

Acceptance and Commitment Therapy, Relational Frame Theory, and the Third Wave of Behavioral and Cognitive Therapies

STEVEN C. HAYES

University of Nevada, Reno

The first wave of behavior therapy countered the excesses and scientific weakness of existing nonempirical clinical traditions through empirically studied first-order change efforts linked to behavioral principles targeting directly relevant clinical targets. The second wave was characterized by similar direct change efforts guided by social learning and cognitive principles that included cognitive in addition to behavioral and emotive targets. Various factors seem to have set the stage for a third wave, including anomalies in the current literature and philosophical changes. Acceptance and Commitment Therapy (ACT) is one of a number of new interventions from both behavioral and cognitive wings that seem to be moving the field in a different direction. ACT is explicitly contextualistic and is based on a basic experimental analysis of human language and cognition, Relational Frame Theory (RFT). RFT explains why cognitive fusion and experiential avoidance are both ubiquitous and harmful. ACT targets these processes and is producing supportive data both at the process and outcome level. The third-wave treatments are characterized by openness to older clinical traditions, a focus on second order and contextual change, an emphasis of function over form, and the construction of flexible and effective repertoires, among other features. They build on the first- and second-wave treatments, but seem to be carrying the behavior therapy tradition forward into new territory.

Over the last several years quite a number of behavior therapies have emerged that do not fit easily into traditional categories within the field. Examples include Dialectical Behavior Therapy (DBT; Linehan, 1993), Functional Analytic Psychotherapy (FAP; Kohlenberg & Tsai, 1991), Integrative Behavioral Couples Therapy (IBCT; Jacobson & Christensen, 1996), and Mindfulness-Based Cognitive Therapy (MBCT; Segal, Williams, & Teasdale, 2002), among several others (e.g., Borkovec & Roemer, 1994; McCullough, 2000; Marlatt, 2002; Martell, Addis, & Jacobson, 2001; Roemer & Orsillo,

The present article stems from my AABT Presidential Address. Without deflecting responsibility for the current paper, I would like to acknowledge that some of this line of argument appeared previously in Dutch (Hayes, Masuda, & De Mey, 2003).

Address correspondence to Steven C. Hayes, Department of Psychology/296, University of Nevada, Reno, NV 89557-0062; e-mail: hayes@unr.edu.

2002). No one factor unites these new methods, but all have ventured into areas traditionally reserved for the less empirical wings of clinical intervention and analysis, emphasizing such issues as acceptance, mindfulness, cognitive defusion, dialectics, values, spirituality, and relationship. Their methods are often more experiential than didactic; their underlying philosophies are more contextualistic than mechanistic.

Acceptance and Commitment Therapy (ACT, said as one word, not as letters; Hayes, Strosahl, & Wilson, 1999) is another of this group. ACT is hard to categorize. The traditional distinctions (e.g., behavioral versus Gestalt; behavioral versus cognitive) seem to be more confusing than clarifying. Theoretically speaking, ACT is rigorously behavioral, but yet is based on a comprehensive empirical analysis of human cognition (Relational Frame Theory or RFT; Hayes, Barnes-Holmes, & Roche, 2001). Based in clinical behavior analysis, ACT nevertheless seriously addresses issues of spirituality, values, and self, among other such topics. Such categorical ambiguity is shared with the majority of these new methods. For example, while ACT is supposedly “behavioral” and MBCT is supposedly “cognitive,” the two seem much more closely allied than either are to, say, Beck’s cognitive therapy on the one hand or to desensitization on the other.

When sets of anomalous events co-occur that are difficult to categorize using well-established distinctions, sometimes the field itself is reorganizing. Behavior therapy has already lived through periods of reorganization in a disciplinary lifetime that now enters its fifth decade. Now may be such a time. The purpose of this article is to explain ACT and to show how it relates to the intellectual and practical evolution that seems to be under way within behavior therapy.

The Waves of Behavior Therapy

Behavior therapy can be roughly categorized into three waves or generations (except where more specificity is needed, we will use the term “behavior therapy” to refer to the entire range of behavioral and cognitive therapies, from clinical behavior analysis to cognitive therapy). What I mean by a “wave” is a set or formulation of dominant assumptions, methods, and goals, some implicit, that help organize research, theory, and practice.

The First Wave

The first wave of behavior therapy was in part a rebellion against prevailing clinical conceptions. Early behavior therapists believed that theories should be built upon the bedrock of scientifically well-established basic principles, and that applied technologies should be well-specified and rigorously tested. In contrast, existing clinical traditions had a very poor link to scientifically established basic principles, vague specification of interventions, and weak scientific evidence in support of the impact of these interventions. Franks and Wilson (1974) showed this dual metatheoretical and empirical concern when

they defined behavior therapy in terms of “operationally defined learning theory and conformity to well-established experimental paradigms” (p. 7).

The objections to existing clinical traditions were shared by both of the major streams within behavior therapy at the time, neo-behaviorism and behavior analysis, and for that reason what united early behavior therapists overrode for a time the substantial differences among them. Both of these traditions were strongly scientifically based, and thus could unite against the obvious metatheoretical and empirical weakness of competing clinical paradigms.

The core of the objections to analytic and humanistic conceptions was metatheoretical and empirical, but the specific arguments were substantive. For example, Freud’s case of Little Hans (1928/1955) was skewered by early behavior therapists, who ridiculed the amazing flights of psychoanalytic fancy the case study contained (Bandura, 1969, pp. 11–13; Wolpe & Rachman, 1960). Freud argued that Little Hans was failing to leave home as a means of avoiding Oedipal feelings and resulting castration anxiety. The convoluted reasoning that led to this conclusion included claims that a horse going through a gate is similar to feces leaving the anus, a loaded cart is like a pregnant woman, and that “the falling horse was not only his dying father but also his mother in childbirth” (Freud, 1955, p. 128). Behavior therapists (Wolpe & Rachman, 1960) had a far simpler explanation. Since Little Hans had seen a horse-drawn cart fall over amidst the cries and screams of riders (among several other horse-related frightening events), it was more plausible that he avoided going outside because he had a learned fear of horses. Behavior therapists poked fun at the complexity of psychoanalytic theorizing by showing experimentally that simple contingencies could readily produce behavior that would occasion bizarre psychoanalytic interpretations (e.g., Ayllon, Houghton, & Hughes, 1965).

Behavior therapy focused directly on problematic behavior and emotion, based on conditioning and neo-behavioral principles. The goal would not be to resolve the hypothesized unconscious fears and desires of Little Hans and others like him—the goal would be to get him to go out of the house and to school. Psychoanalysts ridiculed this approach (e.g., Bookbinder, 1962; Schraml & Selg, 1966) on the grounds that symptom substitution would far outstrip superficial behavioral gains, or that unconscious desires would overwhelm necessary defense mechanisms. But this claim itself was an object of behavioral criticism (e.g., Yates, 1958) and, while it seemed possible from a behavioral point of view (Bandura, 1969, pp. 48–49), as an empirical matter it proved to be much less of a problem than psychoanalysts supposed (Nurnberger & Hingtgen, 1973).

With a direct change in focus came also a certain narrowing of vision, however. The rejected analytic and humanistic concepts were clinically rich. They generally were designed to address fundamental human issues, such as what people want out of life or why it is hard to be human. Unfortunately, as vague concepts were rejected, their underlying purposes also became relatively unfashionable.

The Second Wave

In the late 1960s, neo-behaviorists began to abandon simple associative concepts of learning in favor of more flexible mediational principles and mechanistic computer metaphors. The new cognitive psychology established a much more liberal theoretical approach that appealed to hypothesized internal psychological machinery.

The failure of S-R learning theory was paralleled by Skinner's (1957) failure to provide an empirically adequate analysis of language and cognition. This failure is especially poignant because "radical" behaviorism overthrew the Watsonian restriction against the direct scientific analysis of thoughts, feelings, and other private events. Skinner did so (1945) on the grounds that a behavioral analysis of scientists themselves was necessary (thus the word "radical") and when that analysis was made it was clear that scientific objectivity depended not on the target or location of analyzed events but on the nature of the contingencies controlling the observations of them. Objectivity could occur in the analysis of private events, and scientifically unacceptable subjectivity could occur in the analysis of publicly observed events (or vice versa). That fundamental break with the Watsonian tradition (under the entirely inappropriate label of "radical behaviorism") was not appreciated for what it was because Skinner's analysis of language and cognition led him to conclude that while a scientifically valid study of thoughts and feelings was possible, it was not needed to understand overt behavior. Language and cognition was conceived of as simple operant behavior and as such it added nothing fundamentally new to the contingency stream surrounding other behaviors. Thus, a door was opened by Skinner, but few behavior analysts walked through it or would have had any reason to do so.

