preformationist

model of the evolution of behavior and Lévy-Bruhl's conception of the radical otherness of "primitive" thinking, with its implications for a theory of cultural evolution. Shortly thereafter, he had assisted in the emergence of Gestalt theory. In *The Growth of the Mind*, he then attempted to weave these strands together with a wealth of observations from the work of many others into a coherent general theory of psychical development. In order to understand and assess this attempt,

we will begin with his treatment of Edinger's model.

Koffka called Edinger's model of "developmental history," in particular the distinction between "old brain" and "new brain" functions, "a valuable heuristic principle" (Koffka 1925: 55). Most significant to him was the fact, also emphasized by Edinger, that the human cerebral cortex continues to develop after birth. Evidence about the perception of motion in infants indicated, for example, that this is "a performance which improves during the course of life," largely due to growth in the optic sector. If this is the case, then "it is not 'experience' which accounts for the gradual increase ... but, evidently, a physiological alteration of the organ which . . . we have called maturation" 1925: 64). When Koffka extended the point to development in general, however, he added an important twist: "We must think of development in terms of a process of maturation, in the course of which certain regions of the nervous system attain the capacity of forming fixed configurations which at first they do not possess; this process of maturation being dependent upon functional employment" of the organ in question (1925: 285; emphasis mine).

To put it briefly: for Koffka, development is only partly the realization of preformed anatomical potential; it is maturation aided by practice.

The introduction of functionalistic thinking meant that Koffka could treat learning, too, as "essentially a type of development" (1925: 51; 38–39). It was at this level that he differed most clearly with Edinger; for he had come "to a quite different conclusion as to the nature of these ["new brain"] activities" and of the brain functions underlying them (1925: 55). Wolfgang Köhler's demonstration of "insight" in anthropoid apes had shown, he maintained, that learning is not, or not only, the gradual assemblage of associative connections; it can also occur in a single, "nonheritable achievement" (1925: 152). But even such achievements have roots. Just as perception and action become, with practice, "an integrated sensory-motor process . . . an interconnected system . . . uniting phenomena and movements in one total form of behavior" (1925: 146–148), so too in learning "the total situation

As early as 1913, Max Wertheimer had presented, in lectures, a conception of "the epistemological process" as "a process of 'centering', of 'structuring', or of grasping that particular aspect which provides the key to an orderly whole, a unification of the particular individual parts that happen to be present" (cited in von Wartensleben 1914: 1–2; cf. Michael Wertheimer 1980: 14, and Ash 1982: 302). Evidently Koffka had adapted Wertheimer's conception of the "knowledge process" to cover the structure of all behavior, both instinctive and intended. He did the same for the relationship of learning to maturation. Just as the functional employment of an organ aids the maturation of the behavior of that organ, so "the maturation of a performance improves with practice" (1925: 151); and "practice means the formations of a figure, rather than the strengthening of bonds of connection" (1925: 234).

Koffka could confidently extend such metaphors so far, because he had accepted Köhler's philosophy of nature. This was most obvious in his discussion of instinct. Citing Köhler's discussion of the second law of thermodynamics at the end of Die physischen Gestalten, he asserted that there are events in the physical world which "shape themselves," as it were toward a very definite end, that of the simplest organization consistent with the given conditions. Goal-directedness is thus not confined to living matter. If we seek an explanation for instinctive behavior, we should therefore not attribute it to any vital principle or "entelechy," nor to "an inherited system of connected neurones." Rather, we should "investigate what kind of physicochemical 'closure' produces these astonishing types of behavior, and under what conditions." He admitted that "instinct is still a riddle;" but "at least it is no longer one that forces upon us the acceptance of psycho-vitalistic principles" (1925: 106). Since both instinctive and learned responses are present in the same individual, and since both have essentially the same structure, Koffka thought it unnecessary to choose sides in the heredity-environment controversy. A decision was not possible on this issue in any case, he wrote, without clarity about the nature of experience itself (1925: 52). Having achieved that clarity, he could accept a role for practice in the development of behavior, because he subsumed both the function-aided maturation of instinctive behavior and the practiceaided maturation of "performances" in learning under the same physical teleology. He could thus portray even Köhler's "insight" as a

result of development, and make frequent use of Claparéde's term "construction" in an essentially maturational theory.

