William James and Gestalt Psychology

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To date, there have been only two scholarly papers devoted to a comparison of Gestalt psychology with the psychology of William James. An early paper by Mary Whiton Calkins called attention to numerous similarities between these two schools of thought. However, a more recent paper by Mary Henle argues that the ideas of William James, as presented in *The Principles of Psychology*, are irrelevant to Gestalt psychology. In what follows, this claim is evaluated both in terms of *The Principles* and James's larger vision as set forth in his mature philosophical works. Although there are important differences between James and the Gestalt psychologists, there are also striking similarities particularly when the two schools are examined in the light of James's mature philosophical perspectives.

Scholarly comparisons of the various systems of psychology were popular in early literature (see Viney, Wertheimer, and Wertheimer, 1979, pp. 236–247 for over 90 examples) and remain useful for promoting understanding of psychological systems (e.g., Henle, 1978; Natsoulas, 1996; Skinner, 1990). Such comparisons are especially helpful as pedagogical tools for students enrolled in courses in history and systems of psychology. Comparative scholarship is useful to scholars who work for unity and synthesis in psychology and to practitioners who seek to understand specific applications of various theoretical positions. Unfortunately, one comparison that has been largely overlooked is the comparison between Gestalt psychology and the psychology of William James. To date, only two papers have addressed this subject: an early paper by Mary Whiton Calkins (1926) and a more recent work by Mary Henle (1990). However, Henle's work is based only on *The Principles of Psychology* and is thus too limited in scope to fully address the

issues in contention. The mutual intellectual ground of James and the Gestalt psychologists remains an active gap in the history of psychology.

Henle (1990) has argued that the thought of William James, as set forth in *The Principles of Psychology*, is irrelevant to the development of Gestalt psychology. Unfortunately, Henle's analysis of the possible commonalities between Gestalt theory and Jamesian psychology fails to consider the larger vision of William James found in his mature psychological and philosophical works (e.g., *Essays in Radical Empiricism*, *Pragmatism*, *The Meaning of Truth*, and *A Pluralistic Universe*). The purpose of the present paper is to explore similarities between William James and Gestalt theory in the context of James's *The Principles* as well as in his mature writings. It will be argued that in this larger context there are many important commonalities between Gestalt psychology and James's thought. Gestalt psychology did not emerge in an intellectual vacuum, and James was an important predecessor to Gestalt theory. He preceded the Gestalt school in the revolt against the prevailing mechanism, atomism, and associationism encountered in many of the early systems of psychology.

Mary Henle's Interpretation of The Principles

Mary Henle (1990) questions connections between William James and Gestalt psychology and focuses her discussion on the topics of mechanism, atomism, associationism, and organization presented in James's *The Principles*. She contrasts the physics and physiology of James's day with modern field concepts available to the Gestalt psychologists. Henle concludes that James did not transcend nineteenth century work in these fields and therefore, due to his initial acceptance of the prevailing telephone "switch-board" conception of the nervous system (James, 1890/1981, p. 38), could not influence or share commonalities with the Gestalt psychologists. In what follows, the validity of Henle's interpretation of Jamesian thought is considered as well as her claim that James's perspective is absent in Gestalt theory.

Henle explores James's beliefs about the nervous system, especially his rejection of vitalism in favor of a mechanistic account of the human body. James (1890/1981, p. 38) initially presents the nervous system as "the great commutating switch-board at a central telephone station." However, he then proceeds to suggest changes in this view that alter its "machine-like" conception (p. 39). Henle argued that James was unable to "escape from the physiology that was the standard view of psychologists of his time" (1990, p. 79). Despite James's mechanistic view of the body, he did recognize the inadequacy of this perspective and, according to Henle, made "commendable" departures from it (p. 81). Such exception is evident in his statement that "perhaps neural laws will not suffice, and we shall need to invoke a dynamic reaction of

the form of consciousness upon its content" (James, 1890/1981, p. 547). James was obviously dissatisfied with nineteenth-century neural physiology.