Behavior therapists knew they needed to deal with thoughts and feelings in a more direct and central way. In the context of the failure of both associationism and behavior analysis to provide an adequate account of human language and cognition, the seeds planted by early cognitive mediational accounts of behavior change (e.g., Bandura, 1969) quickly flowered into the cognitive therapy movement (e.g., Beck, Rush, Shaw, & Emery, 1979; Mahoney, 1974; Meichenbaum, 1977). Methodological behaviorism provided a ready means for the transition from the first to the second wave of behavior therapy: "One can study inferred events or processes and remain a behaviorist as long as these events or processes have measurable and operational referents" (Franks & Wilson, 1974, p. 7). Some neo-behaviorists objected that cognition had been dealt with all along (e.g., Wolpe, 1980), but this objection was ignored because what was more at issue was the centrality of cognition and the flexibility needed to deal with it in a more natural way. Early cognitive behavior therapies addressed cognition from a direct, clinically relevant point of view. Certain cognitive errors seemed characteristic of patient populations, and research proceeded directly to the identification of these errors and the methods needed to correct them.

Some of the central themes of the first wave of behavior therapy were carried forward into the second, including the focus on content changes, or what has been called “first-order” change. In the second wave, irrational thoughts, pathological cognitive schemas, or faulty information-processing styles would be weakened or eliminated through their detection, correction, testing, and disputation, much as anxiety was to be replaced by relaxation in the first wave. Beck, for example, said: “Although there have been many definitions of cognitive therapy, I have been most satisfied with the notion that cognitive therapy is best viewed as the application of the cognitive model of a particular disorder with the use of a variety of techniques designed to modify the dysfunctional beliefs and faulty information processing characteristic of each disorder” (Beck, 1993, p. 194).

Some leaders of the second-wave therapies meant to present an alternate model to both psychoanalysis and the first wave of behavior therapy. Aaron Beck was particularly clear about this, asking the rhetorical question, “Can a fledgling psychotherapy challenge the giants in the field—psychoanalysis and behavior therapy?” (1976, p. 333). Despite that rhetoric, behavior therapy expanded to absorb the innovation. Most therapists within organizations like the Association for Advancement of Behavior Therapy seemed to resolve the tension between the two waves by taking a very large step in the direction of cognitive therapy, but stopping just short of abandonment of the first-wave sensibilities through the use of the “cognitive-behavior therapy” (CBT) label. Behavioral principles were given much less emphasis, and cognitive concepts were given much more, but nothing seemed to prohibit the use of empirically supported first-order change methods aimed at overt behavior, emotion, and cognition, depending on the specific situation and preferences of the analyst. In that way, the second wave largely assimilated the first.

Contexts Supporting a New Wave of Behavior Therapy

When a discipline is markedly successful, it tends to continue in the same direction for a time without a serious examination of its assumptions because adherents have interesting work to do and rewards for doing that work. Eventually, however, these assumptions themselves begin to be examined. Anomalies gradually emerge that undermine the dominant paradigm. Younger members of disciplinary paradigms are less bound to previous assumptions and are thus more prone to question them. Earlier battles and divisions that were never resolved can reemerge if previous minority views once again regain a foothold.

When basic assumptions and models begin to be questioned, the discipline enters into a creative but slightly disorienting time in which new formulations emerge and compete with older ones without a broad consensus about the value of these new approaches. The behavioral and cognitive therapies seem to be in such a stage. There are multiple reasons, but two will be described here.

Anomalies. According to the traditional narrative of the second wave, the limitations of previous behavioral methods and conditioning models were

largely corrected by the addition of cognitive change methods and models. While giving cognitive variables increased weight is generally acknowledged to have been a step forward, various anomalies are forcing a reexamination of certain aspects of this traditional narrative, particularly the core idea that direct cognitive change is a necessary or primary method of clinical improvement in most cases. A large component analysis study (Gortner, Gollan, Dobson, & Jacobson, 1998; Jacobson et al., 1996) showed that with depression “there was no additive benefit to providing cognitive interventions in cognitive therapy” (Dobson & Khatri, 2000, p. 913; cf. Zettle & Hayes, 1987). The explicitly contextualistic “behavioral activation” model that has emerged from this work (Martell et al., 2001) has the potential to be more readily disseminated than cognitive therapy (Hollon, 2001). The response to traditional cognitive therapy often occurs before the presumptively key features have been adequately implemented (Ilardi & Craighead, 1994). There are a variety of possible reasons for this (Tang & DeRubeis, 1999), but on balance this disturbing finding is not yet adequately explained (Ilardi & Craighead, 1999; G. T. Wilson, 1999). Support for the hypothesized mediators of change in CT is uneven (e.g., Burns & Spangler, 2001; Morgenstern & Longabaugh, 2000), particularly in areas that are causal and explanatory rather than descriptive (R. Beck & Perkins, 2001; Bieling & Kuyken, 2003). Finally, well-supported learning accounts of major disorders have arisen to challenge traditional cognitive accounts, but while still recognizing the important role of cognition (e.g., Bouton, Mineka, & Barlow, 2001).

Philosophy of science changes. The majority of well-known cognitive and behavioral therapies in the first and second wave are relatively mechanistic. This is most obvious in models that literally appeal to computers as a working metaphor, but it is true of other models as well. From a mechanistic point of view, human complexity is thought to be built up of elementary parts, relations, and forces (e.g., in the nervous system; or in cognitive mechanisms) and the goal of science is to model those elements in a comprehensive way. Suppose a particular thought is argued to be associated with an undesirable life adjustment (e.g., a particular thought may supposedly be leading to aversive emotions or ineffective actions). In second-wave interventions, the content of this thought is usually directly targeted: the logical flaws inherent in its content might be pointed out; the truth of the thought might be tested; or alternative reconstructions might be trained. All of these presuppose that the form, frequency, or situational sensitivity of the thought itself leads directly to emotional and behavioral effects — an inherently mechanistic assumption.

The rise of constructivism and similar postmodernist (and post-postmodernist) theories have weakened the idea that scientific theories identify discrete parts of reality that can then be organized into comprehensive models (Hayes, Hayes, Reese, & Sarbin, 1993). These changes in philosophy of science have gradually weakened the assumptive base of both the first and second wave of behavioral and cognitive therapies and their underlying theories (e.g., Jenkins, 1974) in favor of a more instrumentalist and contextual approach (Moore,

2000). Changes within the thinking of earlier proponents have sometimes revealed that same process (e.g., compare Beck, Rush, Shaw, & Emery, 1979, with Emery & Campbell, 1986; or Mahoney, 1974, with Mahoney, 2000).

A broader, more contextual focus was also supported by weakening of the FDA model that coincided with and heavily influenced the second wave, particularly through federal funding linked to the treatment of highly specified syndromes. Over time it has become clear that many treatments (both pharmacological and psychotherapeutic) have broad effects, and pathological processes tend to be similarly broad in their prevalence and impact. As these data were absorbed, some research clinicians began to think in terms of more general models and treatment approaches, which set the stage for an empirical analysis of second-order, not merely first-order, change strategies.

Factors such as these can set the stage, but change requires new ideas and innovations. These have come, and from all corners of behavior therapy. From the more behavioral side, exposure-based therapies began to focus more on contact with internal events (Barlow, 2002), seeking to alter the function of these events, not necessarily their form per se. This, along with other findings (e.g., Adler, Craske, & Barlow, 1987) gradually led to a more contextual rather than simple eliminative approach (e.g., Bouton, Mineka, & Barlow, 2001). The positive outcomes for DBT (Linehan, 1993; see Hayes, Masuda, Bissett, Luoma, & Guerrero, 2004, for a recent outcome review) provided strong support for the role of both acceptance and change and for the value of mindfulness in behavior therapy (Hayes, Follette, & Linehan, 2004; Hayes, Jacobson, Follette, & Dougher, 1994). In the cognitive wing, attentional and metacognitive perspectives (e.g., Wells, 1994) began to shift the focus from first-order cognitive change. This shift undermined the idea that the form or frequency of specific problematic cognitions were key, focusing instead on the cognitive context and coping strategies related to these specific thoughts. More emphasis began to be given to contacting the present moment (e.g., Borkovec & Roemer, 1994), similarly redirecting treatment from first-order change to the psychological context in which cognition occurs. Finally, Mindfulness-Based Cognitive Therapy (Teasdale et al., 2002) provided dramatic evidence that it was possible to alter the function of thoughts without first altering their form.

ACT is in line with these same changes. In the next section I will describe ACT—its theoretical and philosophical base; its techniques; and a smattering of data relevant to it. In so doing, I do not wish to imply any primacy for ACT in the changes that seem to be occurring. Nevertheless, the discussion of ACT will be useful for our final task: characterization of the new wave of the behavioral and cognitive therapies.

The Theoretical and Philosophical Basis of ACT

ACT is neither from the first wave of behavior therapy nor the second, although it builds upon both. In this section, we will describe the philosophical

and theoretical underpinnings of ACT. Because of its shorthand nature, this summary is necessarily dense—more complete explications can be found in book form elsewhere (e.g., Hayes et al., 1999; Hayes et al., 2001).

ACT Philosophy: Functional Contextualism

Although it is clearly post-Skinnerian, ACT is part of the behavior analytic tradition and thus is linked to radical behaviorism. “Radical behaviorism” is a poor umbrella term for ACT, however, both because it is a name that begs for misunderstanding, and because ACT is based on only one of two fundamentally distinct philosophies that continue to co-occur under the “radical behaviorist” label.

