Buddhism and Acceptance and Commitment Therapy

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The philosophy, basic theory, applied theory, and technology of Acceptance and Commitment Therapy (ACT) are briefly described. Several issues relevant to Buddhist teachings—the ubiquity of human suffering, the role of attachment in suffering, mindfulness, wholesome actions, and self—are examined in relation to ACT. In each case there are clear parallels. Given that a major focus in the development of ACT has been on the identification of basic behavioral processes that make sense of acceptance and defusion-based treatments, these parallels suggest that the basic account may also provide a scientific grounding within the behavioral tradition for a range of Buddhist concepts and practices.

THE PURPOSE of this paper is to relate Acceptance and Commitment Therapy (ACT; said as one word, *"act,"* not A-C-T) to a Buddhist view of suffering and its amelioration. ACT was developed over the last 20 years from the confluence of behavior analysis, the human potential movement, and experiential psychotherapies. That development work refined the contextualistic philosophy upon which the therapy is based (e.g., Hayes & Brownstein, 1986; Hayes, Hayes, Reese, & Sarbin, 1993), developed a contextual theory of language and cognition (Hayes & Hayes, 1992; see Hayes, Barnes-Holmes, & Roche, 2001, for a book-length treatment), and generated a working account of relevant forms of psychopathology (e.g., Hayes, Wilson, Gifford, Follette, & Strosahl, 1996), as well as developing ACT as a technological approach (Hayes, Strosahl, & Wilson, 1999). Each of these areas will be touched upon in the present paper.

The ACT work was always closely connected to issues of spirituality (indeed, the first article on this work was on spirituality; Hayes, 1984) and the parallels between ACT and Buddhist thinking are quite clear in some areas. However, there was no conscious attempt to base ACT on Buddhism per se, and my own training in Buddhism was limited. It is for that very reason that these parallels may cast an interesting light on the current discussion. It is one thing to note how Buddhist philosophy and practices can be harnessed to the purposes of behavioral and cognitive therapy. It is another to note how the development of a behavioral clinical approach has ended up dealing with themes that have dominated Buddhist thought for thousands of years. Such an unexpected confluence strengthens the idea that both are engaging topics central to human suffering.

Buddhism is a prescientific system and the processes it points to are not scientific concepts. Thus, while it may sound sacrilegious, if Buddhist concepts and practice are pragmatically useful, it will fall to science, not Buddhism itself, to provide a scientifically valid account of why and when these concepts and practice are useful. The concepts and data underlying ACT may be useful in that regard.

Given this purpose, a fair amount of this article will focus on ACT per se, so that a ground may be established from which to examine some Buddhist teachings. The following sections will consider the philosophy, theory, and technology of ACT. I will then consider the parallels between this work and Buddhism.

The Philosophy Underlying ACT: Functional Contextualism

What was originally "radical" about "radical behaviorism" is that scientific observations themselves were thought of as behavior. When applying contingency thinking to scientists themselves, Skinner (1945) saw that one could no longer hold to the traditional methodological behavioral rejection of thoughts, feelings, and the like, because under some contingency conditions observing one's own feelings could be objective, while observing publicly accessible events might be subjective.

It is a bit strange to call this view "radical behaviorism" because it overturns many of the major points that had previously defined behavioral thinking. Skinner's approach is made more accessible by thinking of behavior analysis as a type of contextualism, or pragmatism (Biglan & Hayes, 1996; Hayes, 1993). The core analytic unit of contextualism is the ongoing act in context (Pepper, 1942), with a focus on the whole event, a sensitivity to the role of context in understanding the nature and function of an event, and a firm grasp on a pragmatic truth criterion (Hayes, Hayes, & Reese, 1988). There are various kinds of contextualism, defined by their analytic goals (Hayes, 1993). Functional contextualism is that wing of

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contextualism that adopts the prediction and influence of events as the goal of their analysis.

A contextualist always asks, "In what context does that apply?" and looks for an answer that orients the analyst to effective action. Given the goals of a functional contextualist, analysis should help explain how to alter the problematic events, and for that reason, the account must eventually reach the manipulable environment. Clients often take a quite different approach, focusing instead on whether their interpretations of their own troubles are ontologically "true," whether or not these analyses are pragmatically useful.

The Basic Theory Underlying ACT: Relational Frame Theory

The theory of language and cognition upon which ACT is based is called Relational Frame Theory (RFT; Hayes et al., 2001). The core conception in RFT is that humans learn to relate events mutually and in combination, that this relational response is brought under the control of arbitrary contextual cues, and that the stimulus functions of events are modified by the functions of other events related to them. Consider a child who has learned to relate events as "opposite." Suppose the child is told, "A is the opposite of B and B is the opposite of C; A can be used to buy candy; which do you want, B or C?" The relations among these events are arbitrarily specified. The relation is both mutual (if A is the opposite of B, then B is the opposite of A) and combinatorial (the relation between A and C must be one of sameness, because an opposite of an opposite is the same). Further, the child will probably be able to select C over B, based on the specified functions of A (i.e., buying candy) and the relation of B and C to A (since C is derived to be the same as A you can probably also use it to buy candy, while B is the opposite of A, so presumably you cannot). Scores of studies have been done in the basic literature on such performances (see Hayes et al., 2001, for a review). Relations of this kind emerge in infancy (Lipkens, Hayes, & Hayes, 1993) and appear to be absent in nonhumans.