Part of James's dissatisfaction with nineteenth-century neurology stemmed from his deep concern with relations between objects. Henle (1990) recognizes "how seriously James took such understandable relations" (p. 82) and states that "for James, it does matter, in short, what goes with what, that is, *how* the self is related to phenomenal objects " (p. 82). However, she finds James's views on relationships and interactions in the world to be secondary to his views on physiology, and she claims that his beliefs about relations cannot reflect his true position because "by his mechanistic view of the *nature* of the nervous system, he had precluded such interactions" (p. 86). In discussing James's beliefs about organization, a concept central to Gestalt theory, Henle allows that "James takes for granted the *facts* of organization" (p. 92) but then points out that "[a] network of insulated fibers, no matter how dense, is not a medium in which interactions can occur" (pp. 92–93).

Henle admits that James was "rooted in the physiology of his time, but on occasion he seems to see beyond it" (1990, p. 87) For example, James suggests a hierarchical scheme in which the entire physical system corresponds to psychological phenomena. He conceptualized a neural organization of "some rather massive and slow process of tension and discharge in the cortical centres, to which, as a whole, the feeling of [for example] musical tone . . . simply and totally corresponds" (1890/1981, p. 159). James's idea is to some extent similar to Köhler's psychophysical isomorphism. Köhler (1969, p. 66) claims that "psychological facts and the underlying events in the brain resemble each other in all their structural characteristics." Despite James's suggestions for improving the neural physiology of his day, Henle resolutely anchors him in mechanism. For Henle, James's acceptance of the nineteenth-century state of science acts as the womb from which all of his claims about psychology are born. She demands that his views conform with the physiology of his time, and, when his vision exceeds such assumptions, she rejects his ideas as inconsistent with physiology. Her analysis does not take into account James's later philosophical writings which ignore the inadequate physiology of his day.

She draws similar conclusions concerning James's position on atomism, associationism, and organization. Henle claims that, despite James's persistent attacks on atomism and its limitations, "[h]is mechanism forced him into atomism," including all of the andsum implications about human experience that come with it (1990, p. 86). She discusses James's rejection of traditional associationism and his speculations concerning the non-associationist formation of new connections, but then concludes that he was "attempting to face up to, and deal with, a problem that the physiology he employed did not allow him to solve" (p. 90). In his later work, James explicitly denies the contention

that underlying neural processes are primary. When discussing religion, he claims that "Medical Materialism [the belief in the primacy of physiological processes] seems indeed a good appellation for the too simple-minded system of thought which we are considering" (James, 1902/1990, p. 20) and that "In other words, not its [physiological] origin, but *the way in which [a religious belief] works on the whole,* is [the] final test of a belief. This is our own empiricist criterion" (p. 26). He rejects the use of neurology in favor of *"immediate luminousness,* in short, *philosophical reasonableness,* and *moral helpfulness* [which] are the only available criteria" (p. 25). James's conclusions clearly contradict Henle's analysis.

Although Henle acknowledges that James "may have, at times, glimpsed a different kind of nervous system" (1990, p. 94), she finds his ideas concerning organization, mechanism, atomism, and associationism to be dissimilar to Gestalt psychology because of the inadequacy of the nineteenth-century mechanistic views of neural physiology. Gestalt notions are based in modern field concepts and the application of such concepts to the nervous system (see Kölher, 1969), and these ideas were unavailable to James. Henle claims that because James's psychological positions regarding organization, mechanism, atomism, and associationism were not sufficiently supported by his nineteenth-century physiology, his ideas could neither influence nor share commonalities with Gestalt psychology; she maintains that James's ideas merely show his own internal inconsistencies and are unrelated to Gestalt psychology.