A substantial amount of philosophical work was done to clarify the philosophical basis of ACT—clarifications that help define it as an approach that is neither first- nor second-wave behavior therapy. ACT (and, arguably, much of behavior analysis itself) is based on a variety of pragmatism known as functional contextualism (Biglan & Hayes, 1996; Hayes, Hayes, & Reese, 1988; Hayes et al., 1993). The core analytic unit of functional contextualism is the “ongoing act in context.” The core components of functional contextualism are (a) focus on the whole event, (b) sensitivity to the role of context in understanding the nature and function of an event, (c) emphasis on a pragmatic truth criterion, and (d) specific scientific goals against which to apply that truth criterion. ACT conceptualizes psychological events as a set of ongoing interactions between whole organisms and historically and situationally defined contexts. Removal of a client’s problematic behaviors from the contexts that participate in that event (e.g., merely analyzing manifested behavioral symptoms themselves) is thought to miss the nature of the problem and avenues for its solution. Reductionism of all kinds is resisted, whether that be reduction across levels of analysis (e.g., biological reductionism) or within the psychological domain (e.g., physicalistic definitions of behavior or contextual events).

The truth criterion of all forms of contextualism is successful working (Hayes et al., 1988). What is considered “true” is what works. In order to know what works, however, one must know what one is working toward: there must be the clear a priori statement of an analytic goal (Hayes, 1993). In contextualism, ultimate goals enable analysis (that is, they allow a pragmatic truth criterion to be applied)—they are not themselves the results of analysis. This means that while ultimate goals are foundational in contextualism, they can only be stated, not justified. There are two major types of contextualism, organized in terms of their goals (Hayes, 1993): descriptive contextualism (e.g., hermeneutics, dramaturgy, narrative psychology, feminist psychology, social constructionism, and the like), which seeks an appreciation of the participants in a whole event, and functional contextualism (e.g., behavior analysis), which seeks the prediction and influence of ongoing interactions between whole organisms and historically and situationally defined contexts. Analyses are sought that have precision (only certain terms and concepts

apply to a given phenomenon), scope (principles apply to a range of phenomena), and depth (they cohere across scientific levels of analysis, such as biology, psychology, and cultural anthropology).

In functional contextualism, “prediction and influence” is seen as a unified goal (analyses should help accomplish both simultaneously), and for that reason functional contextual analyses always include contextual variables. Accomplishing a goal of influencing behavior requires successful manipulation of events, and only contextual variables can be manipulated directly (Hayes & Brownstein, 1986). Stated another way, analyses that deal *only* in psychological dependent variables (e.g., emotion, thought, overt action) can never be fully adequate as measured against the pragmatic purposes of functional contextualism. Thus, the environmentalism of behavior analysis is not dogmatic, but pragmatic.

Fully explicating the implications of functional contextualism as a philosophy of science is not possible in the present article (see Biglan & Hayes, 1996; Hayes et al., 1993; Hayes et al., 1988), but three features are worth mentioning here because they are echoed in ACT itself and because they provide a contrast to the mechanistic mainstream. First, functional contextualism is a realistic philosophy that nevertheless, on epistemological grounds, rejects ontology. ACT and RFT are not trying to find what is objectively true or real because we know the world only through our interactions in and with it, and these interactions are always historically and contextually limited. Instead, ACT and RFT are theories and interventions designed to make a particular difference, and they are “true” only to the degree that they do so. In a parallel way, ACT clients are encouraged to abandon any interest in the literal truth of their own thoughts or evaluations; instead, they are encouraged to embrace a passionate and ongoing interest in how to live according to their values. Second, functional contextualism is holistic and context focused—no event affects another in a mechanical way. In ACT there is a conscious posture of openness and acceptance toward all psychological events, even if they are formally “negative,” “irrational,” or even “psychotic”: The issue is not the presence of any particular event, but in its contextually established function and meaning. Finally, the foundational nature of goals in contextualism is reflected in the ACT emphasis on chosen values as a necessary component of a meaningful life (and indeed a meaningful course of treatment).

Basic ACT Theory: Relational Frame Theory

The single biggest failure of the first wave of behavior therapy was failing to deal adequately with cognition. This was not the fault of behavior therapy so much as S-R learning theory and behavior analysis, which had both stumbled in this domain. The second wave dealt with the topic, but did so either by adopting a more clinically based approach, which undermined the link between behavior therapy and basic theory, or by embracing a relatively mechanistic cognitive psychology (based on “information processing” and computer metaphors), which emphasizes the arrangement of dependent vari-

ables that enable prediction rather than differentially emphasizing those contextual variables that can be directly manipulated in the service of psychological change.

ACT takes a third and entirely new path. ACT is built on a functional contextual program of basic research on language and cognition: Relational Frame Theory (Hayes et al., 2001). The presence of such a research program allows a new, post-Skinnerian approach to language and cognition that attempts to provide manipulable basic principles for all forms of cognitive intervention.

According to RFT, the core of human language and cognition is the ability to learn to relate events under arbitrary contextual control. Nonarbitrary stimulus relations are those defined by formal properties of related events. If one object looks the same as another, or bigger than another, a wide variety of animals would be able to learn that relation and then show it with new objects that are formally related in the same way (Reese, 1968). Human beings seem especially able to abstract the features of such relational responding and bring them under contextual control so that relational learning will transfer to events that are *not* necessarily related formally but rather are related on the basis of these arbitrary cues (“arbitrary” in this context means “by social whim or convention”). For example, having learned that “x” is “smaller than” “X,” humans may later be able to apply this stimulus relation to events under the control of arbitrary cues (such as the words “smaller than”). A very young child will know, say, that a nickel is bigger than a dime, but a slightly older child will learn that a nickel is “smaller than” a dime by attribution, even though in a formal sense it is not.

There are three main properties of this kind of relational learning. First, such relations show mutual entailment or “bidirectionality.” If a person learns that A relates in a particular way to B in a context, then this must entail some kind of relation between B and A in that context. For example, if a person is taught that hot is the same as boiling, that person will derive that boiling is the same as hot. Second, such relations show combinatorial entailment: if a person learns in a particular context that A relates in a particular way to B, and B relates in a particular way to C, then this must entail some kind of mutual relation between A and C in that context. For example, if by attribution a nickel is smaller than a dime and a dime is smaller than a quarter, then it will be derived that a quarter is bigger than a nickel and a nickel is smaller than a quarter. Finally, such relations enable a transformation of stimulus functions among related stimuli. If you need to buy candy and a dime is known to be valuable, it will be derived that a nickel will be less valuable and a quarter will be more valuable, without necessarily directly purchasing candy with nickels and quarters. When all three features are established with a given type of relational responding, we call the performance a “relational frame.”

What makes relational framing clinically relevant is that functions given to one member of related events tend to alter the functions of other members. Suppose a child has never before seen or played with a cat. After learning

“C-A-T” → animal, and C-A-T → “cat” the child can derive four additional relations: animal → C-A-T, “cat” → C-A-T, “cat” → animal, and animal → “cat.” Now suppose that the child is scratched while playing with a cat, cries and runs away. Later the child hears mother saying, “Oh, look! A cat.” Now the child again cries and runs away, even though the child was never scratched in the presence of the words “Oh, look! A cat.” Indeed, in this example, the oral name never was trained in the presence of the animal. Such effects may help explain why, for example, people can have an initial panic attack while “trapped” in a shopping mall, and soon find that they are worrying about being “trapped” in an open field or on a bridge. What brings these situations together is not their formal properties in a simple sense, but the verbal/cognitive activities that relate these events.

For simplicity sake, RFT has been presented here without significant citation but it is one of the most active research areas in basic behavior analysis over the last decade, and scores of studies (reviewed in Hayes et al., 2001) have tested and found support for its basic claims. According to RFT, human language and cognition are both dependent on relational frames. When we think, reason, speak with meaning, or listen with understanding, we do so by deriving relations among events—among words and events, words and words, events and events. Unlike Skinner’s verbal operants, what is unique about relational operants is that they alter how direct learning processes themselves work. For example, the transformation of stimulus functions alters how stimulus control operates since now events can acquire functions through indirect, relational (i.e., “cognitive”) means. Thus, unlike Skinner’s account, according to RFT it is not just possible, it is necessary to analyze cognition in order to understand human behavior. This insight corrects the mistake of the first wave, but provides a contextual way forward that differs from the more mechanistic approach of the second.

Applied ACT Theory: The Implications of RFT

Because RFT is a contextualistic theory of cognition, its clinical implications differ from those drawn from alternative conceptions of cognition. RFT can be used to generate innovative methods meant to accomplish the first-order change goals of traditional CBT (e.g., see Hayes et al., 2001, pp. 228–230), but given the purpose of the present article, the relevance of RFT to ACT will be emphasized.

RFT points directly to the likelihood of cognitive fusion and experiential avoidance, the danger of suppression and disputation, the importance of cognitive defusion and experiential acceptance, the importance of certain senses of “self,” and the centrality of values, among other implications. All of these have been expanded into treatment approaches within ACT. Because of the limited space available, only a few of these implications will be explored here.