To make this view more plausible Koffka worked out a number of hypothetical developmental sequences. The most extensive of these was for the development of color vision (1925: 264 ff.) This he described as "the gradual construction of new color configurations" by a process akin to that exhibited in Köhler's experiments with "structural functions" in animals (1925: 272). The differnce between figure and ground already investigated by Edgar Rubin he termed the "most primitive" phenomenon of visual perception. Transferred to color vision, this meant that the first stage of development would be the distinction between chromatic and achromatic colors. This would be followed by the differentiation first of the "warm" and "cold" colors-more exactly of the reds and blues, or of red and "not-red"-then of the spectral colors, and finally of intermediate hues. A child who earlier saw only blue and red, for example, could later come to distinguish lilac in relation to blue as "not-blue." On this basis it could gradually develop a wide range of color phenomena before it learned their common names. Koffka offered a variety of observations in support of this hypothetical sequence, but admitted that much of it remained speculative; and he did not attempt to work out a more complete stage theory of the kind that Piaget would soon develop. In fact, the schema was, at bottom, a deduction from Wertheimer's and Köhler's work and the known facts about the visual spectrum.

In effect, Koffka transformed Edinger's model of "developmental history" by combining it with functionalism, then subordinating the result to Wertheimer's epistemology and Köhler's physical teleology. Because of his claim that practice could modify or complete the development even of preformed behavioral schemata, he was open to the charge of attempting to revive Lamarckism. This was not his aim. Köhler's physical "Gestalt laws" are not acquired characteristics that can then be inherited, but invariant structural principles for physical and psychical events, inherited and acquired behaviors. In one sense this style of theorizing is similar to that of Driesch, for both describe development as a realization of inherent potential. However, the location of that potential is fundamentally different. For the vitalists, it was exclusively within the organism; for Koffka, it was in the organism-environment interaction, which works as it does because behavior, reflected experience, and the objects to which they are directed are subject to the same structural laws.

However, in all of this Koffka referred primarily to the development of individuals. Early in the book he raised the issue of ontogeny and phylogeny. After reviewing the recapitulationist and "utilitarian" or neo-Darwinist alternatives, he accepted the "correspondence" theory held by Claparéde and Dewey, among others. This, the view "that the general characteristic of development are the same for both the individual and the species," he called "far more cautious than either of the other two" theories; it holds the way open for further hypotheses (1925: 46-47). As he proceeded, it became clear that this was insufficient. If his system were to be complete and consistent, and also applicable to pedagogy, he had to provide explicitly for the social dimension.

It was here that Lévy-Bruhl entered the picture. Koffka integrated Lévy-Bruhl's thinking into his argument in the final chapter of the book, entitled "The World of the Child." In general he retained the formulations about the thought of "primitive" peoples already cited, simply transferring them from the so-called "primitive" mind to that of the child. There was, however, one fundamental difference. The claims expressed by both Lévy-Bruhl and Wertheimer in universalist terms appear here in historicized form. There is indeed a "child-world" which is different from that of adults, and persists for a time alongside it. However, Koffka wrote, "we are dealing here not with an unchanged child-soul, but with a world-view which continually undergoes a process of transformation" (1925: 336-337). In part this process is one of maturation, during which inanimate objects become distinct from animate ones, objects in general acquire the quality of things with attributes, and appearance is distinguished from reality. But the shape of the process "depends upon the total environment, and above all upon the sociological conditions of this milieu ... man's entire development, including, of course, his perceptions, is dependent upon society" (1925: 339-340).