Mary Whiton Calkins Reflects on The Principles

Mary Henle's interpretation of *The Principles of Psychology* is not undisputed. Mary Whiton Calkins (1926), the eminent self-psychologist, challenged "the novelty which Gestalt theorists attribute to their doctrine" (p. 153). Allowed to attend classes although forbidden to register as a graduate student at Harvard due to her gender, Calkins studied *The Principles* in 1890 with William James "quite literally on either side of a library fire" (Calkins, 1930, p. 31) and completed an informal oral defense of her doctoral studies with James as her advisor (Scarborough and Furamoto, 1987). Calkins uses *The Principles* to delineate antecedents of Gestalt psychology in the writings of William James. She begins by claiming that "no student of William James can have forgotten either the vigor with which he hews away, root and branch, at the current concept of sensations as 'composing' objects of consciousness or the persistence with which he enforces the concept of perception and of thought as apprehension of unified objects" (Calkins, 1926, p. 155). She then guides the reader through Gestalt notions present in the specific chapters on "The Mind-Stuff Theory," "The Stream of Thought,"

"Sensation," "The Perception of Things," and "The Perception of Space." Although Calkins points out that "This emphasis on the important likeness between *Gestalt*-psychology and that of William James need not blind one to the differences between them" (p. 156), she does devote the final pages of her article "to the exposition of the James doctrine of configuration" (p. 155). At the time, "configuration" was a popular American translation of "Gestalt." In her autobiography, she lists specific doctrines "which I now recall as most impressing me, in [my] early study of *The Principles*" and includes James's "reiterated teaching (obviously an anticipation of the *Gestaltpsychologie*) that a percept has a unity of its own and is no mere aggregate of sensations" (Calkins, 1930, p. 31). Thus, Mary Whiton Calkins, comparing Gestalt psychology and her thorough knowledge of the early psychological writings of William James, points out distinct similarities which challenge Mary Henle's conclusions.

Gestalt Psychologists Address The Principles

Another source of information on this topic is found in references to William James in major works of the Gestalt theorists. These references sometimes attempt to distance Gestalt theory from the functional nature of James's psychological writings. For example, Duncker (1926) uses the chapter on "Reasoning" from *The Principles of Psychology* as a foil to contrast the standard view of problem solving, as presented by James, with the Gestalt approach to problem solving. Köhler (1929) challenges James's idea of relations, pointing out that James failed to clearly define what he meant by the term. Köhler claims that if "relations can be considered among all parts and fractions of a given field [as Köhler interprets James] . . . such ubiquitous relations are entirely unfit to make us understand why in a given case a particular attitude is experienced as arising 'because of' an equally particular object or event in the field" (p. 199). Duncker (1926) echoes this sentiment when he directs attention to James's claim that "all ways of conceiving a concrete fact, if they are true ways at all, are equally true ways. *There is no property ABSOLUTELY essential to any one thing*" (James, 1890/1981, p. 959). This idea diverges from the Gestalt notion of "requiredness" (see Köhler, 1938, pp. 63–101). However, Köhler (1929) acknowledges that James describes experiences that are driven by specific facets of the situation rather than by the purely arbitrary connections attributed to his thought by these Gestalt theorists. Köhler (1938, p. 119) gives an example of James breaking free from these critiques; he mentions a section from James's chapter on "The Stream of Thought" in which James describes the Gestalt process of trying to fill the "intensely active" gap which is present when one is trying to remember a forgotten name (see James, 1890/1981, p. 243).

Gestalt theorists also write appreciatively of James. Koffka (1928) speaks highly of James's notion of the transitory nature of instincts. Koffka also relies on the "ideo-motor law," which states that an explicit decision to move is not always required for behavior, that, in effect, "sometimes the bare idea is sufficient" (James, 1890/1981, p. 1130) to generate movement. Koffka (1928) uses the ideo-motor law as part of his explanation of imitation behavior in children. In his discussion of the nature of science, Köhler (1938, pp. 33–34) allies himself firmly with James in the fight against the trend of the "scientific Nothing But." While Gestalt theorists attempted to distance themselves from James, they often appreciatively discuss aspects of his insight and his vision which they find to be favorable.