Experiential avoidance and the failure of suppression. One of the most pathological processes known is experiential avoidance: the attempt to escape

or avoid private events, even when the attempt to do so causes psychological harm (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). Emotion focused and avoidant strategies predict negative outcomes in depression (DeGenova, Patton, Jurich, & MacDermid, 1994), substance abuse (Ireland, McMahon, Malow, & Kouzekanani, 1994), the sequelae of child sexual abuse (Leitenberg, Greenwald, & Cado, 1992), and many other areas. Deliberate attempts to suppress thoughts and feelings can increase their occurrence and behavioral impact (Cioffi & Holloway, 1993; Clark, Ball, & Pape, 1991; Wegner, Schneider, Carter, & White, 1987), and can greatly complicate exposure-based strategies (Feldner, Zvolensky, Eifert, & Spira, 2003).

Although amplified by the culture, RFT suggests that such processes are built into human language and cognition itself. A nonhuman trying to avoid pain can do so readily by avoiding the situations in which it has occurred in the past. A human being does not have this option because relational frames allow pain to occur in almost any situation (via a transformation of stimulus functions) and their arbitrary contextual control prevents the success of purely situational solutions such as those followed by nonhumans. Thoughts of a recently dead spouse might be cued by pictures, depressed mood, a comment in a conversation, a beautiful sunset, or any of myriad other cues. Unable to control pain by situational means, humans begin to try to avoid the painful thoughts and feelings themselves. Unfortunately, many of these means (e.g., suppression) will ultimately themselves come to cue the avoided event because they strengthen the underlying relational frames (“don’t think of x” will serve as a contextual cue for “x” and the psychological presences of the actual event it is related to).

Cognitive fusion. Relational networks are extraordinarily difficult to break up, even with direct, contradictory training (Wilson & Hayes, 1996), in part because myriad derived relations are available to maintain and reestablish a given relational network. In practical terms this means that elaborated relational networks rarely really go away — they are simply further elaborated. Detecting that one is deriving coherent relational networks (e.g., learning that one is “right”), or that relating events is leading to effective outcomes (e.g., learning that one has “solved the problem”), and similar processes in essence provide automatic reinforcement for the action of deriving stimulus relations. As a result, it is very difficult to slow down language and cognition once it is well established, despite its originally instrumental nature. This combination of features means that stimulus functions from relational frames typically dominate over other sources of behavioral regulation in humans without any awareness of the process involved (what we term “cognitive fusion”), making an individual less in contact with here-and-now experience and direct contingencies and more dominated by verbal rules and evaluations (Hayes, 1989). Through a transformation of stimulus functions, the environment will seemingly “contain” stimulus functions that are dependent on relational frames, without the relational process itself necessarily being evident. The fearful person who constructs a fearful environment will act as if that fearsomeness

has been discovered, not constructed. Because behavior governed by relational networks is notoriously insensitive to contradictory experiences (e.g., Hayes, Brownstein, Zettle, Rosenfarb, & Korn, 1986), very ineffective verbal formulations can continue to create harm even when little environmental support is provided for them.

These kinds of phenomena are precisely why the cognitive revolution occurred in behavior therapy in the first place, but because of mechanistic assumptions it was thought that an undesirable thought → action or emotion → action relation should be modified by changing the form, frequency, or situational sensitivity of private events themselves. RFT suggests a third-wave alternative: change the contexts that support a thought → action or emotion → action relation (or an emotion → thought → action relation, and any similar variants). Experiential acceptance and cognitive defusion are prime examples of ACT techniques that attempt to do just that.

Acceptance and Commitment Therapy

The general clinical goals of ACT are to undermine the grip of the literal verbal content of cognition that occasions avoidance behavior and to construct an alternative context where behavior in alignment with one's value is more likely to occur. ACT has been described in book-length form (Hayes et al., 1999) and the other articles in this issue will provide additional details. Thus, in the present article we will focus only briefly on the components of ACT, giving the barest of examples of their content and intellectual rationale.

Therapeutic Assumptions and Clinical Stance

ACT assumes that dramatic, powerful change is possible and possible quickly, because it is the general context and purpose of action that is the true problem, not the historically produced and well-conditioned content of life difficulties. What the client is feeling, thinking, remembering, or otherwise experiencing is never assumed to be the core difficulty, even though human beings will initially focus on difficult content as the core of their problems. For instance, "anxiety" is not assumed to be the problem in "anxiety disorders"; "mood" is not assumed to be the problem in "mood disorders"; "thought" is not assumed to be the problem in "thought disorders," and so on. In ACT, it is the tendency to take these experiences literally and then to fight against them that is viewed as harmful.

ACT therapists assume that it is neither possible nor healthy to attempt to rescue clients from the difficulty and challenge of growth. It is inherently difficult to be a human being. ACT therapists compassionately accept no reasons and stories as "true" if these stories are functionally useless or harmful, regardless of their reasonableness. The issue is workability, not reasonableness. This applies as well to ACT itself, and thus it is more important as an ACT therapist to do as you say than to say what to do. For example, if the client is trapped, frustrated, confused, afraid, angry, or anxious, the ACT stance

suggests that this is not so much a problem as it is an opportunity to work on how powerful events in the here and now can become barriers to growth. In exactly the same way, if the therapist feels trapped, frustrated, confused, afraid, angry, or anxious, it is the therapist's job to open up to these experiences, recognizing the humanizing opportunity they provide to put themselves into the shoes of their clients and to do the same work without avoiding or moving one up. Because of this quality, the therapeutic relationship is important, powerful, and deliberately equal in ACT.

Skepticism about the value of "truth" is pervasive. ACT therapists are cautioned not to argue or persuade. The issue is the client's life and the client's experience, not opinions and beliefs, however well meant. The issue is always the function of events, not their decontextualized form or frequency. The key question is thus "What is this in the service of?" not "Is this true or false?"

The key goal of ACT is to support the client in feeling and thinking what they directly feel and think already, as it *is*, not as what it *says it is*, and to help the client move in a valued direction, *with* all of their history and automatic reactions. ACT techniques are simply means designed to find a psychological context from which that is possible. The process of ACT is a cycle of detecting cognitive fusion and avoidance, defusing and letting go (thus establishing new, more flexible functions for these events) and moving in a valued direction in a way that builds larger and larger patterns of effective behavior.

ACT therapists are passionately interested in what the client truly wants, but not necessarily with the means that the culture specifies for achieving these ends. It is this distinction that allows ACT therapists to compassionately confront unworkable agendas without invalidation because the client's experience is respected as the ultimate arbiter. For example, typically an anxiety-disordered person wants to get rid of anxiety. It could be experienced as invalidating to refuse to work directly on that desired outcome. At another level, however, the anxious client wants to get rid of anxiety in order to do something such as living a vital human life. Lack of anxiety is not the ultimate goal — it is a means to an end. Since often it has failed as a means, ACT suggests abandoning that means — simply because the client's own experience suggests its unworkability. Furthermore, ACT provides something else that the client can do with these previously avoided or fused events, while moving directly and quickly to the ultimate goal (e.g., establishing relationships, participating, contributing). The larger message thus is validating (trust your experience) and empowering (you can live a powerful life from here, without first winning a war with your own history).

As a general style, ACT relies on relatively nonlinear uses of language, since language processes themselves (at least in certain contexts) are thought to be the primary source of rigid and ineffective repertoires. Thus ACT relies heavily on paradox, metaphors, stories, exercises, behavioral tasks, and experiential processes, while logical analysis has a relatively limited role.

Techniques

There are several specific domains of ACT intervention, and each has its own specific methodology, exercises, homework, and metaphors.

Confronting the system. ACT seeks to identify the strategies that the client has employed until this point to “solve the problem” and see whether these methods are working. If they have not been truly solving the problem, ACT therapists ask the client to consider the possibility that maybe the problem is not the techniques but their very purpose. In essence, ACT often begins by challenging the linguistic set that defines both problems and their potential solutions, because that set is itself viewed to be a problem. The “person in the hole” metaphor provides a model of this part of ACT:

“The situation you are in seems a bit like this. Imagine that you’re placed in a field, wearing a blindfold, and you’re given a little bag of tools. You’re told that your job is to run around this field, blindfolded. Unknown to you, in this field there are a number of widely-spaced, fairly deep holes. So you start running around and sooner or later you fall into this large hole. You feel around and there are no escape routes you can find. So you reach into your bag and find a shovel. So you start digging, but pretty soon you notice that you’re not out of the hole—the hole is bigger. So you try digging faster, or with big scoops. But it is not working. So you come in to see me thinking, *Maybe he has a really huge shovel—a gold-plated steam shovel.* Well, I don’t. And even if I did I wouldn’t use it because digging is not a way out of the hole—digging is what makes holes. So maybe the whole thing is a big setup—a rigged game.”

Control is the problem. In the world of common sense, if we do not want something, we must figure out how to get rid of it. Controlling strategies are taught repeatedly and in most domains they work quite well. In the world of private events, however, it might work differently because of the nature of relational frames. For example, deliberately not thinking of something usually fails because the rule (“don’t think of x”) contains the avoided item. Similarly, if it is essential not to feel anxious, anxiety is something to be anxious about. In this part of ACT a simple idea is put on the table: conscious, deliberate, and purposeful control simply may not work very well with regard to the private experiences the client has been targeting. The polygraph metaphor provides a model of this part of ACT:

“Suppose I had you hooked up to the world’s most sensitive polygraph machine and I told you that I had a very simple task for you to perform: stay relaxed. However, I

want you to try hard, so I am going to hold a loaded .44 Magnum to your temple. If you get nervous, I'm sorry but I'm going to have to pull the trigger. What you think might happen here?"