Derived stimulus relations are what permit human verbal behavior to be useful, because they enable functions of the natural environment to be altered by what one says. Unfortunately, they also greatly increase human contact with painful events. When a human being tells a story of a painful event in the past, some of the negative functions of the original event will be attached to the telling. Even very positive environments can lead to pain through relational means, as when a great success reminds one of past failures.

Unable to avoid pain simply by avoiding external circumstances, human beings begin to try to avoid negative private experiences directly, a process we call "experiential avoidance." For example, humans will "try to forget about" past traumas, or will try not to feel anxious in situations that lead to anxiety. All of these processes substantially increase the human capacity for suffering.

The Theory of Psychopathology Underlying ACT: FEAR

The acronym FEAR expresses four of the key concepts in an ACT approach to psychopathology—fusion, evaluation, avoidance, and reason giving (Hayes et al., 1999). Cognitive fusion refers to the domination of derived functions over direct ones. As behavior becomes more verbally regulated, it also tends to become more insensitive to direct experience. People can begin to "live inside their heads."

The mischief that cognitive fusion produces is increased by verbal evaluation. Verbal comparative relations are useful in human behavior because they allow conceptualized consequences to be weighed, and thus facilitate human problem solving and planning. This same process, however, also permits the comparison of experienced to feared or wished-for events, greatly amplifying the capacity for human suffering. For example, a very successful person can believe himself to be a "failure" because the outcomes produced are less than an imagined ideal. A person can imagine wonderful outcomes and be dissatisfied if only good outcomes are achieved.

Experiential avoidance occurs when a person is unwilling to remain in contact with a particular private experience (e.g., bodily sensations, emotions, thought, memories, behavioral predisposition) and takes steps to alter the form, frequency, or situational sensitivity of these events, even when doing so causes psychological harm (Hayes et al., 1996). Unfortunately, the more negative private events are avoided, the more they tend to occur. Deliberate (i.e., verbally guided) attempts to avoid private events remind the person of the events to be avoided (thus evoking them), deflect the person from effective orientation to the current environment, and often tend to elicit the very emotion being avoided.

Finally, reason giving draws the person into useless attempts to understand and explain as a method of controlling the outcome. Often the "good reasons" offered only increase experiential avoidance and, furthermore, provide a verbal formula that increases resistance to change for fear of "being wrong." Reason givers tend, as a result, to be difficult to treat (Addis & Jacobson, 1996) and more likely to engage in useless worry in response to negative moods (Addis & Carpenter, 1999), despite the fact that such worry and self-analysis has minimal instrumental benefit (Borkovec, Hazlett-Stevens, & Diaz, 1999).

While a careful analysis is beyond the scope of the present article, most forms of psychopathology seem to

involve specific forms of FEAR. Such problems as substance abuse, social withdrawal, agoraphobic avoidance, ruminative worry, obsessive-compulsive behaviors, and so on all seem to have clear components of experiential avoidance and cognitive fusion for many suffering with them (see Hayes et al., 1996, for data in several of these areas).

The Applied Technology: ACT

From an ACT perspective, psychological health is the process of increasingly living life in accord with chosen values, while simultaneously maintaining a nondefensive contact with historically produced private reactions (thoughts, feelings, memories, bodily sensations). Defined in this way, psychological health is available to anyone. No history is so terrible that it is impossible to do a better job of noticing what one's history produces in the private domain, while placing one foot in front of the other in a valued direction in the behavioral domain. The acronym "ACT" refers to the key steps involved: Accept, Choose, and Take action (cf. Emery & Campbell, 1986).

ACT interventions are designed:

- to reduce cognitive fusion through the use of exercises and paradoxical and process-oriented language in therapy;
- to undermine experiential avoidance by confronting the costs of that avoidance and the conflict it produces with client values;
- to teach acceptance and willingness as an alternative coping response, and to practice deliberate defused exposure to troublesome thoughts, feelings, bodily sensations, and the like;
- to help the client maintain contact with a transcendent sense of self that makes acceptance and cognitive defusion less fearsome, through the use of exercises and practices;
- to clarify life values; and
- to behave in accord with chosen values through behavioral commitment strategies.