Importance of a Wider Context

It is necessary to consider William James's mature philosophical writings to understand fully any contribution he might have made to Gestalt psychology. James's *The Principles of Psychology* is only a prelude to his mature philosophical vision. To limit James to *The Principles* is to run the risk of missing him. His project was lifelong; even as he shifts from psychology to philosophy, he continues to return to and broaden the psychological themes presented in *The Principles* (see Viney and King, 1998, p. 258). Crosby and Viney (1992) point out that in *Essays in Radical Empiricism* James returned to 15 of the 25 psychological topics of *The Principles* (topics not centered on the nervous system), and they claim that "if one considers the entire corpus of James's philosophical work, it will be seen that he returned to virtually every psychological topic covered in *The Principles*" (p. 102). Charlene Seigfried (1990) argues that the "*The Principles* was conceived as an integral part of a larger project and not just as a book inaugurating a new science of psychology" (p. 51). She goes on to claim that "the intrusive metaphysical passages . . . attest to a larger project of which *The Principles* is only the first step" (p. 54). McDermott (1967) maintains that "No such split [between his psychology and his philosophy] is honored here. The 'psychology,' 'will to believe,' 'radical empiricism,' and 'pragmatism' are of a piece in his philosophy" (p. xxxiii). The life-long vision of William James, beginning with *The Principles* and continuing through his later work, shares common themes with Gestalt psychology.

Radical Empiricism

According to McDermott (1967), "One thing is obvious: to underplay the importance of radical empiricism in any understanding of James, is to risk missing him altogether" (p. xlii). Radical empiricism, the name preferred by James for his philosophy, is a fundamental aspect of James's thought that

finds a parallel in Gestalt theory. Radical empiricism fits in the classic empiricist tradition but makes substantial changes in the definition of experience. The classic empiricist tradition is briefly described here (for further explanation see Viney and King, 1998, p. 17). Empiricists accept only a posteriori knowledge, claiming that all knowledge comes from the world as it is perceived through the senses. Classic empiricists such as Hume and Locke postulated a predominately passive mind that works in a mechanistic, lawful manner upon incoming sensory data.

However, the critical point upon which empiricists and their counterpart rationalists differ concerns the actual methods used to acquire knowledge. James (1911/1979) described these methods in *Some Problems of Philosophy* by drawing the following distinction: empiricists look at many cases and draw tentative conclusions, while rationalists begin with a wide theory as a means of generating predictions concerning individual cases. James believed that this distinction is the most fundamental difference between these two methods of acquiring knowledge. However, James's own empiricism goes beyond the classical claims as he takes the definition of "empirical" to its purest form; experience becomes his "metaphysical ultimate" (Crosby and Viney, 1992, p. 102). What is experienced is what is real, and what is real is what is experienced. This is not far from classic empiricism, but the difference is striking. For James, "all kinds of experience are relevant to the truth of [a claim], . . . not just sensate experience" (Crosby and Viney, 1992, p. 103). The primary difference between radical empiricism and what James (1909/1977, p. 147) calls "bugaboo empiricism" or traditional empiricism is that the latter places the most importance upon objects and "in spite of the fact that conjunctive and disjunctive relations present themselves as being full co-ordinate parts of experience, [traditional empiricism] has always shown a tendency to do away with the connections of things" (James, 1912/1958, pp. 42–43). Radical empiricism, on the other hand, "*does full justice to conjunctive relations*" (p. 44). More than any other Jamesian concept, radical empiricism may be closest to Gestalt thought. Three main similarities can be presented: the primacy of phenomenology, the wide definition of the term experience, and the reality of relationships.