In unpacking this metaphor (and similar metaphors or exercises), the client is asked to consider the possibility that a virtually impossible task has been adopted: controlling automatic thoughts, feelings, and memories.

Cognitive defusion and mindfulness. It is difficult to find an alternative to conscious control until the illusion of language is penetrated, because language itself provides conscious control as a method of problem solving. This comedic comment is right on target: "I used to think my mind was my most important organ, until I noticed what was telling me that."

From an RFT perspective, the literal functions of language and cognition are not automatic or mechanical: they are contextual. Because of derived stimulus relations and transformation of stimulus functions, thoughts often function as if they are what they say they are. The thought "I am bad" can seem to mean that the person is dealing with *being* bad, not with thinking "I am bad." CBT has always known this, but the solution has been to challenge, test, or analyze the content of these thoughts. Instead, ACT alters their context.

Cognitive defusion techniques erode the tight verbal relations that establish stimulus functions through relational learning (Hayes et al., 1999; Hayes & Wilson, 1994). A classic ACT defusion technique is the "milk, milk, milk" exercise, first used by Titchener (1916, p. 425). It consists of an exploration of all of the properties of a single word. For example "milk" is white, creamy, and so on. This word is then said out loud by the therapist and client rapidly for about a minute. In the context of rapid repetition, it quickly loses all meaning and becomes just a sound. Often the exercise is repeated with a single word variant of a core clinical concern or troublesome thought the specific client may have (e.g., mean, stupid, weak, etc.; see Masuda, Hayes, Sackett, & Twohig, 2004). The experiential point is that thoughts do not mean what they say they mean, and while it may not be possible or healthy to experience their referents, it is always possible to experience them as an ongoing process if the context in which they are occurring is changed.

Mindfulness exercises are another means to achieve cognitive defusion and thus to increase behavioral flexibility. Contacting events in the here and now without buying into evaluative and judgmental language is the very essence of mindfulness (Kabat-Zinn, 1994, p. 4). This requires a weakening of literal language, which cannot be done in a purely logical, analytical, or critical manner. Metaphorically, mindfulness teaches clients to look at thoughts as events in the world, not at the world as structured by thoughts. A variety of mindfulness exercises are used in ACT, such as imagining watching one's thoughts as they float by like leaves on a stream, and watching how this becomes impossible when these thoughts are taken literally.

A transcendent sense of self. Difficult thoughts and feelings create an illusion

that they are dangerous. That is precisely why we name our disorders after them (e.g., “anxiety disorders”). It is not realistic to ask clients to experience them without providing a safe place from which that is possible. Language itself provides such a place: the continuity of consciousness that emerges from perspective taking (Hayes, 1984). RFT claims that its source is deictic relational frames such as I-you; here-there; and now-then—a claim that has been tested in young children (Hayes et al., 2001; McHugh & Barnes-Holmes, in press). In one sense of the term, “you” are “from-here-now” and once this perspective is acquired it never changes. The lack of experienced limits or variations in “I-here-now” forms a direct experiential basis for human spirituality (Hayes, 1984). Because “as seen from here, now” never changes (there is no other perspective from which to experience events consciously), and its limits are never consciously contacted (by definition), there is a dimension of human experience that is not thing like (or, as from an Eastern perspective, “everything/nothing”).

The observer exercise (a variant of the self-identification exercise developed by Assagioli, 1971, pp. 211–217) is a key eyes-closed ACT exercise designed to promote experiential contact with this transcendent sense of self. The person is asked to become aware of present sensations, and then is asked to remember something that happened a few months earlier and to become intensely aware of what that experience felt like. Then the person is asked to notice (not as a belief, but as a direct experience) that a person (“you”) is here now, and a person experienced those events some months ago. The actual experiential continuity between the person “behind the eyes” is emphasized (“you have been you your whole life”). From this “observer perspective” a variety of domains are examined (e.g., bodily sensations, roles, emotions, thoughts, memories). In each case, the rapidly changing content of experiences is contrasted with the continuity of consciousness itself. For example:

“Now let’s go to another area: emotions. Notice how your emotions are constantly changing. Sometimes you feel calm and sometimes tense, sometime joyful and sometimes sorrowful. Sometimes happy. Sometimes sad. Even now you may be experiencing emotions . . . interest, boredom, relaxation, fear. The only thing you can count on with emotions is that they will change. And yet while these emotions come and go, notice that in some deep sense the ‘you’ that looks out from behind those eyes does not change. You have been you your whole life. I’m not asking you to believe this—I’m asking you to look at your experience. If your emotions are constantly changing and yet the you that you call you is not, it must mean that while you have emotions you do not experience yourself to simply *be* your emotions. [Leave a brief period of silence.] So just notice your emotions for a moment and as you do so notice also who is noticing them.”

After several domains are covered (roles, thoughts, bodily sensations, memories), the punch line is simple: “The things you’ve been struggling with and trying to change are not *you* anyway.” Knowing that there is an unchanging transcendent sense of self (not self as an object, but one that is no-thing) helps provide a safe place from which to experience fearsome psychological content with less concern that psychological harm or even psychological obliteration could result.

Acceptance and willingness. Etymologically, acceptance means “to take what is offered.” In ACT, acceptance is not merely tolerance—it is the active nonjudgmental embracing of experience in the here and now. Acceptance is not possible without defusion. Literal language is referential and for that reason is always about “there and then”—something else, some other time. Even the word “now” refers to the now just experienced, not the now that exists now. Acceptance means actively experiencing events, as they are and not as what they *say* they are. This means feeling feelings as feelings; thinking thoughts as thoughts, sensing sensations as sensations, and so on, here and now.

Acceptance inherently involves “exposure” and thus ACT connects with all of the exposure-based behavior therapies (a point I will pick up again later) but not for an emotional regulatory purpose. Feeling a feeling to get it to diminish involves a simultaneous process of feeling, and cognitively fused processes of measuring, evaluating, and comparing, such as, “I am feeling this much anxiety, which is more (or less) than it was and this is good (or bad).” Acceptance and willingness in ACT lead to a different kind of exposure: experiencing actively and fully in the present, moment by moment, for the proximal purpose of experiencing actively and fully in the present, moment by moment.

Values. The emphasis on values distinguishes ACT from many alternative treatments. It is only within the context of values that action, acceptance, and defusion come together into a sensible whole. Indeed, ACT therapists often do values clarification work before other ACT components for that reason. Values are qualities of action that can be instantiated in behavior but not possessed like an object. ACT therapists ask their clients, “What do you want your life to stand for?” In this phase of treatment a client is asked to list values in different life domains such as family, intimate relationships, health, spirituality, and so on. Various evocative exercises are used to develop more clarity about fundamental values. For example, the ACT therapist may ask the client to write out what he or she would most like to see on his or her tombstone, or the eulogy he or she would want to hear at his or her own funeral. In essence, this focuses verbal processes away from literal truth toward psychological meaning and motivation. When values are clarified, achievable goals that embody those values, concrete actions that would produce those goals, and specific barriers to performing these actions are identified.

Values dignify the need for acceptance of specific painful thoughts and feelings because it is only that they have arisen as barriers that requires that they be embraced. ACT is not about endless emotional wallowing; rather, it involves taking in what one’s history offers in the process of living a valued life.

Commitment. ACT seeks to build larger and larger patterns of flexible and effective responding, both by removing the repertoire-narrowing effects of cognitive fusion and experiential avoidance and by promoting deliberate patterns of action that comport with chosen values. ACT involves learning a generalized strategy of moving forward toward valued ends, dissolving psychological barriers through defusion and acceptance and dissolving situational barriers through direct action. A variety of techniques are used, drawn from the larger armamentarium of traditional behavior therapy. For example, clients may be asked to establish specific goals, to make public and concrete commitments, and to work toward these goals in small steps. As its very name implies, ACT is thus as much a change-oriented strategy as an acceptance-oriented one. Similar to DBT, the “acceptance and change dialectic” (Linehan, 1993) is maintained as a central focus throughout ACT work.

ACT Empirical Findings

A review of ACT (and DBT and FAP) outcomes has recently appeared in this journal (Hayes, Masuda, et al., 2004), so no comprehensive restatement seems necessary. Although clearly preliminary, the ACT outcome literature already seems unusually broad, involving effectiveness studies and efficacy studies in depression, psychosis, substance use disorders, chronic pain, eating disorders, work-related stress, and other problems (see Hayes, Masuda, et al., 2004). The present issue reveals that breadth very dramatically. The theory underlying ACT explains this breadth. RFT suggests that language itself has created the problems ACT is trying to solve. If so, all verbal human beings are confronting these problematic processes on a daily basis. If ACT targets them effectively, its clinical spread should be very large indeed.

Tests of the theory underlying ACT and process research explaining ACT outcomes are also young, but there is some support for the idea that ACT produces an unusually rapid decrease in the believability (but not necessarily the frequency) of negative thoughts (e.g., Bach & Hayes, 2002; Zettle & Hayes, 1986), the opposite of what is usually expected in CBT. These decreases in the believability of negative thoughts, whether or not frequency changes are expected, are based on the concept of “cognitive defusion” and are specifically associated with positive ACT outcomes (e.g., Bach & Hayes, 2002). ACT also produces an increased willingness to experience negative private events—a process that is also associated with positive ACT outcomes (e.g., Bond & Bunce, 2000). Articles in the present series also test both of these processes (e.g., Gifford et al., 2004—this issue; Hayes, Bissett, et al., 2004—this issue). Experimental psychopathology tests of the role of these processes are also beginning to appear, as the present issue demonstrates. The role of other core ACT processes (e.g., values; transcendent self) have not yet been evaluated experimentally.