There are several stages to ACT. The first is called "creative hopelessness." If it is the case that human suffering emerges in part from natural and ubiquitous human verbal processes and is exacerbated by cognitive fusion and experiential avoidance, as is suggested from RFT, then clients need to face the possibility that what they have been seeing as a possible solution to their problems is actually part of the problem. In essence, doing what seems rational and normal is nevertheless pathological. Clients are asked to consider the possibility that perhaps they are having psychological pain in part because trying to get rid of pain is painful.

This is a difficult insight, because the alternative is not obvious. Superficially, the literal alternative would be to "stop trying to get rid of psychological pain," but if one did so in order to feel better, one would be doing so to rid of psychological pain, and thus the struggle would not have stopped.

The Chinese handcuff metaphor (Hayes et al., 1999) is commonly used early on in ACT to point to the problem:

> The situation here is something like those "Chinese handcuffs" we played with as kids. Have you ever seen them? It is a tube of woven straw about as big as your index finger. You push both index fingers in, one into each end, and as you pull them back out the straw catches and tightens. The harder you pull, the smaller the tube gets and the stronger it holds your finger. You'd have to pull your fingers out of their sockets to get them out by pulling them out once they've been caught. Maybe this situation is something like that. Maybe these tubes are like life itself. There is no healthy way to get out of life, and any attempt to do so just restricts the room you have to move. With this little tube, the only way to get some room is to push your fingers in, which makes the tube bigger. That may be hard at first to do because everything your mind tells you to do casts the issue in terms of "in and out" not "tight and loose." But your experience is telling you that if the issue is "in and out," then things will be tight. Maybe you need to come at this situation from a whole different angle than what your mind tells you to do with your own psychological experiences. (p. 105).

The purposes of the creative hopelessness phase of ACT are to undermine reason giving, block experiential avoidance, and to disconnect language from its normal, literal functions.

In the next phase of ACT, what is not working is given a bit more form: The core problem is often the conscious, deliberate attempt to control private events. The following metaphor is meant to capture the useless quality of experiential avoidance as a coping strategy:

> Let's imagine you were hooked up to the world's most sensitive polygraph and in such a way that both of us could clearly see its readings and thereby immediately know how anxious or relaxed you were. Now suppose I presented you with the following task—all you have to do is remain relaxed. Furthermore, to increase your motivation on the task, I take out a loaded revolver, point it to your head, and tell you I will pull the trigger if you fail at the task by becoming anxious. What will happen?

In other exercises and thought experiments, clients will be asked to deliberately try not to think thoughts, or

to examine and score their own efforts to control private events throughout the day.

Willingness, defusion, and acceptance is then briefly presented as an alternative focus for therapy, and exercises and metaphors are used to help the client see this alternative. It is not yet pursued, however, because a safe place needs to be carved out that will allow the client to open up to previously avoided private events without being overwhelmed. That safe place is consciousness itself. The observer exercise (a variant of the "self-identification exercise" developed by Assagioli, 1971, pp. 211–217) is designed to begin to establish a sense of self that exists in the present and provides a context for cognitive defusion. This is a key exercise in ACT. We will briefly summarize it here.

The client sits with eyes closed. After some time centering the client, the therapist continues:

> "I want you to remember something that happened last summer. Raise your finger when you have an image in mind. Good. Now just remember all the things that were happening then. Remember the sights . . . the sounds . . . your feelings. . . . And as you do that, see if you can notice that you were there then noticing what you were noticing. See if you can catch the person behind your eyes who saw, and heard, and felt. You were there then, and you are here now. I'm not asking you to believe this. I'm not making a logic point. I am just asking you to note the experience of being aware and see if it isn't true that in some deep sense the 'you' that is here now was there then. The person aware of what you are aware of is here now and was there then."

After several more cycles of such guidance, toward various memories at different ages, the therapist continues:

> "You have been you your whole life. Everywhere you've been, you've been there noticing. This is what I mean by the 'observer you.' And from that perspective or point of view, I want you to look at some areas of living. Let's start with your body. Notice how your body is constantly changing. Sometimes it is sick and sometimes it is well. It may be rested or tired. It may be strong or weak. You were once a tiny baby, but your body grew. You may have even had parts of your body removed, like in an operation. Your cells have died and literally almost every cell in your body was not there as a teenager, or even last summer. Your bodily sensations come and go. Even as we have spoken they have changed. So if all this is changing and yet the 'you' that you call 'you' has been there your whole life, that must mean that while you have a body, as a matter of experience and not of belief, you do not experience yourself to be just your body. So just notice your body now for a few moments, and as you do this, every so often notice you are the one noticing." [*Give the client time to do this.*]

The exercise then goes on in a similar way to examine roles, emotions, behavioral predispositions, thoughts, and memories. It concludes:

> "So as a matter of experience and not of belief, you are not just your body . . . your roles . . . your emotions . . . your thoughts. These things are the content of your life, while you are the arena . . . the context . . . the space in which they unfold. As you see that, notice that the things you've been struggling with, and trying to change, are not you anyway. No matter how this war goes, you will be there, unchanged. See if you can take advantage of this connection to let go just a little bit, secure in the knowledge that you have been you through it all, and that you need not have such an investment in all this psychological content as a measure of your life. Just notice the experiences in all the domains that show up, and as you do, notice that you are still here, being aware of what you are aware of . . . [*Leave a brief period of silence.*]

These kinds of exercises help the client find a transcendent part of themselves (namely, a sense of fromhereness or pure consciousness) that is not threatened by difficult psychological content.