Radical empiricism invites comparison with Gestalt ideas. James contended that phenomenology is primary, and experience was his "metaphysical ultimate" (Crosby and Viney, 1992, p. 102). James considered phenomenology to be the only comprehensive source of knowledge (Seigfried, 1990). According to Seigfried (1990, p. 15), "central to James's new beginning in philosophy is the assumption that there is such a thing as neutral, pure description of phenomena and that such a description of mental life discloses the pervasiveness of a 'knowing together' that can serve as an indisputable basis for philosophical reflection." Experience is real; this idea drives William James to his con-

clusions concerning religion (James, 1902/1985), pluralism (James, 1909/1977), and pragmatism (James, 1907/1975).

Experience is a fundamental basis and necessary starting point for Gestalt psychology. Henle (1978, p. 30) argued that "For Gestalt psychology, phenomenology is a first step, a propaedeutic to experimental research and to a science of functional relations that transcends phenomenology." According to King, Wertheimer, Keller, and Crochetière (1994, p. 924) "Gestalt psychology advocated a kind of phenomenal realism." The Gestalt psychologists capitalize on the notion of experience being real to claim that there are actual "givens" in experience that are comprehensive and that occur in "a particular segregation, combination, [and] separation" (Wertheimer, 1923/1958, p. 116). Wholes are given and are known through experience. Henle realizes this and admits that "both James and the Gestalt psychologists start their work with naive description of the phenomena to be investigated" (1990, p. 97). The primacy of experience forms both a practical and a philosophical common ground between William James and Gestalt psychology.

A second aspect of radical empiricism that coincides with Gestalt theory is the belief that "all kinds of experience are relevant to the truth of claims in philosophy, psychology, and other domains . . . [including] emotional, recollective, inquisitive, deliberative, judgmental and evaluative, as well as sensate experience" (Crosby and Viney, 1992, p. 103). James calls upon human beings to reach out and to study the many-sided wholes of experience when evaluating truth; his claim is mirrored in the words of Wertheimer (1934/1961, p. 28), who stated that truth "is not necessarily something purely intellectual, remote from feelings and attitudes; the most important thing is not the statement but the whole position, a [person's] attitude toward the thing itself." The multi-faceted nature of evaluation refers not only to truth, but to the world. Gestalt psychology asks people who are faced with a problem to evaluate the problem in every conceivable way in order to perceive the whole, determine the relevant relationships, and productively devise a solution (Wertheimer, 1945/1982). For both James and Wertheimer, examination of a problem was never an activity limited to the methods of traditional logic or rote memorization. The search was always to be conducted in the world for any kind of data that would yield a relevant relationship essential to solving a dilemma.

For James, it is experience in the real world that guides the activity of philosophy and the evaluation of the truth value of a claim. For the Gestalt psychologists, experience, especially experience of the whole, is necessary to guide research, especially in psychology. Wolfgang Köhler (1969) expressed frustration with those who attempted to explain experienced phenomena by denying the existence of such phenomena. Such explanations remained "a

mere excuse, an 'explaining away'" (p. 37). He asked whether "In a first attempt to study perception, would it not be a more empirical project if one started with these obvious visual [experienced wholes] rather than with the hypothetical mosaic of local sensations?" (Köhler, 1967/1971, pp. 49–50). Even when conducting neurological research, the molar experiential aspects of the problem must be primary. Empirical research on pieces of mental apparatus divorced from the whole of experience is, at best, unproductive. Köhler (1967/1971, p. 122) lamented that "the microelectrode inserted in an individual cell seems to have abolished all interest in more molar functions of the nervous system." According to Pratt (1967), "Köhler insisted throughout his life that the phenomenal world is for science the only world open to inspection and that the initial data of this world are Gestalten no matter from what angle or branch of science they may be reported" (pp. 3–4). For the Gestalt psychologists, the molar functions are primary — they are what humans experience, and they must be studied as such.