From an ACT/RFT perspective it is the repertoire-narrowing effects of cognitive fusion and avoidance that are most harmful, because that narrowing

prevents new contingency-shaped behavior and undermines healthy forms of extinction. It is the acquisition of more flexible and less defensive styles of dealing with difficult thoughts, feelings, or sensations that reduces their harmful behavioral regulatory effect. This analysis shares features of other accounts, such as Teasdale et al.'s analysis of the impact of CT and MBCT (Teasdale et al., 2002) and Bouton et al.'s analysis of the mechanisms of conditioning in panic disorder (Bouton et al., 2001). Defusion and acceptance alter the functions of heretofore pathogenic thoughts and feelings and permit the acquisition of more flexible and effective response functions related to them, removing needless "safety behavior" or other forms of avoidance that diminish extinction. These same steps (treating thoughts as thoughts, undermining avoidance, focusing on new behaviors) are also echoed in Behavioral Activation (Jacobson, Martell, & Dimidjian, 2001), DBT (Linehan, 1993), modern interoceptive exposure methods (Barlow, 2002), and many of the other new behavior therapies. Traditional CBT also helps clients distance themselves from their thoughts (cognitive distancing is one of the first steps in traditional CT approaches) and then to behave in different ways toward them (e.g., for purposes of "hypothesis testing") in the earliest stages of CBT when clinical response is known to be particularly powerful despite the lack of focus on cognitive change per se (Hardi & Craighead, 1994). Thus, the processes targeted by the third wave may help explain some of the empirical anomalies of the second.

The Third Wave of Behavior Therapy

This discussion of ACT technology and ACT/RFT processes may orient us toward a few general features of the new generation of behavior therapy that seems to be emerging. *Grounded in an empirical, principle-focused approach, the third wave of behavioral and cognitive therapy is particularly sensitive to the context and functions of psychological phenomena, not just their form, and thus tends to emphasize contextual and experiential change strategies in addition to more direct and didactic ones. These treatments tend to seek the construction of broad, flexible, and effective repertoires over an eliminative approach to narrowly defined problems, and to emphasize the relevance of the issues they examine for clinicians as well as clients. The third wave reformulates and synthesizes previous generations of behavioral and cognitive therapy and carries them forward into questions, issues, and domains previously addressed primarily by other traditions, in hopes of improving both understanding and outcomes.* We will consider major components of this characterization below.

Grounded in an empirical, principle-focused approach. Despite worries in some corners (e.g., Corrigan, 2001), examination of the literature shows that the new-wave therapies have maintained a commitment to the empirical roots of behavior therapy (Hayes, Masuda, et al., 2004). This is true not just at the level of outcome, but also at the level of processes and principles. Commitment to theoretical development is notable in most of the new treatments. In

both of these areas, the third wave builds on the best of previous waves of development.

Contextual and experiential in addition to direct change strategies, focused on function over form. While not abandoning direct or even didactic change strategies, the most unique characteristic of the third-wave interventions is the degree of emphasis on contextual and experiential change strategies, including acceptance, defusion, mindfulness, relationship, values, emotional deepening, contact with the present moment, and the like. The purpose of experiential and contextual strategies of this kind is to rapidly alter the function of problematic psychological events, even if their form or frequency does not change or changes only slowly. Mindfulness-based and acceptance technologies show that focus quite clearly. For example, Segal, Teasdale, and Williams (2004) state: "Unlike CBT, there is little emphasis in MBCT on changing the *content* of thoughts; rather, the emphasis is on changing *awareness of and relationship to* thoughts" (p. 54; emphasis in the original). It is worth noting that this step is being taken both by techniques that are quite behavior analytic and thus philosophically contextualistic in their rationalization (e.g., Behavioral Activation, ICBT, DBT, ACT), and by techniques that are quite cognitive in their rationalization (e.g., MBCT). Indeed, procedures that helped foster the current wave of development in the first place, such as interoceptively oriented exposure-based therapies, have in turn increasingly emphasizing themes central to the third-wave interventions more generally (e.g., compare Barlow, 1988, to Barlow, 2002).

Construction of flexible and effective repertoires over elimination of narrowly defined problems. One of the main themes of both the first wave and second wave was a focus on eliminating specific problematic behaviors, thoughts, or emotions as a primary purpose of therapy. The third wave's broad focus on new and sometimes very generally applicable skills (e.g., mindfulness, acceptance, interpersonal deepening, emotional deepening, valuing, commitment) harkens back to the earliest days of behavioral thinking in which the construction of broad and flexible repertoires (Goldiamond, 1974) and an appeal to principles that underlie normal functioning were foundational in the understanding of abnormal behavior. Even with the most severe problems, the new behavior therapies tend to focus more on empowerment and repertoire enhancement than on pathologizing narrowly defined problem behaviors. For example, even persons coping with psychotic symptoms (e.g., Bach & Hayes, 2002) or dually diagnosed persons dealing with both borderline personality disorder and substance use disorder (Linehan, Dimeff, Reynolds, Comtois, Welch, & Heagerty, 2002) are treated in a skills building, relatively nonpathologizing way.

Emphasizing the relevance of the issues they examine for clinicians as well as clients. The reemergence of the relevance of normal processes can also be found in the relevance of these methods to therapists themselves. MBCT advocates suggest that mindfulness practice should be pursued by therapists; DBT underlines the importance of a peer consultation team to "treat the

therapist”; FAP advocates have argued that you “cannot teach what you cannot do”; ACT argues that acceptance and defusion are equally relevant to therapists themselves and necessary for effective ACT work; and so on. In part as a result, treatment is often radically nonhierarchical—the therapist and client are thought to be swimming in the same stream.

Synthesizing previous generations. It is very much worth noting that these changes are emerging from every wing of behavior therapy. This is important, because it is not that a behavioral model is becoming re-ascendant over a cognitive model. What seems to be happening is that the assumptive base of both the first and second wave is weakening, to be replaced by an altered set of assumptions for both. As this occurs, the mainstream itself is changed. In a kind of dialectical synthesis of a previous thesis and antithesis, third-wave therapies seem to be healing old wounds and divisions between behavioral and cognitive perspectives. Evidence for this view can be found in the synergies between technologies across the spectrum of third-wave interventions and in the ways that each of these new approaches has breadth across these divisions regardless of its home of origin. The third-wave interventions are not a rejection of the first and second waves of behavioral and cognitive therapy so much as a transformation of these earlier phases into a new, broader, more interconnected form. Thus, while the implications may be revolutionary, the processes giving rise to these developments are evolutionary—as might be expected in an explicitly empirical tradition.

Dealing with the questions, issues, and domains addressed by other traditions. These new treatments are breaking down some of the previously important distinctions between behavior therapy and older, less scientific traditions. In the current period, the issues and methods of less empirical traditions are actively on the table, but now from a scientific point of view, with an interest in coherent theory, carefully assessed processes of change, and solid empirical outcomes. Issues of spirituality, values, emotional deepening, and the like are now central in a way that was uncommon or even unwelcome before. What is resulting is recognizably part of the behavioral and cognitive therapy tradition, but is nevertheless linked to the issues and concerns of other traditions, including some of those (analytic, Gestalt, humanistic, existential) that were turned away from in the earliest days of behavior therapy.

Improving understanding and outcomes. It is not yet clear that this new wave of behavioral and cognitive therapy will achieve better outcomes. The ACT literature is too young to provide much of a guide, but there are examples that provide hope that these changes will make a difference in the effectiveness of behavior therapy. For example, as Borkovec’s treatment protocol for GAD has moved from traditional CBT (Borkovec & Mathews, 1988) to a package that includes such third-wave interventions as teaching clients to focus on the present moment, intrinsic values training, and interpersonal and emotional deepening, within-group effect sizes have improved nearly 80% (Borkovec & Sharpless, 2004). Similarly, IBCT seems to be producing results that exceed its second-wave progenitor, behavioral marital therapy (Christensen, Sevier,

Simpson, & Gattis, 2004). While these examples are not determinative, the fact that these new therapies have remained committed to the empirical values of the behavior therapy tradition means that it will be clear over time whether these changes are progressive as measured by clinical impact.

At the level of understanding, however, there seems to be growing evidence that these new methods are progressive. The present issue provides evidence on that point in the case of ACT. Third-wave models and methods make sense of previous outcomes and open up the behavior therapy tradition to new ideas in both basic and applied literatures. They have been driven by empirical developments and scientifically sensible ideas. They are logical next steps (Borkeovc & Sharpless, 2004).

