

# Otto Kernberg's Object Relations Theory

## A Metapsychological Critique

---

**John Chambers Christopher**

MONTANA STATE UNIVERSITY

**Mark H. Bickhard**

LEHIGH UNIVERSITY

**Gregory Scott Lambeth**

UNIVERSITY OF ILLINOIS

**ABSTRACT.** A conceptual and empirical critique of Kernberg's influential object relations theory is presented as a case study of the limitations of structural ontological presuppositions in accounting for psychological processes. A summary overview is provided of Kernberg's systems model, the process of internalization, his developmental stages, and his conception of the borderline personality organization. Then a detailed critique considers: (1) the foundations of Kernberg's model in affective memory and units of internalized object relations; (2) the principles of construction underlying his developmental processes; (3) the resulting product of these processes, his structural model and theory of the borderline personality organization; and (4) the relationship between his metapsychology and his clinical theory. Suggestions are made for how process models of personality and psychopathology can redress the problems with structural accounts.

**KEY WORDS:** metapsychology, object relations theory, process ontology

Kernberg's object relations theory, particularly his exploration of the borderline personality organization, has been widely influential within the psychological and psychiatric community during the past several decades. Klein and Tribich (1981), for example, refer to Kernberg's work as a 'tour de force'. Even more strongly, Carsky and Ellman (1985) claim that Kernberg has 'presented the most systematic and wide-sweeping clinical and theoretical statements of the last decade, perhaps even since Freud' (p. 257). During the 1950s and 1960s, the suitability of so-called 'borderline' patients for psychoanalytic treatment had been challenged, and outcome results were

often discouraging (see Stanton & Schwartz, 1954). Kernberg's theory contributed two necessary components to the systematic evaluation, diagnosis and treatment of individuals with severe personality disorders. First, it provided a conceptual framework or metapsychology that emphasized the psychological structure and defenses of the severe personality disorders. Second, Kernberg outlined a specific, structured treatment approach that extended beyond traditional psychoanalytic procedures and included recommendations for supportive psychotherapeutic work and inpatient treatment regimes.

Kernberg described his orientation as an object relations theorist, explicitly acknowledging the influence of Melanie Klein, W.R.D. Fairbairn, Margaret Mahler and Edith Jacobson on his thinking. In general, Kernberg viewed his object relations theory as integrative, meaning it draws upon and extends the theoretical insights and clinical observations of previous authors. Whereas some other contemporary psychoanalytic thinkers, including Kohut, seldom referred to the pioneering work of previous writers, Kernberg maintained a continuous dialogue with a group of psychoanalytic authors who have attempted to synthesize object relations theory with a traditional, Freudian drive perspective. Kernberg retained the language and emphasis Freud attached to the dual-instinct theory while he developed certain themes first outlined by Jacobson and Klein regarding the aggressive and destructive components of human nature. Greenberg and Mitchell (1983) viewed Kernberg as 'attaching himself to an already evolving tradition of theoretical accommodation, a tradition which has been moving drive theory toward a more "social" view of man and the forces motivating him' (p. 328).

Kernberg (1975/1985) proposed that the psychoanalytic literature has been plagued by imprecise and inconsistent diagnostic criteria, and he asserted that the 'borderline conditions' have been the subject of the most confusion. He suggested that conceptual difficulties have arisen in the past because clinicians have too frequently based their diagnoses upon counter-transference reactions and limited behavioral information. He maintained that important diagnostic considerations should include analysis of defensive operations of the ego, analysis of ego structure and weaknesses, and descriptive features including behavioral symptoms, ego defenses, pathology of internalized object relations and genetic-dynamic features. Kernberg (1984b) also raised serious questions regarding the validity of any classification of personality disorders based upon a cluster of trait dimensions (see American Psychiatric Association, 1980, 1987, 1994; Millon, 1981). One problem with the trait dimension approach, according to Kernberg, concerns the enormous overlap of symptoms across the personality disorders. All of the personality disorders exhibit some degree of diminished impulse control, for example, which in part explains the low reliability of Axis II diagnoses.

The diagnostic classification system that Kernberg recommended has

important differences from the *Diagnostic and Statistical Manual of Mental Disorders* (APA, 1994) and is more comprehensive than Kohut's (1971, 1977) typology of self disorders. Kernberg's diagnostic classification system provides a developmental continuum of character pathology within the broader category of borderline personality organization. The term 'borderline personality organization' encompasses a range of psychological disorders that constitute 'a specific, stable, pathological personality organization' that is neither typically neurotic or psychotic (Kernberg, 1975/1985, p. 3). An individual diagnosed with borderline personality disorder, for example, exhibits a characteristic pathological ego structure, including the presence of chronic anxiety, neurotic symptoms such as multiple phobias, perverse sexual behavior and diminished impulse control. In addition to these symptomatic features, a constellation of characteristic defenses are often present, most often splitting, primitive idealization, projective identification, denial and omnipotence.

In general, Kernberg described the psychological features and therapeutic strategies for the borderline conditions with unusual detail and clarity. The strong connection he developed between the theoretical exposition of the personality disorders and specific therapeutic interventions should be considered a strength of his type of object relations approach. His penetrating descriptions of character pathology are inextricably linked to a broader object relations theory, however, which is mired in a complex and, at times, convoluted metapsychology. The prose in *Object Relations Theory and Clinical Psychoanalysis* (1976/1984a), for example, is reminiscent of Edith Jacobson's enigmatic style: dense, terse and at times impenetrable. As a result, there is a temptation to discard the convoluted metapsychology in favor of the rich clinical descriptions and therapeutic explanations. In fact, there can be no easy delineation between theory and practice because both are inextricably linked to one another. In other words, there is no simplified or condensed version of Kernberg's object relations theory that eliminates the problematic metapsychology. Greenberg and Mitchell (1983) contend, for example, that 'one's theory, one's understanding, one's way of thinking *determine* what are likely to be taken as facts, determine how and what one observes. Observation itself is understood to be "theory-laden"' (p. 16).

Given Kernberg's important contributions to object relations theory and widespread influence, the scarceness of conceptual analyses of his work is surprising. Odder still, the rare assessments that do exist, like Carsky and Ellen (1985) as well as Greenberg and Mitchell (1983), offer no more than a few pages. Typically, critiques and analyses of Kernberg's metapsychology have focused on the way his theories compare with the different schools of psychodynamic thought (i.e. Greenberg & Mitchell, 1983; Klein & Tribich, 1981). However, there are limitations to this approach. As Carsky and Ellen (1985) point out:

It can be useful to discuss how one theorist's use of a concept differs from another theorist's, but this does not constitute a criticism, unless one discovers logical fallacies with the system or data that contradicts the theory. To criticize Kernberg for differing with Freud, for example, is not a theoretical criticism, but a value judgment. (p. 289)

This paper offers a comprehensive logical and empirical critique of Kernberg's object relations theory. Central to this critique is a consideration of the ways that his theory relies on postulated structures as a way of accounting for the persistence and rigidity of psychopathology and personality. Elsewhere (Bickhard & Christopher, 1994) we have claimed that structural models are ultimately untenable in psychology. They rely on a circularity of reasoning in which the stability of process is accounted for by creating structures that are inherently stable. Structural models, therefore, capture this essential quality of stability through presupposition and fiat rather than through explanation. According to Hull (1974), virtually every field of science has passed through a phase in which the basic ontology of its subject matter was regarded as a substance or structure of substance (e.g. phlogiston theories of fire, caloric theories of heat, fluid theories of magnetism, and vital fluid theories of life). However, almost all sciences other than psychology have abandoned substance and structure ontologies in favor of process ontologies. Process ontologies, such as quantum field theory, regard all phenomena either as process or as patterns and organizations of process. Using Kernberg's influential object relations theory as a case study, we will consider the limitations of structural ontological presuppositions in accounting for psychological processes.