It is the primacy of experience that inspired William James to write his famous chapter on the stream of thought. He begins with the idea that "every thought tends to be part of a personal consciousness" (James, 1890/1981, p. 220). His starting point is rooted deep in the belief that phenomenology is primary; similar beliefs are central to the Gestalt theorists. Such beliefs are exemplified in the starting point of Duncker's (1947, p. 507) exploration of the consciousness of objects, when he states that "'consciousness' manifests itself as a type of participation of the phenomenal self in phenomenal objects." James proceeds to present his claim that human thought proceeds in a continuous stream. He maintains this belief because "consciousness . . . does not appear to itself chopped up in bits . . . it is nothing jointed; it flows" (James, 1890/1981, p. 233). Accordingly, the stream of consciousness is only denied by individuals who speak of their mental "states as ideas of this or that thing" (p. 230) and miss the temporal relations, as well as other relations, among items in their experience. The emphasis on such a broad conception of relationships and on the experiential evidence for such relationships is compatible with the Gestalt claim that wholes are primary in experience (Wertheimer, 1983).

Another fundamental basis for comparison between Gestalt thought and the ideas of William James is the manner in which both conceptualize relationships. In *The Meaning of Truth* (1909/1975, p. 7), James put forward a concept that the Gestalt psychologists embrace (see below): "relationships between things . . . are just as much matters of direct experience as are the things themselves." According to James, "to be radical, an empiricism must neither admit into its constructions any element that is not directly experienced, nor exclude from them any element that is directly experienced"

(James, 1912/1958, p. 42). Crosby and Viney (1992, p. 103) conclude that, for James, "relations are an integral part of our experience, characterizing it at the very outset and at every turn." James argues that relations are given in experience. As explained above, James (1912/1958, p. 44) considered "*conjunctive relations*" among objects to be as real as the objects themselves. These same claims are clearly made by the Gestalt psychologists, for whom "*the given [in experience] is itself in varying degrees 'structured' ('gestaltet'), it consists of more or less definitely structured wholes and whole-processes with their whole-properties and laws, characteristic whole-tendencies and whole-determinations of parts*" (Wertheimer, 1922/1938, p. 14). The Gestalt theorists added power to this theoretical claim with empirical research on relationships in such areas as learning (Duncker, 1926, 1945; Katona, 1940; Köhler, 1925; Wertheimer, 1945/1982), perception (Wertheimer, 1923/1958), and social psychology (Asch, 1952; Sherif, 1935). Relationships are real, and they are not only as real as the objects themselves, they determine the nature of the objects and the way the objects are experienced. The Gestalt principle of relational determination states that "it is the relations of parts to the whole and parts to each other that determine the nature of each part and its function in the whole" (Wertheimer, 1980, p. 211). Treating the relations as real and doing so because relationships are found in experience is a striking commonality between William James's approach and Gestalt psychology.

Methodological Pluralism

William James and the Gestalt psychologists were methodological pluralists, believing that vision is more important than method. For both James and the Gestalt theorists, the method of study should reflect the vision and the practical aspects of the problem. According to Luchins and Luchins (1978, vol. 2, p. 277), Max Wertheimer favored James's method of studying religious experiences in terms of the effects that an experience had "for the person and others in his [or her] social world." However, despite methodological agreements between James and the Gestalt psychologists, the larger spirit of Jamesian pluralism is not evident in Gestalt theory.

Differences

There are major discrepancies between William James and Gestalt psychologists with respect to the part–whole problem. In Gestalt theory, the whole defines its parts and also defines which items act as parts in the system and which items are merely unrelated pieces. According to Wertheimer (1923/1958, p. 135) "the way in which the parts are seen, in which sub-wholes emerge, in which grouping occurs, is not an arbitrary piecemeal and-