Conclusion

Behavior therapy has been a great success story. True to its empirical commitments, it has been open to new ideas and willing to follow the data. It has also tended to expand its scope over time. The rise of mindfulness, acceptance, defusion, values, relationship, spirituality, and similar concerns, marks another phase of that expansion of scope that can be characterized in a number of ways. I have pointed to some of the apparent dimensions in the present article (second-order, contextual, constructional, experiential, flexible repertoires, and so on) but regardless of how it may be characterized, the breadth of current change and its deviation from core assumptions of earlier generations suggests that a new generation of behavioral and cognitive therapy has arrived. Whatever the source and ultimate outcome of these changes, it seems to mark a maturing of the behavior therapy tradition. The leading force for an empirical clinical approach over the last 50 years is once again expanding both its models and methods to include an even broader range of clinical issues and procedures under the “behavior therapy” umbrella. In the long run, this seems bound to change not just behavior therapy, but the entire field of mental health, substance abuse, and the psychological aspects of physical disease.

References

- Adler, C. M., Craske, M. G., & Barlow, D. H. (1987). Relaxation-induced panic (RIP): When resting isn't peaceful. *Integrative Psychiatry, 5*, 94–100
- Assagioli, R. (1971). *The act of will*. New York: Viking.
- Ayllon, T., Houghton, E., & Hughes, H. B. (1965). Interpretation of symptoms: Fact or fiction. *Behaviour Research and Therapy, 3*, 1–7.
- Bach, P., & Hayes, S. C. (2002). The use of Acceptance and Commitment Therapy to prevent the rehospitalization of psychotic patients: A randomized controlled trial. *Journal of Consulting and Clinical Psychology, 70*, 1129–1139.
- Bandura, A. (1969). *Principles of behavior modification*. New York: Holt, Rinehart, & Winston.
- Barlow, D. H. (1988). *Anxiety and its disorders: The nature and treatment of anxiety and panic*. New York: The Guilford Press.
- Barlow, D. H. (2002). *Anxiety and its disorders: The nature and treatment of anxiety and panic* (2nd ed.). New York: Guilford Press.

- Beck, A. T. (1976). *Cognitive therapy and the emotional disorders*. New York: International Universities Press.
- Beck, A. T. (1993). Cognitive therapy: Past, present, and future. *Journal of Consulting and Clinical Psychology, 61*, 194–198.
- Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*. New York: The Guilford Press.
- Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry, 4*, 561–571.
- Beck, R., & Perkins, T. S. (2001). Cognitive content-specificity for anxiety and depression: A meta-analysis. *Cognitive Therapy and Research, 25*, 651–663.
- Bieling, P. J., & Kuyken, W. (2003). Is cognitive case formulation science or science fiction? *Clinical Psychology: Science and Practice, 10*, 52–69.
- Biglan, A., & Hayes, S. C. (1996). Should the behavioral sciences become more pragmatic? The case for functional contextualism in research on human behavior. *Applied and Preventive Psychology: Current Scientific Perspectives, 5*, 47–57.
- Bond, F. W., & Bunce, D. (2000). Mediators of change in emotion-focused and problem-focused worksite stress management interventions. *Journal of Occupational Health Psychology, 5*, 156–163.
- Bookbinder, L. J. (1962). Simple conditioning vs. the dynamic approach to symptoms and symptom substitution: A reply to Yates. *Psychological Reports, 10*, 71–77.
- Borkovec, T. D., & Mathews, A. M. (1988). Treatment of nonphobic anxiety disorders: A comparison of nondirective, cognitive, and coping desensitization therapy. *Journal of Consulting and Clinical Psychology, 56*, 877–884.
- Borkovec, T. D., & Roemer, L. (1994). Generalized anxiety disorder. In R. T. Ammerman & M. Hersen (Eds.), *Handbook of prescriptive treatments for adults* (pp. 261–281). New York: Plenum.
- Borkovec, T. D., & Sharpless, B. (2004). Generalized anxiety disorder: Bringing cognitive behavioral therapy into the valued present. In S. C. Hayes, V. M. Follette, & M. M. Linehan (Eds.), *Mindfulness and relationship: Expanding the cognitive-behavioral tradition* (pp. 209–242). New York: The Guilford Press.
- Bouton, M. E., Mineka, S., & Barlow, D. H. (2001). A modern learning theory perspective on the etiology of panic disorder. *Psychological Review, 108*, 4–32.
- Burns, D. D., & Spangler, D. L. (2001). Do changes in dysfunctional attitudes mediate changes in depression and anxiety in cognitive behavioral therapy? *Behavior Therapy, 32*, 337–369.
- Christensen, A., Sevier, M., Simpson, L., & Gattis, K. (2004). Acceptance, mindfulness, and change in couple therapy. In S. C. Hayes, V. M. Follette, & M. M. Linehan (Eds.), *Mindfulness and relationship: Expanding the cognitive-behavioral tradition* (pp. 288–309). New York: The Guilford Press.
- Cioffi, D., & Holloway, J. (1993). Delayed costs of suppressed pain. *Journal of Personality and Social Psychology, 64*, 274–282.
- Clark, D. M., Ball, S., & Pape, D. (1991). An experimental investigation of thought suppression. *Behaviour Research and Therapy, 29*, 253–257.
- Corrigan, P. W. (2001). Getting ahead of the data: A threat to some behavior therapies. *the Behavior Therapist, 24*, 189–193.
- DeGenova, M. K., Patton, D. M., Jurich, J. A., & MacDermid, S. M. (1994). Ways of coping among HIV-infected individuals. *Journal of Social Psychology, 134*, 655–663.
- Dobson, K. S., & Khatri, N. (2000). Cognitive therapy: Looking backward, looking forward. *Journal of Clinical Psychology, 56*, 907–923.
- Emery, G., & Campbell, J. (1986). *Rapid relief from emotional distress*. New York: Rawson.
- Feldner, M. T., Zvolensky, M. J., Eifert, G. H., & Spira, A. P. (2003). Emotional avoidance: An experimental test of individual differences and response suppression using biological challenge. *Behaviour Research and Therapy, 41*, 403–411

- Franks, C. M., & Wilson, G. T. (1974). *Annual review of behavior therapy: Theory and practice*. New York: Brunner/Mazel.
- Freud, S. (1928/1955). Analysis of a phobia in a five-year-old boy (little Hans)/Analyse d'une phobie chez un petit garçon de cinq ans. (Le petit Hans.) *Revue Francaise de Psychanalyse*, 2, No. 3. Reprinted in *The complete psychological works of Sigmund Freud*. Translated by James Strachey, Vol 10. London: Hogarth.
- Gifford, E. V., Kohlenberg, B. S., Hayes, S. C., Antonuccio, D. O., Piasecki, M. M., Rasmussen-Hall, M. L., & Palm, K. M. (2004). Acceptance-based treatment for smoking cessation. *Behavior Therapy*, 35, 689–705.
- Goldiamond, I. (1974). Toward a constructional approach to social problems. *Behaviorism*, 2, 1–79.
- Gortner, E. T., Gollan, J. K., Dobson, K. S., & Jacobson, N. S. (1998). Cognitive-behavioral treatment for depression: Relapse prevention. *Journal of Consulting and Clinical Psychology*, 66, 377–384.
- Hayes, S. C. (1984). Making sense of spirituality. *Behaviorism*, 12, 99–110.
- Hayes, S. C. (Ed.). (1989). *Rule-governed behavior: Cognition, contingencies, and instructional control*. New York: Plenum.
- Hayes, S. C. (1993). Goals and varieties of scientific contextualism. In S. C. Hayes, L. J. Hayes, H. W. Reese, & T. R., Sarbin (Eds.), *The varieties of scientific contextualism* (pp. 11–27). Reno, NV: Context Press.
- Hayes, S. C., Barnes-Holmes, D., & Roche, B. (Eds.). (2001). *Relational Frame Theory: A Post-Skinnerian account of human language and cognition*. New York: Plenum Press.
- Hayes, S. C., Bissett, R., Roget, N., Padilla, M., Kohlenberg, B. S., Fisher, G., Masuda, A., Pistorello, J., Rye, A. K., Berry, K., & Niccolls, R. (2004). The impact of Acceptance and Commitment Training and multicultural training on the stigmatizing attitudes and professional burnout of substance abuse counselors. *Behavior Therapy*, 35, 821–835.
- Hayes, S. C., & Brownstein, A. J. (1986). Mentalism, behavior-behavior relations and a behavior analytic view of the purposes of science. *The Behavior Analyst*, 1, 175–190.
- Hayes, S. C., Brownstein, A. J., Zettle, R. D., Rosenfarb, I., & Korn, Z. (1986). Rule-governed behavior and sensitivity to changing consequences of responding. *Journal of the Experimental Analysis of Behavior*, 45, 237–256.
- Hayes, S. C., Follette, V. M., & Linehan, M. M. (2004). *Mindfulness and acceptance: Expanding the cognitive behavioral tradition*. New York: The Guilford Press.
- Hayes, S. C., Hayes, L. J., & Reese, H. W. (1988). Finding the philosophical core: A review of Stephen C. Popper's World Hypotheses. *Journal of Experimental Analysis of Behavior*, 50, 97–111.
- Hayes, S. C., Hayes, L. J., Reese, H. W., & Sarbin, T. R. (Eds.). (1993). *Varieties of scientific contextualism*. Reno, NV: Context Press.
- Hayes, S. C., Jacobson, N. S., Follette, V. M., & Dougher, M. J. (Eds.). (1994). *Acceptance and change: Content and context in psychotherapy*. Reno, NV: Context Press.
- Hayes, S. C., Masuda, A., Bissett, R., Luoma, J., & Guerrero, L. F. (2004). DBT, FAP, and ACT: How empirically oriented are the new behavior therapy technologies? *Behavior Therapy*, 35, 35–54.
- Hayes, S. C., Masuda, A., & De Mey, H. (2003). Acceptance and Commitment Therapy: een derde-generatie gedragstherapie. *Gedragstherapie*, 2, 69–96.
- Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (1999). *Acceptance and Commitment Therapy: An experiential approach to behavior change*. New York: The Guilford Press.
- Hayes, S. C., & Wilson, K. G. (1994). Acceptance and commitment therapy: Altering the verbal support for experiential avoidance. *The Behavior Analyst*, 17, 289–303.
- Hayes, S. C., Wilson, K. G., Gifford, E. V., Follette, V. M., & Strosahl, K. (1996). Emotional avoidance and behavioral disorders: A functional dimensional approach to diagnosis and treatment. *Journal of Consulting and Clinical Psychology*, 64, 1152–1168.