Presentations and criticisms of Kernberg's theory will be organized in several sections: overviews of (1) his systems model; (2) the processes of internalization; (3) his developmental stages; and, finally, (4) how these theoretical constructs are employed in his analysis of the borderline personality organization. A summary critique follows. We conclude by suggesting several components of an alternative process ontology that we believe will provide a more adequate conceptual foundation for personality theories.

### **The Systems Model**

Kernberg's most systematic statement of his metapsychology is in *Object Relations Theory and Clinical Psychoanalysis* (1976/1984a). In this work he develops what he calls a 'systems' model of psychological development that attempts to reconcile Freudian drive theory with recent developments in object relations theory. Systems thought, in this view, links drive theory and object relations theory to create a general model of both cognition and motivation. Within this model, three interrelated processes are posited as simultaneously emerging and developing: the intrapsychic structure, effective

representations of the 'external' world and the self, and the instincts. These higher-order processes derive from a common source, the *units of internalized object relations*, also referred to as *constellations of affective memory*.

Initially, Kernberg (1976/1984a) proposes that the infant is a collection of undifferentiated physiological reactions or 'units', which he describes as 'inborn perceptive and behavior patterns' (p. 87). They become organized, as the infant begins to differentiate from its environment, into the crucial *units of internalized object relations* or *constellations of affective memory*. Having both cognitive and affective attributes, these units of internalized object relations are the basis for all future development. The units are critical for personality development: they contain precursors of the intrapsychic structure, effective representations of the 'external' world and the self, and the instincts.

Each object relations unit is a memory of an event containing:

- ... (i) the image of the object, (ii) the image of the self in interaction with that object, and (iii) the affective coloring of both the object-image and the self-image under the influence of the drive representative present at the time of the interaction. (Kernberg, 1976/1984a, p. 29)

Through processes of differentiation and then reintegration by means of what Kernberg refers to as 'agglutination', the object relations units ultimately give rise to still further developments: representations of the self, representations of the object, and a drive motivational system. In this model it is initially affect, the infant's perception of its experiences as 'good' or 'bad', that determines how differentiation and integration transpire (see Figure 1).

The units of internalized object relations are the key to Kernberg's theory—everything is constructed out of them—and, consequently, their

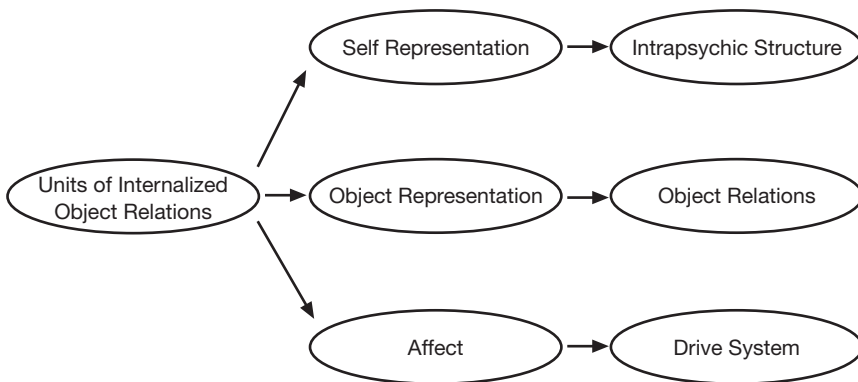


FIGURE 1.

justification and validation determine the status of his entire systemic approach. How such memory constellations, such object relations units, are presumed to emerge from the physiological level is the focus of the next section.

### The Processes of Internalization

Kernberg asserts that early interpersonal experiences determine basic psychological structure and give rise to the drive systems. It is, therefore, essential to examine the internalization process whereby these experiences form the foundation of the individual's psychic make-up. This internalization of object relations is an ordered developmental process that contains three stages: introjection, identification and ego identity. We will consider only the first stage of internalization, introjection.

*Introjection* is integral to Kernberg's metapsychology because it entails the initial internalization of his 'building block', the object relations unit. Kernberg considers introjection as both a process and a structure. As a process, it internalizes or encodes the infant's interactions in *memory traces*. Such memory traces are thought to contain (1) a more or less differentiated image of the object, (2) an image of the self in interaction with the object, and (3) an affective component that is a primitive manifestation of the drives (Kernberg, 1976/1984a). This affective component has what Kernberg terms a *valence*. By this he means that the affect has a charge that is binary in nature, being either pleasurable/good or unpleasurable/bad. This valence colors all other aspects of the infant's perception (self and object representations) and is the means by which the infant's experiences become organized. Kernberg (1976/1984a) writes that:

... introjections taking place under the *positive valence* of libidinal instinctual gratification, as in loving mother-child contact, tend to fuse and become organized in what has been called somewhat loosely but suggestively 'the good internal object.' Introjections taking place under the *negative valence* of aggressive drive derivatives tend to fuse with similar negative valence introjections and become organized in the 'bad internal object.' (p. 30)

Initially, introjects having opposite valences are kept apart because the precursors to the infant's ego are considered too weak to integrate them. Gradually, 'ego nuclei' 'precipitate' around the introjections and, as these introjections and precipitants become more complex, ego boundaries begin to solidify. With this review of the nature of introjects, we will now turn to their functional role in Kernberg's model of development.

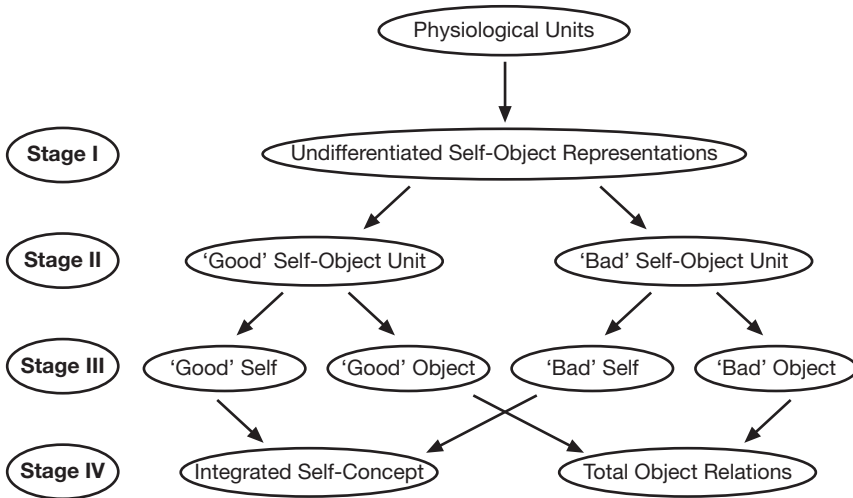


FIGURE 2.