summation of elements, but is a process in which characteristics of the whole play a major determining role." The Gestalt notion of the whole is as a transsum, "a whole that is quite different from a sum of a set of mutually indifferent constituent parts" (Wertheimer, 1980, p. 209). By contrast, James (1907/1975, p. 126) argues that "the world that we live in exists diffused and distributed in the form of an indefinitely numerous lot of eaches, coherent in all sorts of ways and degrees." The Gestalt psychologists generally disagree. Although "there are some fields . . . that are relatively self-enclosed" (Wertheimer, 1934/1961, p. 25), the authentic world of the Gestalt psychologists is made up of coherent and interrelated wholes. The whole is primary; Gestalt psychologists accept "the radical view that *the whole is psychologically, logically, epistemologically, and ontologically prior to its parts. A whole is not only more than the sum of its parts, it is entirely different from a sum of its parts: thinking in terms of a sum does violence to the very nature of the dynamics of genuine wholes* (Wertheimer, 1983, p. 43).

The two schools also embrace different theories of truth. James (1909/1975, p. 3), argued that "true ideas are those that we can assimilate, validate, corroborate and verify." James (p. 3) places truth in validation and its "cash-value in experiential terms." For James, "truth is a matter of finite experiences, . . . but nothing outside the flux supports them or guarantees them" (see Seigfried, 1990, p. 247). Wertheimer's (1934/1961) notion of truth is similar to Jamesian truth in that it functions in the world, can change, and is about particular facts. However, the Gestalt psychologists reject the pragmatic theory of truth and accept a contextual correspondence theory in which a "proposition is really true when it corresponds not only with the part as such but with the role that it plays in the whole" (p. 21). For Gestalt theorists, real truth exists in the world outside of the observer who studies the appropriate and relevant wholes. The truth of a statement "is an integral part of a well-defined situation in which the [facts] form a characteristic whole" (p. 21). Although Gestalt truth is practical in that it applies directly to events and situations in the world, it insists upon correspondence with experienced wholes. The correspondence upon which Wertheimer insists serves to anchor the Gestalt notion of truth firmly in realism. Thus, the Gestalt psychologists reject James's pragmatic theory of truth.

Conclusions

Despite the challenges raised by Henle (1990), the similarities between Gestalt theory and the mature ideas of William James remain clear. Jamesian metaphysical pluralism and Jamesian pragmatism are not evident in Gestalt theory, but the notion of radical empiricism is central to both James and the Gestalt theorists. The primacy of phenomenology and the reality of experi-

ence are vital to James and to the Gestalt psychologists. They also agree on the relevance of all types of experience instead of only sensate experience. Another similarity is the perception of relationships as real. Relations are experienced in the world and are viewed by James and by the Gestalt psychologists as at least as real as experienced objects. The larger scheme that motivates these comparisons is the radical empiricism of William James. The ideas of radical empiricism are present in *The Principles of Psychology* (see Crosby and Viney, 1992), and Henle's (1990) analysis of this work has not provided sufficient reason to disregard some of the remarkable similarities between Gestalt theory and the writings of William James.

Henle (1990) maintains that James's grounding in nineteenth-century physiology is primary; she does not recognize his larger and more important vision, a vision that in many respects parallels the tenets of Gestalt psychology. She chains him so firmly to mechanism that he is left with only the shortcomings and implications of a physiology that he found to be too limiting. Despite being aware of some general scientific views of a few twentieth-century physicists such as Maxwell and Mach (see James, 1907/1975), James was not a product of modern physics or physiology. Being born twenty years too early to experience twentieth-century accomplishments in these rapidly developing sciences appears to have left James, in Henle's view, incapable of having any intellectual connection or commonality with Gestalt psychology. Henle ignores the larger Jamesian corpus and denies what Seigfried (1990) calls his *Radical Reconstruction of Philosophy*, including the possibility that his views could influence, for example, the philosophy of Max Wertheimer. James built a mature system of thought based in the metaphysical ideal and the reality of experience. James's beliefs in the primacy of experience and in multiple levels of analysis do not require him to explain the particular physiological means by which these come about. Parallels between this aspect of Jamesian thought and Gestalt theory are much greater than Henle acknowledges.

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