- Hollon, S. D. (2001). Behavioral activation treatment for depression: A commentary. *Clinical Psychology: Science & Practice*, 8, 271–274.
- Ilardi, S. S., & Craighead, W. E. (1994). The role of nonspecific factors in cognitive-behavior therapy for depression. *Clinical Psychology: Science and Practice*, 1, 138–156.
- Ilardi, S. S., & Craighead, W. E. (1999). Rapid early response, cognitive modification, and nonspecific factors in cognitive behavior therapy for depression: A reply to Tang and DeRubeis. *Clinical Psychology: Science and Practice*, 6, 295–299.
- Ireland, S. J., McMahon, R. C., Malow, R. M., & Kouzekanani, K. (1994). Coping style as a predictor of relapse to cocaine abuse. In L. S. Harris (Ed.), *Problem of drug dependence, 1993: Proceedings of the 55th annual scientific meeting*. (National Institute on Drug Abuse Monograph Series No. 141, p. 158). Washington, DC: U.S. Government Printing Office.
- Jacobson, N. S. (1997). Can contextualism help? *Behavior Therapy*, 28, 435–443.
- Jacobson, N. S., & Christensen, A. (1996). *Integrative couple therapy: Promoting acceptance and change*. New York: Norton.
- Jacobson, N. S., Christensen, A., Prince, S. E., Cordova, J., & Eldridge, K. (2000). Integrative behavioral couple therapy: An acceptance-based, promising new treatment for couple discord. *Journal of Consulting and Clinical Psychology*, 68, 351–355.
- Jacobson, N. S., Dobson, K. S., Truax, P. A., Addis, M. E., Koerner, K., Gollan, J. K., Gortner, E., & Prince, S. E. (1996). A component analysis of cognitive-behavioral treatment for depression. *Journal of Consulting and Clinical Psychology*, 64, 295–304.
- Jacobson, N. S., Martell, C. R., & Dimidjian, S. (2001). Behavioral activation treatment for depression: Returning to contextual roots. *Clinical Psychology: Science and Practice*, 8, 255–270.
- Jenkins, J. J. (1974). Remember that old theory of memory? Well, forget it. *American Psychologist*, 29, 785–795.
- Kabat-Zinn, J. (1994). *Wherever you go, there you are: Mindfulness meditation in everyday life*. New York: Hyperion.
- Kohlenberg, R. J., & Tsai, M. (1991). *Functional analytic psychotherapy: Creating intense and curative therapeutic relationships*. New York: Plenum.
- Leitenberg, H., Greenwald, E., & Cado, S. (1992). A retrospective study of long-term methods of coping with having been sexually abused during childhood. *Child Abuse and Neglect*, 16, 399–407.
- Linehan, M. M. (1993). *Cognitive-behavioral treatment of borderline personality disorder*. New York: The Guilford Press.
- Linehan, M. M., Dimeff, L. A., Reynolds, S. K., Comtois, K. A., Welch, S. S., & Heagerty, P. (2002). Dialectical behavior therapy versus comprehensive validation therapy plus 12-step for the treatment of opioid dependent women meeting criteria for borderline personality disorder. *Drug and Alcohol Dependence*, 67, 13–26.
- Mahoney, M. J. (1974). *Cognition and behavior modification*. Cambridge, MA: Ballinger.
- Mahoney, M. J. (2002). Constructivism and positive psychology. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 745–750). London: Oxford University Press.
- Marlatt, G. A. (2002). Buddhist philosophy and the treatment of addictive behavior. *Cognitive and Behavioral Practice*, 9, 44–49.
- Martell, C. R., Addis, M. E., & Jacobson, N. S. (2001). *Depression in context: Strategies for guided action*. New York: W. W. Norton.
- Masuda, A., Hayes, S. C., Sackett, C. F., & Twohig, M. P. (2004). Cognitive defusion and negative self-relevant thoughts: Examining the impact of a ninety-year-old technique. *Behavior Research and Therapy*, 42, 477–485.
- McCullough, J. P., Jr. (2000). *Treatment for chronic depression: Cognitive Behavioral Analysis System of Psychotherapy (CBASP)*. New York: The Guilford Press
- McHugh, L., & Barnes-Holmes, Y. (2004). Perspective-taking as relational responding: A developmental profile. *The Psychological Record*, 54, 115–144.

- Meichenbaum, D. H. (1977). *Cognitive-behavior modification: An integrative approach*. New York: Plenum.
- Moore, J. (2000). Words are not things. *The Analysis of Verbal Behavior*, 17, 143–160.
- Morgenstern, J., & Longabaugh, R. (2000). Cognitive-behavioral treatment for alcohol dependence: A review of evidence for its hypothesized mechanisms of action. *Addiction*, 95, 1475–1490.
- Nurnberger, J. I., & Hingtgen, J. N. (1973). Is symptom substitution an important issue in behavior therapy? *Biological Psychiatry*, 7, 221–236.
- Reese, H. W. (1968). *The perception of stimulus relations: Discrimination learning and transposition*. New York: Academic Press.
- Roemer, L., & Orsillo, S. M. (2002). Expanding our conceptualization of and treatment for generalized anxiety disorder: Integrating mindfulness/acceptance-based approaches with existing cognitive-behavioral models. *Clinical Psychology: Science and Practice*, 9, 54–68.
- Schraml, W., & Selg, H. (1966). Behavior therapy and psychoanalysis. *Psyche*, 29, 529–546.
- Segal, Z. V., Teasdale, J. D., & Williams, J. M. G. (2004). Mindfulness-based cognitive therapy: Theoretical rationale and empirical status. In S. C. Hayes, V. M. Follette, & M. M. Linehan (Eds.), *Mindfulness and relationship: Expanding the cognitive behavioral relationship* (pp. 45–65). New York: The Guilford Press.
- Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2002). *Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse*. New York: The Guilford Press.
- Skinner, B. F. (1945). The operational analysis of psychological terms. *Psychological Review*, 52, 270–276.
- Skinner, B. F. (1957). *Verbal behavior*. New York: Appleton-Century-Crofts.
- Tang, T. Z., & DeRubeis, R. J. (1999). Reconsidering rapid early response in cognitive behavioral therapy for depression. *Clinical Psychology: Science and Practice*, 6, 283–288.
- Teasdale, J. D., Moore, R. G., Hayhurst, H., Pope, M., Williams, S., & Segal, Z. V. (2002). Metacognitive awareness and prevention of relapse in depression: Empirical evidence. *Journal of Consulting and Clinical Psychology*, 70, 275–287
- Titchener, E. B. (1916). *A text-book of psychology*. New York: MacMillan.
- Wegner, D. M., Schneider, D. J., Carter, S. R., & White, T. L. (1987). Paradoxical effects of thought suppression. *Journal of Personality and Social Psychology*, 53, 5–13.
- Wells, A. (1994). Attention and the control of worry. In G. C. L. Davey & F. Tallis (Eds.), *Worrying: Perspectives on theory, assessment and treatment* (pp. 91–114). Oxford, England: Wiley.
- Wilson, G. T. (1999). Rapid response to cognitive behavior therapy. *Clinical Psychology: Science and Practice*, 6, 289–292.
- Wilson, K. G., & Hayes, S. C. (1996). Resurgence of derived stimulus relations. *Journal of the Experimental Analysis of Behavior*, 66, 267–281.
- Wolpe, J. (1980). Cognitive behavior: A reply to three commentaries. *American Psychologist*, 35, 112–114.
- Wolpe, J., & Rachman, S. (1960). Psychoanalytic “evidence”: A critique based on Freud’s case of little Hans. *Journal of Nervous and Mental Disease*, 131, 135–148.
- Yates, A. J. (1958). Symptoms and symptom substitution. *Psychological Review*, 65, 371–374.
- Zettle, R. D., & Hayes, S. C. (1986). Dysfunctional control by client verbal behavior: The context of reason-giving. *The Analysis of Verbal Behavior*, 4, 30–38.
- Zettle, R. D., & Hayes, S. C. (1987). Component and process analysis of cognitive therapy. *Psychological Reports*, 64, 939–953.

RECEIVED: March 31, 2003

ACCEPTED: September 9, 2003