When that connection is made, clients are ready more assertively to expose themselves to their own emotions, thoughts, memories, and so on. Many techniques are used to encourage defusion and willingness: physicalizing painful experiences (e.g., "What color is it? What shape is it?"), practicing language conventions that increase the distance between thoughts and their referents (e.g., the convention of naming all reactions by kind, such as "I am having the thought that I'm going to lose control; and I am having the evaluation that this would be bad"), or practicing defusion exercises (e.g., saying a word over and over until all meaning is lost). Perhaps 100 such techniques have been incorporated into ACT protocols, thought most clients are exposed only to a few dozen.

The acceptance of previously avoided private events is not a goal in its own right in ACT. Rather, these coping strategies are taught so that they can be put in the service of moving behaviorally in valued directions. ACT encompasses a detailed method of values clarification. Values are verbally constructed, globally desired life directions. Goals are the outcomes that are achieved while heading in a valued direction. So defined, values unfold as an ongoing process, they are not ever achievable in a static

sense. For example, one can value being an honest, loving person, but that is not a concrete outcome that one can have as an object. No matter how long a value has been pursued, there is more to do if the value is retained; that is not true with goals. If someone said, "Well, I'm an honest person now," and stopped being honest, the value would have *changed.* A concrete goal is different. If someone said, "Well, I have my Ph.D. now," and stopped working for the Ph.D., the goal would merely have been *achieved.*

In ACT, client values are elaborated in several major domains (relationships, work, citizenship, health, and so on) and concrete actions that would instantiate these values are identified. When actions are identified, usually barriers to accomplishing these actions immediately emerge. Often these barriers are more private events. The strategies of acceptance, willingness, and defusion are then practices with these barriers, and concrete behavioral commitment exercises are arranged. At this point, ACT looks more like traditional behavior therapy, but the earlier work continues to inform behavior change efforts.

The core question in ACT is this: Based on a distinction between you and the things you've been struggling with and trying to change, are you willing to experience those things, fully and without defense, as they are, and not as they say they are *and* do what takes you in a valued direction in the current situation?

If the client can answer yes to this question, then life itself opens up just a bit. If the answer is no, then, psychologically speaking, the client becomes a bit smaller.

While an examination of the impact of ACT is beyond the scope of this paper, recent studies have reconfirmed its impact in randomized controlled trials with various clinical populations (e.g., Bach, 2000; Bond & Bunce, 2000). Effectiveness research has also shown that training in ACT produces generally more effective clinicians (Strosahl, Hayes, Bergan, & Romano, 1998).

ACT and Buddhist Concepts and Practices

In considering how ACT connects with Buddhist philosophy and practices, I will limit my comments to the following issues (each of which has been touched upon by Kumar, 2002, in the present volume): the ubiquity of human suffering, the role of attachment, mindfulness, valued action, and issues of self.

The Ubiquity of Human Suffering and Its Source in Attachment

The Four Noble Truths begin with the idea that human suffering is ubiquitous. In the first sermon delivered by the Buddha after enlightenment (the *Dhammacakka Sutta,* or *Wheel of Dhamma Discourse*), he said, "Birth is suffering, death is suffering, sorrow, and lamentation, pain, grief, and despair are suffering, association with the unloved or unpleasant condition is suffering, separation from the beloved or pleasant condition is suffering, not to get what one wants is suffering" (as cited in Dhamma, 1997, pp. 17–18). The list given is obviously meant to be a partial one, and it is obviously ubiquitous. Kumar (present volume) says it this way: "suffering is an inalienable part of existence, inflamed by any attempt to contain it."