### Stage Theory of Early Ego Integration and Object Relations

Kernberg's model of self and object development rests on five distinct stages that delineate the growth of the internalized object relations units (Figure 2). Because our focus is on the earlier stages of Kernberg's metapsychology, Stage V, *Consolidation of Superego and Ego Integration*, will not be addressed in this paper.

#### *Stage I (0–1 Month)*

The first stage, *Normal Autism*, is referred to as the 'primary undifferentiated stage' and is equated with Mahler, Pine and Bergman's (1975) conception of autism.

#### *Stage II (2 Months to 6–8 Months)*

Stage II, *Normal 'Symbiosis'*, begins with 'primary, undifferentiated self-object representations'. By this he means that there are two clusters of object relations units: one cluster consists of the 'good' self-object representations, the other of the 'bad' self-object representations. Because the child is unable to integrate opposing affective valences, the separation of libidinally invested and aggressively invested representations is necessary. While at the beginning of the stage the self is not differentiated from the object representation,

differentiation occurs during the stage: within the 'pleasurable or rewarding or "good" self-object image', a 'good' self and a 'good' object differentiate as separate representations.

### *Stage III (6–8 Months to 18–36 Months)*

The third stage, *Differentiation of Self from Object Relations*, begins as the 'good' (libidinally invested) self-object of the Symbiosis stage completely differentiates into a 'good' self and a 'good' object. Shortly thereafter the 'bad' (aggressively invested) self-object differentiates into a 'bad' self and a 'bad' object. This is the stage when *splitting* is seen as a normal mechanism of development that 'protects the ideal, good relationship with mother from "contamination" by bad self representations and bad representations of her' (1976/1984a, p. 67). During this stage the child begins to integrate the self and object representations of different affective valences. Thus, 'good' and 'bad' self representations start to form an 'integrated self-concept', and 'good' and 'bad' object representations start to form 'total' object representations, leading to Stage IV.

### *Stage IV (36 + Months through the Oedipal Period)*

The fourth of Kernberg's stages consists of the *Integration of Self Representations and Object Representations and Development of Higher-level Intrapsychic Object Relations-derived Structures*. During this stage the 'good' (libidinally invested) and 'bad' (aggressively invested) self representations are consolidated into a 'definite self system'. Coinciding with the integration of the self, libidinally invested object representations are combined with aggressively invested object representations. By binding together what were separated into 'good' and 'bad' objects, the child forms what Kernberg calls 'total' object representations. Kernberg (1976/1984a) also states that in Stage IV, 'Ego, superego, and id, as definite, overall intrapsychic structures, are consolidated . . .' (p. 67).

According to Kernberg, one of the major consequences of the integration of introjects and identifications of opposite affective valence is that the drive derivatives are 'neutralized', thereby liberating energy that can be utilized for repression. With the development of repression the individual no longer needs to separate threatening or anxiety-provoking experiences and split them off into 'bad' self or object representations. Instead, repression allows these experiences to be blocked from consciousness, hence the beginning of the dynamic unconscious and the id. By utilizing some of the energy released from the neutralization of the drives, the child can begin to create counter-cathexes to repress anxiety-provoking psychic material. With the development of repression both aggressive and libidinal elements of the

internalization process that are rejected by the developing ego come to be deposited in the id.

### **Drive Development**

Within this framework of Kernberg's developmental stages, we will examine the third aspect of the object relations units, the drives. As previously mentioned, one of the elements of the primitive object relations unit (self-object-affect) is affect. These primitive affects not only constitute the basic building block of drives but help to organize the drives as well. Affect, for Kernberg, plays more of an organizational function than a motivational one; affect dispositions incorporated into object relations organize the drives as higher-level motivational systems. Thus, (1) primitive affects give rise to (2) drive derivatives, which become organized into (3) integrated motivational systems, which give rise to (4) the instincts. Like the primitive affects and drives, instincts embody both libidinal and aggressive elements, only now they are organized as 'aims'. These aims, libido and aggression, come to be a part of the dynamic unconscious with the development of repression and the consolidation of the id.

Summarizing Kernberg's approach, Greenberg and Mitchell (1983) write that:

Systems theory is a way for Kernberg to solve for himself the problem of integrating his view that affectively charged relational structures are the basis for development with the classical concept of structure evolving out of transformations of drive, which he wishes to retain. (p. 337)

### **The Borderline Personality Disorder**

The borderline personality organization is, according to Kernberg, a developmental disturbance originating during the third stage, *the differentiation of self from object relations*. The developmental task of this phase is to integrate the libidinally and aggressively invested representations of self and object into a more realistic self-concept and 'total' object representations. Kernberg maintains that because the borderline patient has been unable to establish these integrations, the clinician observes 'nonmetabolized ego states', which consist of severe fluctuations from one unintegrated self to another.

The etiology of the borderline personality organization in Kernberg's theory is based upon several factors. The first is excessive aggression. This aggression may be constitutionally determined or it may be the result of the frustration of the infant's 'early instinctual needs, especially oral'. Because aggression is linked to the 'bad/unpleasurable' valence of the primitive

self-object representations, excessive aggression essentially means that the all-'bad' self-object (mother-image) becomes too powerful. Excessive aggression can be equated with too much energy feeding the all-'bad' self-object. Because the powerful 'bad' self-object can undermine the 'ego core formed around positive introjects', the child is threatened and experiences anxiety.

Additionally, Kernberg posits 'constitutionally determined lack of anxiety tolerance' as another factor in the etiology of the borderline personality organization. A certain amount of anxiety tolerance is necessary for the eventual integration of libidinal and aggressive aims. If the child exhibits a 'constitutionally determined lack of anxiety tolerance', and/or if the aggression that fuels the 'bad' self-object is too powerful, development may be disrupted. The child responds by *splitting* the aggressive self-objects away from the 'good' self-objects, and attempting to expel the bad object.

Splitting is a defensive operation that not only separates the aggressive affects from the budding ego core but also separates the 'bad' self-object from the 'good' self-object. Thus Kernberg (1976/1984a) states: '... I inferred that the defensive function of splitting the ego consisted precisely in keeping contradictory primitive affect states apart—but *not* the affect states alone: these contradictory affects were inseparably linked with corresponding internalized, pathological object relations' (p. 24).

Although splitting is a normal part of development according to Kernberg, it becomes pathological when it prevents the ego from developing. This can occur because of a mutually reinforcing relationship that can ensue between splitting and a weak ego: splitting prevents the integration of the affects of opposite valence, thus preventing the release of neutralized energy that makes repression possible, and thus preventing the constructive differentiation of ego and id as products of that repression. Conversely, a weak or pathologic ego does not have the energy to combine conflicting opposites. Thus, by splitting apart the self-objects of opposite valence, and thereby preventing the generation of energy for repression, ego weakness is perpetuated. In other words, because the ego is weak it relies upon splitting to forestall the destructive influences of the threatening, aggressively charged self-object; because it relies upon splitting it does not have the energy to develop a stronger ego. Only by integrating the opposite self representations and the opposite object representations can drive neutralization occur. The neutralization of the drives liberates the energy required for repression. It is only to the degree that repression has replaced splitting as the primary defensive operation that the ego, superego and id can develop.