This is obvious for both children and adults in primitive society, where social bonds appear to be much stronger than in "civilized" society. In the case of children, however, it is difficult to discover the phenomena and structures of the "child-world," precisely because it is "constantly influenced by association with adults and hence [is] not stable enough to show its worth in performance," except perhaps in play (1925: 335). Max Wertheimer had said in 1912 that in such a situation it was often understandable that children or members of other cultures resisted the demands of teachers from "outside" (Wertheimer 1912a: 349n.). Koffka put it this way:

The release from [immediately perceived] reality which is possible and easy to our mode of thinking is a specific product of our civilization. The child must go a tremendously long way in a short time in order to learn to think as adults do, in a manner which is not at all natural to him. To lead him along this way, so that his advancement may be vital to him, is the difficult but thankful task of the teacher (1925: 335).

At the very least, "respect" was due to children for all that they manage to achieve in their earliest years (1925: 319).

In passages such as these, Koffka appears to become an advocate of the "natural" child, much like the proponents of Deweyite progressive education, which was becoming fashionable in the United States at the time. Teachers appear here as agents of alienation working on behalf on an adult "civilization" with goals fundamentally different from those of the child. However, the opposition is not as simple as that. The intervention of teachers and parents in the maturation process is also a necessary aspect of the development of culture, and of the development of the child within that culture. According to this view, then, the child cannot be simply left to itself. Even the teaching strategies that declare this to be their goal are interventions. Though Koffka sought both to explain the development of reason and to make development reasonable, the end result has the tragic cast of Freud's Civilization and its Discontents. Nonetheless, it is clear that Koffka had begun with such statements to approach a historico-cultural conception of development.

Conclusion

However, Koffka did not pursue these beginnings further; nor did he produce the developmental social psychology that might have emerged from them. He had asserted that mental development proceeds the same way at all levels; it is "not the bringing together of separate elements, but the arousal and perfection of more and more complicated configurations in which both the phenomena of consciousness and the functions of the organism go hand in hand" (1925: 356). But he had not shown in any detail whether or how the functional interaction he would constently have to posit between the developing individual and society—or its agents, teacher's and parents, takes place. Nor was there any discussion of the development of social interactions among children. Without such discussions, the usefulness of the book to teachers was limited.

More important to psychologists, probably, were other difficulties. Despite the wealth of detail Koffka packed into his account, many of his generalizations were deductions from general principles, not inductions from research results. Though these generalizations were framed in such a way that they might beomce testable experimentally, he did not carry out such tests himself. He continued his running debate with Thorndike in later discussions of the law of effect, and students of Gestalt theory, especially Americans who studied in Berlin in the late 1920s such as N.R.F. Maier and D.F. Adams, attempted to apply Gestalt principles to learning theory. Through this work, and Koffka's dialogue with E.C.Tolman, Gestalt theory exerted a not insignificant influence on the development of learning theory, and thus indirectly on developmental psychology in the United States. However, the fact remains that Koffka had no children of his own to observe, and did not set up a laboratory dedicated to child studies; his research interests lay elsewhere. Though many of the principles in his 1921 (1925) text were restated and elaborated in his 1935 classic, Principles of Gestalt Psychology, there was little direct discussion either of developmental or of child psychology there. Perhaps this ommission accounts in part for the fact that Koffka's work had either slight or only a negative reception among developmental psychologists in the United States. It was not clear how these principles could lead to further experimentation in the field, and the suggested schemas and stages of development in particular areas, such as color perception, were not worked out extensively enough to be of direct pedagogical use. The hints Koffka dropped about the determining roles of society and history were taken up most enthusiastically in Russia by the so-called cultural-historical school led by Lev Vygotsky (Scheerer 1981).

In Western Europe and the United States, developmental psychology went other ways. In his contribution to this volume, Kurt Danziger shows how the conceptual fruits of attempts to develop a common theoretical conception for socialization and for cognitive development by thinkers such as James Mark Baldwin and Piaget were later divided among two specialties, developmental and social psychology. After the above account it is clear that Gestalt theory also belongs to this history. It, too, was one of the last attempts to hold the dimensions of psychological reality together, in this case by referring them to a common ontological base. The substantive issues Koffka raised in that attempt—the problem of the physical and biological realities underlying cognitive and behavioral development, and the relations of

individual development to its cultural and social context, remain central today.

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