The source of suffering is attachment or craving. The Buddha said it this way: "This is the Noble Truth of the origin of suffering: It is craving which produces rebirth, bound up with pleasure and greed. It finds delight in this and that, in other words, craving for sense pleasures, craving for existence or becoming and craving for nonexistence or self-annihilation" (*Dhammacakka Sutta,* as cited in Dhamma, 1997, p. 18). Kumar (2002) states that, according to Buddhism, "Suffering is generated by the mental tendency toward essentialism" based on "experiencing thoughts, emotions, behaviors, or self as discrete and unchanging." Another modern Buddhist scholar says it this way:

> The real cause of suffering is the reaction of the mind. . . . The reaction is repeated moment after moment, intensifying with each repetition, and developing into craving or aversion. This is what in his first sermon the Buddha called *tanha,* literally "thirst": the mental habit of insatiable longing for what is not, which implies an equal and irremediable dissatisfaction with what is. (Hart, 1987, p. 38)

In ACT, suffering is also considered to be an inalienable part of human existence. A specific process is posited as the source of the ubiquity of human suffering: the bidirectionality of human language. Pain is unavoidable for all complex living creatures, due to the exigencies of living, but human beings enormously amplify their own pain through language. Because verbal relations are arbitrarily applicable, any situation can "remind" humans of past hurts of all kinds. In nonverbal organisms, only formally similar situations will perform this function. Indeed, because events can be related verbally in an infinite number of ways, even situations that have the opposite functions of previous pain can evoke this pain. For example, a person who has experienced a painful death in the family may recall that death when seeing a hearse, but may also recall it on a spectacular spring day, or when seeing a flower, or when seeing a child play with great innocence and joy. Just as a person playing a word-association game can say "hot" when given the clue "cold," so too can a person seeing events that are joyful and full of life be reminded of painful deaths. Similar effects occur clinically: relaxation-induced anxiety, suicide increases during holi-

days, depression produced by joyful events, or panic produced by noticing the current absence of anxiety.

The bidirectionality of human language also increases suffering by providing a language for self-knowledge, thus providing an invitation to experiential avoidance. Emotions provide a good example. In nonverbal organisms, events that produce aversive reactions are avoided. In verbal organisms, the reactions themselves become targets of avoidance. Human language allows loose sets of bodily sensations, contextual features, and behavioral predispositions to be verbally constructed into "emotional states." We may learn to call one loose set "depression" and another "anxiety." The aversiveness of these verbally organized events is in turn amplified by verbal evaluation (e.g., anxiety is "bad" and something that "people who are together don't have"), and by constructing verbal futures linked to these emotions that are aversive (e.g., "If I have a panic attack here I would make a complete fool of myself"). These verbal constructions considerably increase the aversiveness of the emotional event itself.

Human suffering is further increased by human language because of the verbal evaluation systems described earlier. Humans constantly compare the current situation to verbally constructed futures, which increases the dominance of verbal sources of behavioral control (e.g., "I would be able to live if only I could get free of this anxiety"). Furthermore, humans can verbally construct outcomes that have never been experienced. These processes can be painful even when they are literally accurate. For example, everyone "knows" they will die, and educated persons "know" that the universe will either expand infinitely and burn out or will be drawn back together into an infinitely dense pea. In either case, they know that all of human achievement is finite.

Finally, having enormously increased the human exposure to pain, human language suggests solution strategies that work just fine in the external world but are often poisonous when applied to conditioned private events. These include particularly ineffective thought and emotional suppression or avoidance strategies, which increase the frequency of events being avoided, further define the situation as an aversive one, and decrease attention to the current demands of the natural environment and thus decrease instrumental effectiveness.

The Buddhist concept of craving and attachment draws its meaning from lay language. The Buddha considered the source of attachment to be multilayered, and he saw his own enlightenment as a kind of peeling of that onion based on his direct experience. He discriminated many steps in the Wheel of Suffering, each based on the next: likes and dislikes, sensations, contact with events through the senses and the mind, the illusion of mind and matter, consciousness, reaction, and ignorance.

The theory underlying ACT provides a process that may help explain the Buddha's insights. For example, consider the idea that attachment comes from likes and dislikes, which in turn come from sensations. Consider the definition of attachment quoted earlier of "longing for what is not here." From an RFT perspective, this longing has to do with verbal knowledge of certain events, verbal relations about the past, present, and future, and with "frames of comparison" allowing events to be evaluated against one another (Hayes et al., 2001). To put this process in a simple form, consider the sentence "I want X." The word "want" comes from the Old Norse term *vant*, meaning literally "missing." The simple verbal act of wanting something thus requires (a) noticing verbally (in the RFT sense of that term) what is present, (b) noticing verbally what is not present, thereby contacting this event through derived relations, and (c) comparing the two. If these verbal functions dominate, the person will become "attached" to a verbally constructed future in which what is not present is present. Scientifically, what is present all along is the process of verbal construction. Domination by a verbal future that minimizes contact with the present (attachment) comes from a verbal comparison of verbally known and evaluated experiences and sensations. The Buddha's insight remains, but a scientifically known process helps fill in the picture.