In this analysis Kernberg combines elements of ego psychology, object relations and a genetic-dynamic perspective. The weakness of the pathologic ego, the excesses of oral aggression and the overpowering nature of the 'bad' self-object all contribute to a fixation at the level of splitting and an inability to develop the defense mechanism of repression.

## A Conceptual and Empirical Critique

In our critique, we begin by considering the foundations of Kernberg's model—his initial premises and the 'building blocks' upon which he wants to base psychological development. Then we will appraise the developmental processes and construction principles that are the foundation of his model of development. Next we will examine his structural model, the outcome of his construction principles, to determine whether it is in fact warranted. Finally we will consider the relationship between Kernberg's metapsychology and his clinical theory.

### *Foundations*

As previously discussed, the foundation of Kernberg's model rests on the units of internalized object relations, also referred to as affective memory. He treats these units as memory traces containing an impression of the self, an impression of the object and a primitive affect. A number of conceptual and empirical problems surround Kernberg's use of such internalized object relations units. We will concentrate on the problems with his use of memory traces, his 'building-block' constructivism and his notion of affective memory.

The 'reproduction and fixation of an interaction with the environment' that forms the essence of Kernberg's memory trace is a form of event memory, or what Tulving (1983, 1985) termed *episodic memory*. However, it is generally agreed that memory for events develops later in childhood than do other forms of memory, such as Tulving's procedural and semantic memory (Bruner, Olver, & Greenfield, 1966; Furth, 1981; Nelson, 1994; Piaget & Inhelder, 1973; Tulving, 1987). By treating episodic memory as if it were primary, Kernberg attributes cognitive abilities to the infant that are unsupported by memory research. We can probably assume that he is motivated to attribute these abilities to infant memory and to accept uncritically the classical 'memory trace' approaches so that he can better synthesize object relations theory and drive theory. In this attempt, he proposes a model in which the earliest memory must be a form of affective memory that contains the seminal elements of object relations (self and object representations) and the instinctual drives (the affective component). But this affective memory is essentially primitive affect combined with event memory, of which the infant is not capable (Nelson, 1994; Piaget & Inhelder, 1973). Thus, Kernberg's attempt to synthesize object relations theory and drive theory results in a model inconsistent with cognitive developmental research. He does state that:

In the earliest introjections, object and self-image are not yet differentiated from each other (Jacobson, 1964), and the definition of introjection suggested really corresponds to a somewhat later stage in which successive

differentiations, refusions, and redifferentiations of the self- and object-images have finally crystallized into clearly delimited components. (Kernberg, 1976/1984a, pp. 29–30)

In this passage Kernberg acknowledges a more primitive form of memory, but his primitive form is based on the lack of differentiation and generalization concerning self and object in initial affectively imbued event memories; he does not deviate from his presupposition of the primitive status of event memory. Again, theories of development would place the advent of event memory, which is essential for Kernberg's system approach, at a much later age.

### *Developmental Processes and Construction Principles*

Kernberg's model faces foundational difficulties because he posits event memory as occurring much earlier than it apparently does. Granting him that assumption, however, we also find problems with his account of developmental processes and construction principles. We will focus on his use of affect as an organizing principle and on the problem of generalization and abstraction.

*Affect.* Kernberg largely relies on affect to provide organization to intrapsychic development by postulating that the affective component of the internalized object relations unit has a 'valence'. This organization centers on the formation of 'good' and 'bad' internal self- and object-images; the valence of the affect associated with the self- and object-images determines the integration and differentiation of introjections—but there are problems with his conceptualization.

Technically, valence is a chemical term that refers roughly to the degree of 'filledness' in the outer shell of electrons in an atom. Since Kernberg's usage contains nothing about the positive and negative numerical affinities that are indispensable to a strict chemical interpretation, a more likely interpretation would be that his model employs static electricity as an underlying metaphorical heuristic. In the physical dynamic of static electricity, opposites attract and like charges repel. A model consistent with the static electricity metaphor would demand that introjects of opposite valence attract. Kernberg's model, however, posits that opposite charges initially repel, and like charges attract—'good' and 'bad' agglutinate together and are split from each other. Kernberg also contends that in later stages of splitting, representations of opposite valence (e.g. good and bad self-representations) integrate. This latter statement concurs with the static electricity metaphor and could be used explanatorily to account for why these introjects with opposite valence come together. However, since in earlier stages opposite charges repel and like charges attract each other (which is the exact opposite

of what we would expect from static electricity), the model cannot at this point simply posit that opposites attract.

By attempting to convert the affective component of the introject into a valence, Kernberg seeks to acquire organizational properties. However, by violating the underlying metaphor, he can no longer claim that it is the valence that generates the type of organizational properties that are needed for the processes of agglutination and differentiation. At best, his 'valence' cannot draw on the underlying electrical metaphor for any explanatory power, but, without that metaphor, 'valence' appears explanatorily vacuous: it names a kind of phenomena rather than explains it (Christopher, Bickhard, & Lambeth, 1992).

Kernberg's theory thus rests on an organizational principle that is problematic in several ways. First, it is not consistent with any established causal mechanisms he appears to be drawing from, such as chemistry or static electricity. Second, and most important, looking at the text alone, valence is used in contradictory ways: as a binary property, first, for which likes attract and fusion of opposites requires energy input (which a weak ego cannot provide), and then, arbitrarily, for which opposites attract and fusion of opposites releases energy (which is then available to the ego). Such inconsistencies seriously undermine the model's potential, either for explanation or for simple description. That is, whether Kernberg intends to provide an explanatory or simply a descriptive account, the end result is a model that is internally inconsistent. As with structural models generally, his appeal to valence as an explanation entails circular reasoning that merely posits the phenomenon in question without providing a true explanatory account.

*Abstraction.* We turn next to the problem of generalization or abstraction. The basic point here is that Kernberg's model does not provide a link between *specific* isolated events stored as affective memory and the formation of *generalized* representations or affect. This problem appears in both cognitive and affective (drive) development as well as with the self.

Earlier we pointed out that Kernberg's characterization of affect memory as event memory is not consistent with cognitive research that has examined the developmental emergence of memory. Even if, contrary to the evidence, event memory did exist at the necessary early ages, there is still the critical problem of how anything more general develops from single memories. In other words, even if the infant has a series of memories, and even if they do agglutinate around affective valence, this does not necessarily lead to a generalized self or object representation. The problem is one of getting an abstracted self or object representation from a series of different event memories. It is not apparent, for that matter, how *any* general representations can arise out of agglutinations of particular representations. Simply put, how does one get *experience* out of *experiences*?

In *Object Relations and Clinical Psychoanalysis*, Kernberg (1976/1984a) affirms that primitive affect is the basic organizing element 'bringing together into a common memory trace fixating that experience the primitive perception of bodily states, of activated inborn behavior and the corresponding "external" (environmental) responses "mixed" with it' (p. 62). At this point in Kernberg's account we still have only single memory traces. However, in the next sentence he writes, 'In short, various inborn physiological, behavioral, affective and perceptive *structures* are internalized jointly as a first unit of intrapsychic *structure*' (pp. 62–63, emphasis added). This is a key sentence for it is the only clue as to how he gets from a series of representations of singular experiences to generalized representations. He does not elaborate further on this 'internalization' and quickly moves into a discussion of how '[a]ffects gradually differentiate in the context of the development of the undifferentiated self-object representations' (p. 63). He seems to presuppose that the agglutination of multiple memory traces will somehow result in a representation of that which is in common among those traces. But this would presuppose that 'that which is common' is already present in the original memory traces so that it can be precipitated out in the agglutination. And this presupposition, in turn, clearly begs the question of how such abstracted representations can be constructed by the infant. In any case, Kernberg would seem to have skipped over this major theoretical hurdle and basically reifies without explaining how a self or object representation, or any other generalized representation, can form (see, for example, the discussion of similarity in Fodor, Bever, & Garrett, 1974).

The problem of generalization exists at a more macro-level when Kernberg (1976/1984a) claims that 'cognition and affect are thus two aspects of the same primary experience' (p. 63). The primary experience as internalized via the introject is thus intended to be the building block of all human psychological development. However, for this to be a valid position, the developmental processes that allow these building blocks to develop into cognition and affect need to be explicated.

Kernberg's (1976/1984a) first implicit claim about the origins of cognition in primary experience is that this primary experience consists of 'primitive perception of bodily states, of activated inborn behavior and the corresponding "external" (environmental) responses "mixed" with it' (p. 62). He then implies that these three components are 'inborn physiological, behavioral, affective and perceptive structures' (p. 62). To claim that cognition develops out of primary experience, he needs to explicate the emergence of cognition from these rudimentary inborn structures (physiological, behavioral, affective and perceptive). The closest that he seems to come to such an explication is a sentence where he refers to '(cognitive) storage' in a manner implying that he equates cognition and memory. He then argues that though the:

... neurophysiological structures responsible for affective experience and for (cognitive) storage capability of this experience are different, their integration in the earliest affective memory establishes, in my opinion, a common structure (pleasurable or unpleasurable primitive experience) out of which cognition and affect will evolve in diverging directions. (p. 63)

If Kernberg wants to argue that cognition is memory, or that it grows out of memory, then he must address several conceptual problems. In order to *store* representations in memory, the ability to *form* representations (a cognitive ability) must already be present. But this ability to form representations is not addressed. A second problem is that while perception is a subunit of cognition, agglutinations of perceptions alone, which is all Kernberg accounts for, cannot account for cognition. In addition, as previously discussed, Kernberg would like to account for this ability with his 'perceptive structures', yet research suggests that the infant does not have the developmental ability to form such representations. Kernberg's process of agglutination, then, is not adequate to account for cognition, and his presumed grounds for those agglutinations—perceptive structures—do not seem to exist.

The problem of abstraction and generalization also affects Kernberg's model of the self. Kernberg treats the self as an agglutination of representations of the self. As such it is subject to the same problems of generalization and abstraction that surround the formation of object representations. But, even when the agglutination model of abstraction is overlooked, we are still presented only with a model of a *representation* of the self, not the self *per se* (cf. McIntosh, 1995). If we accept this equating of the self with a self representation, then we are faced with the problem of determining what is the self of which initial representations are possible. This approach seems committed to an infinite regress, but this is not addressed by Kernberg.

Finally, Kernberg encounters similar problems in his model of affective development, which Greenberg and Mitchell (1983) have mentioned in their discussion of affect and the drives. As with event memory, how does affect get committed to anything more general than a single event? Greenberg and Mitchell suggest that Kernberg's theory contains a 'fundamental discontinuity between the relational and energetic meanings of good and bad' (p. 339). In other words, they claim that Kernberg does not account for how a collection of affects related to events can become motivational forces 'corresponding to the classical libidinal and aggressive instincts' (p. 338). Again, collections of 'building blocks' do not automatically yield higher-order generalizations or emergences.

### *The Structural Model*

*The ego.* Kernberg never offers a definition of the ego, but seems to consider it to be both an agent and a content. The ego is used originally by him

(1976/1984a) as an *agent* that is 'too weak' to integrate introjects of opposite valence. This is the aspect of the ego that he relates to Hartmann's primary autonomous apparatuses and has capabilities such as perception and the ability to form memory traces. As an agent the ego also develops the capacity to use splitting for defensive purposes. However, Kernberg's systems model also describes the manner in which 'ego nuclei precipitate' around the introjections, and as these introjections and precipitants become more complex, ego boundaries solidify. As Kernberg (1976/1984a) writes: 'Since by this fusion [of representations of the same valence] more elaborate self-images and object-images are being "mapped out," this process contributes to the differentiation of self and object and to the delimitation of ego boundaries' (p. 30). Here the ego is claimed to arise from the fusion of representations, and, taken together with Kernberg's reference to 'ego boundaries', it appears as if the ego has *content* and is somehow related to a refinement of self representation. It is not clear how this interpretation coheres with the previous usage in which the ego has agency and is related to organization, hence the drives, hence affect.

It is also unclear why the ego forms around the 'good' self-object constellation. Kernberg (1976/1984a) does not explicitly argue why this must occur and why the ego could not precipitate around the 'bad' object relations units. Furthermore, he does not seem to provide an adequate mechanism of the 'efforts made to "expel" the "bad" self-object experience, while the "good" self-object representation becomes the nucleus of the ego' (p. 63). If the valence metaphor lacks coherence and explanatory power and if the ego has not yet formed, who or what is doing the expelling? It is also worth noting that while Kernberg equates aggression with 'bad', he does not argue why aggression must be intrinsically related to 'experiences of a frustrating, painful nature' (p. 61).

In sum, Kernberg's treatment of the ego does not easily cohere with his basic building-block model of object relations units. Not only does he seem to introduce terminology without adequate reference to how the presumed phenomena could emerge in his model, but he also vacillates between treating the ego in spatial and in organizational terms.

*The id.* There are similar conceptual difficulties surrounding Kernberg's treatment of the id. First, it is difficult to understand how the id, like the ego, can be both a structure with spatial dimensions where things can be stored *and* a function or process. It is understandable that these two possibilities would need to be blended to reconcile drive theory with object relations theory, yet without further explanation it does not seem possible to have the id as both a container and a process/function.

Similar complications also emerge with Kernberg's model of repression and the id. Kernberg claims that by integrating the representations of opposite affective valence, the drive component (valence) is neutralized.

Such neutralization then liberates energy that can be used for repression, and with repression the id is established. It is not clear, within Kernberg's metapsychology, how bringing together a positive and negative charge can create some sort of 'neutral' energy. Within a static electricity model, bringing together opposite charges, provided they are of equal intensity, results in a canceling out of any charge. Consequently, bringing positive and negative introjects together should result in no energy, not a 'neutral' energy. As a result, the static electricity metaphor, which is the only apparent justification for this process, seems very limited in its ability to account for the emergence of repression or the id.

A related concern is that Kernberg seems to have reified the 'energy' freed through neutralization. This 'energy' was initially the affective *quality* of pleasure/displeasure that the infant linked with the self-object introject. Now, however, this affective component is reified, becoming an 'energy' with 'forces' capable of 'moving' psychic 'matter'. In going from an affective response to a psychic energy that is capable of depositing 'material' in the id, Kernberg would seem to have blurred the distinction between an event and a force operating within the psychic structure.