Acceptance and Mindfulness

For a Buddhist, "the first step toward emerging from such suffering is to accept the reality of it, not as a philosophical concept or an article of faith, but as a fact of existence" (Hart, 1987, p. 38). The second is seeing its source in craving and attachment. The Buddha described the cessation of suffering in his Third Noble Truth as "giving up, renouncing, relinquishing, detaching from craving" (*Dhammacakka Sutta*, as cited in Dhamma, 1997, p. 18). Giving up a craving is not a deliberate change in the craving. It is a profound type of change at another level. It is a change in the agenda of craving itself, not immediately a change in the form or frequency of a craving. "Letting go of a craving is not rejecting it but allowing it to be itself" (Batchelor, 1997, p. 9).

ACT takes a similar view, but a specific set of psychological processes is posited as the source of transformation. Just as self-struggle comes from cognitive fusion, acceptance is a natural result of cognitive defusion. Cognitive behavior therapists have decades of research showing that psychopathology tends to be associated with certain kinds of thoughts. Usually this leads to concrete efforts to change the content of thoughts, but the contextualistic qualities of ACT open a different solution: Change the context in which thoughts reduce effective action. All verbal relations, like all behavior in a contextualistic system, are situated. Furthermore, the impact of

thoughts, like all relations between psychological events, is also contextually situated. The problem with negative or irrational thoughts, from a contextual point of view, is not the form of the thought but its excessive literal quality. Changing the literal quality by literal intervention (e.g., through cognitive disputation) is fraught with difficulty because the process contradicts the outcome. Conversely, changing the context in which thoughts are taken literally changes its literal quality, even if the thought continues.

Consider the thought, "I must be perfect." In normal cognitive behavioral approaches, this thought would be targeted, disputed, tested, and changed through direct means. A wide variety of contextual alternatives exist, all of which are components of ACT. For example, the thought could be watched dispassionately, as one watches thoughts while meditating. The thought would be repeated out loud rapidly for a few hundred times, until only its sound remains. The thought could be given a size, shape, color, speed, form, texture, and so on, thus treating it as one treats observations of external objects. The person could thank their mind for such an interesting thought to watch. The person could examine the bodily sensations, emotions, memories, and behavioral predispositions that emerge in association with the thought, and could take time experiencing these events as aspects of an unfolding, changing process of living. The person could label their own cognitive processes (e.g., "Now I am having that thought that I must be perfect"). The person could think the thought very, very slowly, so that each word takes minutes to sound out.

These various procedures are designed to reduce the literality of the thought—weakening the tendency to treat a thought as if it is what it refers to—but without targeting the form of the thought itself. Instead, these methods alter the context in which thoughts of a given form are troublesome.

While these methods were not consciously drawn from Buddhist practice, they have clear parallels there. In Buddhist traditions, Right Mindfulness, part of the Eightfold Path, includes many practical methods of acceptance and defusion. For example, "If one experiences any feelings in the body, whether gross or subtle, one should be aware of them in the present moment . . . if there is liking or disliking, desire, anger, or doubt, these should be taken as meditation objects" (Dhamma, 1997, p. 39). Zazen, following the breath, and the like all seem designed to reduce the domination of the literal meaning of events. Similarly, Zen koans are presented as verbal puzzles, but their essence is not that at all. What underlies koans is what is there when the puzzle is no more. As was pointed out by the Zen master Chung-feng, "It cannot be understood by logic; it cannot be transmitted in words; it cannot be explained in writing; it cannot be measured by reason" (as quoted in Kapleau, 1989, p. 77). The dual qualities of openness to experience in the moment and reduction of the literal dimension when it interferes with that openness seem characteristic of virtually all Buddhist practices of enlightenment.

The techniques of cognitive defusion reduce the behavioral impact of thoughts, at least in ACT. Bond and Bunce (2000), for example, found that positive behavioral and psychological outcomes in ACT were produced by increases in the acceptance of previously avoided private events. Similarly, Bach (2000) found that severely mentally ill patients with hallucinations or delusions treated with ACT showed a 48% reduction in rehospitalization over 4 months compared to treatment as usual, and that this outcome was produced by a significantly greater decrease in the believability, but not the frequency, of psychotic symptoms.

Valued Action

Buddhism is sometimes called a religion, but it is, at its essence, without dogma or belief (Batchelor, 1997). Even the Four Noble Truths are not so much beliefs as orientations to action: seeing suffering, letting go of attachment, and cultivating wholesome deeds. The bottom line in Buddhism is not belief, but living and doing. The Eightfold Path is intensely behavioral.

As a behavior therapy, ACT takes the same stance. Acceptance and cognitive defusion is not an end in itself but a means to successful living. What requires acceptance and defusion will be determined by history and purpose. The goal is not to feel all one's feelings, but to feel all those that occur in the context of living a valued life. For example, if raising a family brings a person in contact with painful material, the task is to observe that pain and to raise one's family. This seems entirely compatible with Buddhism. S. N. Goenka, a modern Buddhist teacher, says it this way: "This is holy indifference: neither inaction nor reaction, but real, positive action with a balanced mind" (Hart, 1987, p. 54).