### *The Clinical Grounding of Metapsychology*

Kernberg's metapsychology and his clinical theory are taken to be mutually supporting: the clinical level provides epistemological support to the metapsychology, while the metapsychology provides theoretical support to the clinical theory. In addition to the internal limitations in Kernberg's metapsychology, this postulate of support with the clinical theory is also problematic.

First, Kernberg's metapsychology cannot provide theoretical support to his clinical theory because his metapsychology contains core errors on both conceptual and empirical levels: a substantially flawed theory can provide only substantially flawed support. Any supposed reciprocal support with the clinical theory, thus, founders on the inadequacies of his metapsychology.

Second, in the opposite direction, Kernberg's metapsychology cannot acquire epistemological grounding from his clinical data. Eagle (1984) and Grunbaum (1984) have pointed out the limitations of using clinical data to support a metapsychological position. Clinical data are both too narrow and too circular to provide a basis for metapsychology. It is by now a common observation that clients tend to have insights in the symbols and language of their therapist (Marmor, 1962). As a result of suggestion and expectation, the client frequently gives the type of response desired by the therapist (Frank, 1974; Hubble, Duncan, & Miller, 1999). Moreover, when faced with ambiguous or opaque behavior the therapist will frequently interpret these in

accordance with his/her well-formed assumptions (Eagle, 1984). The therapeutic setting lacks rigorous methodological safeguards to prevent such observational bias.

While elements of his clinical theory may appeal at an intuitive level, such intuitive appeal cannot be the sole basis for a model. Intuition is what we work from, but it must be educated, constrained, tested, reformed and developed; it alone cannot provide our epistemological ground. A model's ability to make sense of our own clinical experience is important, but provides only a first step in what is ultimately desirable in a model. If intuition is taken as the *ground* of a theory, then a circularity results as one never questions one's initial intuition. To make the point in the extreme, possession by the devil as an explanation for psychopathology made perfect sense to the intuitions of the Christian Middle Ages. For us such intuitions are irrational, yet our intuitions may be found to be similarly limited in ways we do not yet recognize. In Kernberg's case, this means that an appeal to intuition and clinical practice intrinsically fails to provide valid support for his metapsychology. Next, we will examine Kernberg's analysis of the borderline personality organization in order to illustrate some of these problems.

### *The Borderline Personality Disorder*

The borderline personality disorder, according to Kernberg, is characterized by a developmental fixation at the stage in which splitting is the primary defense mechanism. The 'bad' or aggressive representations become too powerful or too threatening to the ego core that is forming around the positive introjects when there is an inherent lack of anxiety tolerance or high levels of constitutional aggression (Kernberg, 1976/1984a). The infant attempts to expel the bad object by splitting the aggressive, bad internalized self-objects away from the good internalized self-objects. Kernberg suggests that analysis of the borderline's character pathology will reveal this relatively stable configuration of split-off good and bad object images. The split-off internalized objects lead the borderline to construe interpersonal relationships in either 'all-good' or 'all-bad' terms, resulting in a pattern of intense, chaotic interactions with other people. The severe personality disorders arise from a basic failure to integrate these affective drive derivatives during early developmental stages. The consequences of such failures include a characteristic pattern of primitive defenses, pathology of internalized object relations and disturbances in interpersonal relations. We will evaluate several problems associated with the structural ontological presuppositions underlying Kernberg's developmental model of borderline psychopathology.

Kernberg treats the concept of energy states inconsistently in his discussion of borderline psychopathology. He proposes that splitting requires less

energy than fusion and that a weak ego does not possess the energy necessary to integrate affects of opposite valence. Yet if this is the case, how can fusion *release* energy? It would seem that fusion would require more energy. How is energy *released* in moving from a *lower* energy condition (splitting) to one requiring *more* energy (integration)? In other words, if fusion *releases* energy, how is it that splitting requires *less* energy? Further, if fusion—‘unsplitting’—releases energy (neutralized), why doesn’t the first fusion yield a runaway positive feedback loop of liberated energy, further fusion, more energy, and so on?

Kernberg also suggests that excessive aggression means that the all-‘bad’ self-object becomes too powerful, too much energy feeds on it. Given that ‘energy’ is already present in the self-object units as affect, where does this additional energy originate that ‘feeds’ the bad self-object? At this point in psychological development, this ‘energy’ cannot yet be the neutralized energy that appears later at Stage IV when good and bad affective valences are combined. All energy is still affect and is still bound to the units of affective memory during Stage III when self and object remain undifferentiated and there is no independent source of energy. These confusions regarding the source of energy make it difficult to understand how affects become organized in Kernberg’s metapsychology.

Other conceptual difficulties surround Kernberg’s treatment of libido and aggression within his metapsychology. He proposes, for example, that the child’s inability to integrate libidinally and aggressively invested representations of the self and object frequently results in frustration of the infant’s ‘early instinctual needs, especially oral’. While Kernberg appears to be making a reasonable connection between drive theory and his object relations theory, it is not readily apparent why he refers to oral needs when his stage model only posits the existence of primitive affect at this early stage. Moreover, it isn’t entirely clear why frustration leads to aggression rather than other, plausible responses such as apathy. It seems evident that Kernberg must make these assertions because his object relations theory provides only two affects at this stage of development. In fact, he refers to excessive aggression and lack of anxiety tolerance as constitutional factors in the etiology of the borderline conditions. This may be true, but there is nothing in his theory to justify or explain this claim. In order to develop an internally consistent theory, he must somehow connect these constitutional factors with his cognitive development model.

Finally, there are concerns as to how Kernberg discusses the relationship between the emotions and ‘ego states’ in his account of the borderline personality disorder. He draws upon his clinical observations that borderline patients often experience dramatically shifting emotional states and concludes that there must also be shifting ego states characterized by distinct ego structures that correspond to these different emotional states. Even though these emotional states appear to Kernberg as discrete entities that

cannot be integrated, he offers no evidence to suggest why there must be a corresponding structural counterpart in the psyche. Thus from his clinical inferences about split emotional experiences, he concludes that there must also be split psychic structures. He then uses this split psychic structure to explain the split emotions of the borderline patient. Thus from 'split' emotions, he posits the existence of a split structure, which he then uses to explain the split emotions. Even if he were to provide unassailable evidence for the existence of a fragmented ego, it is unclear how this would necessarily require the emotions to be fragmented in similar ways. In other words, he blurs the distinction between representation and structure, which results in a circular reification [see also Eagle's [1984] critique of Kohut].

These types of inconsistencies regarding how Kernberg conceptualizes the role of energy in psychological development are important to recognize because they form the basis for conclusions he makes regarding psychopathology and treatment. These criticisms of his theory are not intended to undermine the robust clinical descriptions provided of the borderline personality disorder (dramatically shifting emotional states, lack of anxiety tolerance, impulsivity, aggressiveness, etc.), but they do suggest that the causes he discusses are not clearly supported by his metapsychology.

## Conclusion

Kernberg's theory has promoted a structural approach to psychopathology (cf. Bickhard, 1989; Bickhard & Christopher, 1994) that emphasizes how the many behavioral expressions of patients with personality or character disorders derive from a common source that gives the symptoms coherence. When his ideas are explored in depth, conceptual confusion and ambiguity cloud the gains he has seemingly made in understanding these psychological conditions.

Many of the problems with Kernberg's theory are the result of his structural ontology. At the foundation of his systems approach Kernberg chooses to build upon the theory of memory traces, an outmoded explanatory scheme with numerous empirical and logical limitations. Attempting to make affect the organizing principle of both cognition and emotion, he is forced into conceptual problems, as seen with the valence metaphor. As we argued, this ignores the problem of generalization and abstraction: cognition and emotion are not simply agglutinations of the components of affective memory. Moreover, Kernberg fails to offer a model of internalization; he asserts only its existence. At points where critical distinctions and relationships need to be explicated and clarified, he relies upon metaphors and technical language that seem at first glance to address the problem but on closer inspection are frequently only restating the initial problem in different terms. Perhaps the most egregious example is the circular explanation of split emotions in terms

of a split structure that is then used to explain the split emotions. In addition, Kernberg wants to use the metaphor of static electricity as the principle of organization, yet his inconsistent use of the metaphor invalidates its explanatory power. One could argue that he has not advanced our understanding of the character disorders, but only created a façade of deeper understanding through his technical language. Eagle (1984) captures this point when he writes: ‘. . . the translation of clinical observations into metapsychological language hardly constitutes a deeper level of explanation. . . . It merely creates the illusion that one is being more objective or more scientific or somehow providing a deeper level of explanation’ (p. 148). Carsky and Ellman (1985) specifically acknowledge this tendency in Kernberg when they write: ‘. . . often he does not show how this theory is more than a plausible restatement of his clinical points’ (p. 292).

In summary, we will reply to the following questions that Carsky and Ellman (1985) raised but did not answer:

Aside from consideration of various psychoanalytic traditions, does Kernberg have a well-integrated theoretical position? And in a more general sense, is Kernberg’s theory a good theory, according to the requirements of theory making such as logical structure, rules of inference, and so forth? (p. 289)

We believe that our critique indicates an unqualified ‘no’ to both questions. His foundations (early infant event memory traces) are problematic; his process of construction (agglutinative combination) is incapable of yielding the emergences that he needs (abstract representations out of memories of events; drives out of affective qualities of memories); his proposed sequence of differentiation and agglutination by affective valence, followed by re-differentiation and agglutination, is not well supported; his principles of organization and functioning (e.g. valence, splitting) are used inconsistently; and, finally, his theory does not model what he claims that it does—a model of representation of the self is not a model of the self, and a model of split representations of the self is not a model of a split self nor of a feeling of being personally fragmented. For all these reasons we believe it is quite understandable why no less a psychoanalytic theorist than Morris Eagle (1984) should confess that ‘I could not identify an organized set of coherent theoretical formulations which I could understand well enough to present and to evaluate critically’ (p. 5).

### *Desiderata*

Although some may be concerned that we have held Kernberg up to too high a standard, a standard that perhaps no personality theory could meet, nevertheless we believe that it is crucial not to avoid the issues raised in this paper as we redouble our efforts to refine and improve our theories. While it is outside the scope of this paper to give a full account of those critical

standards that we believe are essential for psychological theories to address and incorporate, we will mention a few that we believe are most important:

1. A personality theory needs to be able to account for the stability of personality without relying on structures. Structures of personality and psychopathology, although accounting for the persistence and rigidity of behaviors and dispositions, do so in a circular manner. Any structural model will therefore be unsuccessful in its attempt to address this stability or persistence. Only genuine process models such as those found throughout contemporary science can account for stability of organization as phenomena of process and patterns and organizations of process without generating the type of problems identified in this paper (Bickhard & Christopher, 1994). A process ontology of the person, in contrast to Kernberg's structural model, would be consistent with Loewald's (1970) insight that '[w]hat becomes internalized . . . are not objects but interactions and relationships' (p. 59). (Some contributions toward a model of the ontology of mental processes can be found in Bickhard, 1992a, 1992b, 1998, 1999, 2000, in press, in preparation; Bickhard & Christopher, 1994; Christopher & Bickhard, 1992, 1994.)
2. A successful personality theory needs to be able to provide an explanation of and model for human sociality that makes it more than 'marionette' sociality. For instance, object relations theorists often postulate a type of genetic energy that is dedicated to persons. Within these accounts, the individual is in effect a marionette that is shaped by genetic energy (Bickhard, 1992b; cf. Shapiro, 1965, 1981, 1999).
3. Within an adequate personality theory the cognitive characteristics have to be coherent. Elsewhere we have explored how most theories of or presuppositions about representation rely on a cognitive encoding process that is untenable and incoherent (Bickhard, 1993, 1999; Bickhard & Christopher, 1994; Bickhard & Terveen, 1995). The cognitive aspects of any psychological theory need to be developed within an action, pragmatist, process framework because of the problems with structural and correspondence models. Psychological theories must, for example, move beyond the wax-slate models of representation first introduced by Plato and Aristotle, and most recently incarnated in high-tech contemporary transduction models (e.g. Fodor, 1990, 1998; cf. Bickhard, 1993; Levine & Bickhard, 1999).
4. Finally, personality theories should be grounded in an epistemological pluralism. Theory generation cannot rely on one method, whether that be clinical data and intuitions or lab-based empiricism. Rather, we believe that theories should be subject to multiple constraints: clinical, empirical, conceptual and logical, and ideological. Theories should be refined and developed through the process of challenging them by bringing together as many relevant considerations and constraints as can be found. While

we reject standard positivist lines in psychology and endorse the social constitution of persons, we also want to avoid idealism. The world and logic do impose constraints on theory.

## References

- American Psychiatric Association. (1980). *Diagnostic and statistical manual of mental disorders* (3rd ed.). Washington, DC: Author.
- American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (3rd ed., revised). Washington, DC: Author.
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Bickhard, M.H. (1989). The nature of psychopathology. In L. Simek-Downing (Ed.), *International psychotherapy: Theories, research, and cross-cultural implications* (pp. 115–140). New York: Praeger.
- Bickhard, M.H. (1992a). How does the environment affect the person? In L.T. Winegar & J. Valsiner (Eds.), *Children's development within social contexts: Metatheory and theory* (pp. 63–92). Hillsdale, NJ: Erlbaum.
- Bickhard, M.H. (1992b). Scaffolding and self scaffolding: Central aspects of development. In L.T. Winegar & J. Valsiner (Eds.), *Children's development within social contexts: Research and methodology* (pp. 33–52). Hillsdale, NJ: Erlbaum.
- Bickhard, M.H. (1993). Representational content in humans and machines. *Journal of Experimental and Theoretical Artificial Intelligence*, 5, 285–333.
- Bickhard, M.H. (1998). Levels of representationality. *Journal of Experimental and Theoretical Artificial Intelligence*, 10, 179–215.
- Bickhard, M.H. (1999). Interaction and representation. *Theory & Psychology*, 9, 435–458.
- Bickhard, M.H. (2000). Motivation and emotion: An interactive process model. In R.D. Ellis & N. Newton (Eds.), *The cauldron of consciousness* (pp. 161–178). Amsterdam: John Benjamins.
- Bickhard, M.H. (in press). Autonomy, function, and representation. *Communication and Cognition*.
- Bickhard, M.H. (in preparation). *The whole person: Toward a naturalism of persons*.
- Bickhard, M.H., & Christopher, J.C. (1994). The influence of early experience on personality development. *New Ideas in Psychology*, 12, 229–252.
- Bickhard, M.H., & Terveen, L. (1995). *Foundational issues in artificial intelligence and cognitive science: Impasse and solution*. Amsterdam: Elsevier Scientific.
- Bruner, J., Olver, R., & Greenfield, P. (1966). *Studies in cognitive growth*. New York: Wiley.
- Carsky, M., & Elluman, S. (1985). Otto Kernberg: Psychoanalysis, and object relations theory; The beginnings of an integrative approach. In J. Reppen (Ed.), *Beyond Freud* (pp. 257–296). Hillsdale, NJ: The Analytic Press.
- Christopher, J.C., & Bickhard, M.H. (1992). Remodeling the 'as if' in Adler's concept of the life-style. *Individual Psychology: Journal of Adlerian Theory, Research & Practice*, 48, 76–85.