Self

Issues of self provide another relevant point of connection. Three kinds of self are considered in ACT: the conceptualized self, self as an ongoing process of knowing, and the transcendent self. ACT seeks to undermine the conceptualized self—that is, an attachment to a literal conception of who we are—on the same grounds that it seeks to undermine attachment to any specific thought: that such attachment is unnecessary and unhelpful. A phrase used in ACT that characterized its posture toward the conceptualized self is, "Kill yourself every day."

Self as an ongoing process of knowing is a fluid, dynamic process of knowing one's own flow of experiences. Enhancing self-as-process is implicitly a goal of various

forms of therapy, particularly in humanistic and experiential camps. This kind of self supports ongoing verbal (or "conscious") contact with events, such as feeling feelings, or sensing sensations. That, in turn, can be clinically useful in reducing excessive rule control and enhancing contact with the effects of actions.

This seems very much in line with Buddhist thinking. The self as discrete and unchanging is problematic. It is a form of attachment. The self as a process is what one fosters through mindfulness.

There may be a point of divergence in the third area: a transcendent self. ACT relies on this sense of self to support clients in exposing themselves to feared private events. The transcendent self, or self as context, is theorized to result from deictic verbal relations, such as here/now, I/you, or now/then (Barnes & Roche, 1997; Hayes, 1984), and may be defined as knowing from a locus or perspective. Another term might be consciousness per se, as distinct from consciousness something. Some experimental support for this conception has recently been shown in very young children: Teaching children deictic verbal relations results in a notable increase in perspective taking—including the ability to take another person's perspective into account (Barnes-Holmes, Barnes-Holmes, & Cullinan, 2001).

Consciousness is not thing-like for the person being conscious. One can be conscious of the limits of everything except one's own consciousness. Self as context is present everywhere we have ever been, so far as we know, by definition. This means that one's own experience of a transcendent sense of self is that it has no limits: It is not a thing. Things are not things unless they have limits. In one important sense of the term, self, thus, is nothing (a word that was originally written as "no thing."). So far, this sounds very much in line with Buddhist thought, and perhaps forms the psychological basis of the Eastern concept of spirituality, and of God, as "everything/nothing."

There may be a point of divergence, however, because while the person is alive, a sense of perspective is not known by that person to change once it emerges (in the preschool period). Indeed, in ACT this sense of self as context is argued to be critical therapeutically because it means that there is at least one stable, unchangeable, immutable fact about oneself that has been experienced directly and is not just a belief or a hope or an idea. In the context of therapy, this kind of stability and constancy helps a client confront extreme psychological pain and trauma, knowing in some deep way that no matter what comes up, the client's deepest sense of being is not threatened.

I am not sure whether this concept diverges from Buddhist teachings. Speaking of an immutable self from the point of view of a knower seems to conflict with Kumar's (2002) statement that "self as . . . unchanging deviates from the natural process of change inherent in all existence." Most Buddhist texts do not speak of self as context, though an observing self seems to be the implicit background of all knowing. In all likelihood, it is the fear of reification of self-concepts that is at the basis of the relative silence on this issue since, after all, "everything that arises and passes away is not self" (Snelling, 1998, p. 31).

This topic is subtle and hard to talk about due to the reflective issues involved. It is a particularly difficult issue to frame within a written manuscript. Nevertheless, I will try.

By a transcendent self I do not mean the *belief* in such a self or the *belief* in immutability, but the *experience* of from-here-now and the essential continuity it provides for all verbally known events from the point of view of the knower. The claim is simply that all verbal knowing is known "from here now." That experience is an important sense of the word "I"—namely, that in one important sense "I" *am* from-here-now. This sense of perspective is immutable from the point of view of the knowing person. It is not immutable in the sense that it assumes a form that cannot or does not change. It is immutable in the sense that it has no form at all. It has no limits that can be known by the knower, by definition. In that sense, it is not a thing, and only things can change. No thing cannot.

It is possible to imagine that a person can experience events from somewhere else, some when else. Some spiritual traditions make such claims (e.g., claims of time travel, multiple planes of existence, or of being in two places at once), but even then, the "somewhere else" would then be "here" and the "some when else" would then be "now" from the point of view of the person doing the experiencing. If that was not true, I see no way that the experience could be "known" by the person, since knowing as a process *is* now.

Conclusion

Buddhist concepts and practices have proven their human value over the millennia, but the question for cognitive behavior therapists is this: What additional value can be obtained by considering these practices from the point of view of cognitive behavioral psychology? Importing Buddhist practices into the technical armamentarium of cognitive behavior therapy is fine, but it is not a very ambitious step. These concepts and practices are thousands of years old—they are already doing good in the culture. Buddhism includes traditions of faith, ritual, practice, and community that are designed to support mindfulness and wholesome actions, and short of becoming a religion, no system of psychotherapy will include all of these elements.

A real step forward in empirical clinical practice could come, however, by considering these concepts and prac-

tices in scientific terms. That might lead to something new. Scientific psychology is still an adolescent. We do not know how much can be done by approaching ancient sources of wisdom from the point of view of scientific knowing.

In each area examined, there are clear parallels between ACT and Buddhism. These parallels suggest that there can be a common core of understanding about the nature of human suffering within the religious and scientific domains. They also suggest that issues of acceptance, cognitive fusion and defusion, self, and valued action may be worth exploring as one way that behavior therapists might consider Buddhist concepts and practices from the point of view of modern behavioral psychology.

References

Addis, M. E., & Carpenter, K. M. (1999). Why, why, why?: Reason-giving and rumination as predictors of response to activation- and insight-oriented treatment rationales. *Journal of Clinical Psychology, 55*, 881–894.

Addis, M. E., & Jacobson, N. S. (1996). Reasons for depression and the process and outcome of cognitive-behavioral psychotherapies. *Journal of Consulting and Clinical Psychology, 64*, 1417–1424.

Assagioli, R. (1971). *The act of will.* New York: Viking.

Bach, P. (2000). *The use of Acceptance and Commitment Therapy to prevent the rehospitalization of psychotic patients: A randomized controlled trial.* Unpublished doctoral dissertation, University of Nevada, Reno.

Barnes, D., & Roche, B. (1997). A behavior-analytic approach to behavioral reflexivity. *The Psychological Record, 47*, 543–572.

Barnes-Holmes, Y., Barnes-Holmes, D., & Cullinan, V. (2001). Education. In S. C. Hayes, D. Barnes-Holmes, & B. Roche (Eds.), *Relational frame theory: A post-Skinnerian account of human language and cognition* (pp. 181–195). New York: Plenum Press.

Batchelor, S. (1997). *Buddhism without beliefs: A contemporary guide to awakening.* New York: Riverhead Books.

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.

Borkovec, T. D., Hazlett-Stevens, H., & Diaz, M. L. (1999). The role of positive beliefs about worry in generalized anxiety disorder and its treatment. *Clinical Psychology and Psychotherapy, 6*, 126–138.

Dhamma, R. (1997). *The first discourse of the Buddha.* Boston: Wisdom Publications.

Emery, G., & Campbell, J. (1986). *Rapid relief from emotional distress.* New York: Rawson.

Hart, W. (1987). *The art of living: Vipassana meditation as taught by S. N. Goenka.* San Francisco: Harper.

Hayes, S. C. (1984). Making sense of spirituality. *Behaviorism, 12*, 99–110.

Hayes, S. C. (1993). Analytic goals and the varieties of scientific contextualism. In S. C. Hayes, L. J. Hayes, H. W. Reese, & T. R. Sarbin (Eds.), *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: Academic Press.

Hayes, S. C., & Brownstein, A. J. (1986). Mentalism, behavior-behavior relations and a behavior analytic view of the purposes of science. *The Behavior Analyst, 9*, 175–190.

Hayes, S. C., & Hayes, L. J. (1992). Verbal relations and the evolution of behavior analysis. *American Psychologist, 47*, 1383–1395.

Hayes, S. C., Hayes, L. J., & Reese, H. W. (1988). Finding the philosophical core: A review of Stephen C. Pepper's *World Hypotheses. Journal of the 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., Strosahl, K., & Wilson, K. G. (1999). *Acceptance and Commitment Therapy: An experiential approach to behavior change.* New York: Guilford Press.

Hayes, S. C., Wilson, K. G., Gifford, E. V., Follette, V. M., & Strosahl, K. (1996). Experiential avoidance and behavioral disorders: A functional dimensional approach to diagnosis and treatment. *Journal of Consulting and Clinical Psychology, 64*, 1152–1168.

Kapleau, P. (1989). *The three pillars of Zen: Teaching, practice, and enlightenment.* New York: Anchor.

Lipkens, G., Hayes, S. C., & Hayes, L. J. (1993). Longitudinal study of derived stimulus relations in an infant. *Journal of Experimental Child Psychology, 56*, 201–239.

Pepper, S. C. (1942). *World hypotheses: A study in evidence.* Berkeley: University of California Press.

Skinner, B. F. (1945/1972). The operational analysis of psychological terms. Reprinted in *Cumulative record: A selection of papers.* New York: Appleton-Century-Crofts. (Originally published in *Psychological Review* in 1945)

Snelling, J. (1998). Buddhist traditions of meditation. In J. Smith (Ed.), *Breath sweeps the mind: A first guide to meditation practice.* New York: Riverhead Books.

Strosahl, K. D., Hayes, S. C., Bergan, J., & Romano, P. (1998). Assessing the field effectiveness of Acceptance and Commitment Therapy: An example of the manipulated training research method. *Behavior Therapy, 29*, 35–64.

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