- Christopher, J.C., & Bickhard, M.H. (1994). The persistence of basic mistakes: A re-examination of psychopathology within individual psychology. *Individual Psychology: Journal of Adlerian Theory, Research & Practice*, 50, 223–231.
- Christopher, J.C., Bickhard, M.H., & Lambeth, G.S. (1992). Splitting Kernberg: A critique of Otto Kernberg's notion of splitting. *Psychotherapy*, 29, 481–485.
- Eagle, M.N. (1984). *Recent developments in psychoanalysis: A critical evaluation*. New York: McGraw-Hill.
- Fodor, J.A. (1990). *A theory of content*. Cambridge, MA: MIT Press.
- Fodor, J.A. (1998). *Concepts: Where cognitive science went wrong*. Oxford.
- Fodor, J.A., Bever, T., & Garrett, M. (1974). *The psychology of language*. New York: McGraw-Hill.
- Frank, J.D. (1974). *Persuasion and healing*. New York: Schocken.
- Furth, H. (1981). *Piaget and knowledge*. Chicago, IL: University of Chicago Press.
- Greenberg, J.R., & Mitchell, S.A. (1983). *Object relations theory in psychoanalytic theory*. Cambridge, MA: Harvard University Press.
- Grunbaum, A. (1984). *The foundations of psychoanalysis: A philosophical critique*. Berkeley: University of California Press.
- Hubble, M.A., Duncan, B.L., & Miller, S.D. (1999). *The heart and soul of change: What works in therapy*. Washington, DC: American Psychological Association.
- Hull, D. (1974) *Philosophy of biological science*. Englewood Cliffs, NJ: Prentice Hall.
- Jacobson, E. (1964). *The self and the object world*. New York: International Universities Press.
- Kernberg, O. (1984a). *Object relations theory and clinical psychoanalysis*. Northvale, NJ: Jason Aronson. (Original work published 1976.)
- Kernberg, O. (1984b). *Severe personality disorders: Psychotherapeutic strategies*. New Haven, CT: Yale University Press.
- Kernberg, O. (1985). *Borderline conditions and pathological narcissism*. Northvale, NJ: Jason Aronson. (Original work published 1975.)
- Klein, M., & Tribich, D. (1981). Kernberg's object-relations theory: A critical evaluation. *International Journal of Psycho-Analysis*, 62, 27–43.
- Kohut, H. (1971). *The analysis of the self: A systematic approach to the psychoanalytic treatment of narcissistic personality disorders*. New York: International Universities Press.
- Kohut, H. (1977). *The restoration of the self*. Madison, WI: International Universities Press.
- Levine, A., & Bickhard, M.H. (1999). Concepts: Where Fodor went wrong. *Philosophical Psychology*, 12, 5–23.
- Loewald, H.W. (1970). Psychoanalytic theory and the psychoanalytic process. *The Psychoanalytic Study of the Child*, 25, 45–68.
- Mahler, M.S., Pine, F., & Bergman, A. (1975). *The psychological birth of the human infant: Symbiosis and individuation*. New York: Basic Books.
- Marmor, J. (1962). Psychoanalytic therapy as an educational process. In J. Masserman (Ed.), *Psychoanalytic education* (pp. 286–299). New York: Grune & Stratton.
- McIntosh, D. (1995). *Self, person, world: The interplay of conscious and unconscious in human life*. Evanston, IL: Northwestern University Press.
- Millon, T. (1981). *Disorders of personality*. New York: Wiley.

- Nelson, K. (1994). Long-term retention of memory for preverbal experience: Evidence and implications. *Memory*, 2, 467–475.
- Piaget, J., & Inhelder, B. (1973). *Memory and intelligence*. New York: Basic Books.
- Shapiro, D. (1965). *Neurotic styles*. New York: Basic Books.
- Shapiro, D. (1981). *Autonomy and rigid character*. New York: Basic Books.
- Shapiro, D. (1999). *Dynamics of character*. New York: Basic Books.
- Stanton, A., & Schwartz, M. (1954). *The mental hospital: A study of institutional participation in psychiatric illness and treatment*. London: Tavistock.
- Tulving, E. (1983). *Elements of episodic memory*. New York: Oxford University Press.
- Tulving, E. (1985). How many memory systems are there? *American Psychologist*, 40, 385–398.
- Tulving, E. (1987). Multiple memory systems and consciousness. *Human Neurobiology*, 6, 67–80.

JOHN CHAMBERS CHRISTOPHER is an Associate Professor of Counseling Psychology in the Department of Health and Human Development at Montana State University and a licensed psychologist. He received his PhD in 1992 from the University of Texas and was formerly an Assistant Professor at the University of Guam. His research focuses on cultural psychology, hermeneutics and interactivism. He has written on the moral and ontological underpinnings of theories of psychological well-being, moral development and psychotherapy. ADDRESS: Health & Human Development, Herrick Hall, Montana State University, Bozeman, MT 59717, USA. [email: [jcc@montana.edu](mailto:jcc@montana.edu)]

MARK H. BICKHARD is Henry R. Luce Professor of Cognitive Robotics and the Philosophy of Knowledge at Lehigh University. His research focuses on the development of naturalistic models of persons, from biological and evolutionary emergent origins to full cultural persons. The nature of representational and cognitive processes is a special emphasis. ADDRESS: 17 Memorial Drive East, Lehigh University, Bethlehem, PA 18015, USA. [email: [mhb0@lehigh.edu](mailto:mhb0@lehigh.edu); website: <http://www.lehigh.edu/~mhb0/mhb0.html>]

GREGORY SCOTT LAMBETH is a Licensed Clinical Psychologist at the University of Illinois' Counseling Center and an Assistant Professor in the College of Veterinary Medicine. He received his PhD in 1994 from the University of Texas at Austin. His research interests include philosophical analysis of psychotherapy theory and practice, philosophical hermeneutics and developmental interventions with young adults. ADDRESS: The University of Illinois, Counseling Center, 212 Turner Student Services Building, 610 East John Street, Champaign, Illinois, 61820, USA. [email: [Lambeth@UIUC.edu](mailto:Lambeth@UIUC.edu)]