

## MAKING SENSE OF SPIRITUALITY

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**ABSTRACT:** In ordinary language a clear distinction is made between the world of matter and that of spirit. While dualism is typically thought to be incompatible with behaviorism, a behavioral analysis of self-awareness suggests that there are good reasons for dualistic talk. Reputed qualities of both the spiritual aspect of humans and of a metaphysical God seem to flow naturally from the analysis. The use of the spiritual facet of self in therapy is briefly discussed.

The purpose of the present paper is to attempt to analyze the distinction between matter and spirit from a behavioral point of view. I have three major reasons to attempt such an analysis. First, it is obvious that spiritual concerns exert an enormous influence over the behavior of many, if not most, of the members of our culture. Popular books on religion, mysticism, meditation, and spiritual growth are consistent sellers. Spiritual leaders are followed the world over. We spend billions of dollars each year on spiritual enhancement, from growth-oriented therapies to organized religion. Second, despite calls for a change in this area (Miller, 1984; Schoenfeld, 1979), there have been relatively few attempts to conduct behavioral theoretical analyses of such concerns. Those that have been done have largely focused on the development of superstition, or on the moralizing influence of organized religion (e.g., Skinner, 1953). While these are important topics, they are relatively easy to analyze in terms of principles of reinforcement or cultural survival. The matter/spirit distinction *per se* is more difficult to understand, but it is also more interesting in many ways. I intend to focus on the nature of the distinction as it is talked about in Western culture, while avoiding issues about the regulative, moralizing influence of organized religion. Third, I believe that a behavioral analysis of spirituality leads to important outcomes for a behavioral view of several other topics, including self-awareness, and therapeutic processes.

### BEHAVIORAL APPROACHES TO "NON-BEHAVIORAL" TERMS

When presented with terms like "spirit" there are several possible responses from behaviorists. One response is to reject them out of hand. In this approach, a behavioral perspective might first be said to have various characteristics. Behaviorism might be declared

*Reprints may be obtained from Steven C. Hayes, Department of Psychology, University of North Carolina at Greensboro, Greensboro, NC 27412. I would like to thank Cindy Harrill, Phil Hinline, Bill McLaurin, Aaron Brownstein, Jill Shelby, Willard Day, Peter Killeen, and students in my laboratory (whose contributions are too intertwined with my thinking to tact specifically) all of whom in one way or another contributed to the ideas in this paper.*

to be deterministic, materialistic, or monistic, for example. Since spiritual or dualistic terms literally contradict materialism, monism, and the like, they would be rejected as scientifically or behaviorally illegitimate. While this is a logical response, it is not really a behavior analytic response.

From a behavioral point of view, rejecting terms purely on the basis of their literal meaning has two problems. First, written or spoken words are the structural products of the functional behavior of speaking or writing. You can "understand" these very sentences even though you know very little or nothing about the contingencies causing them to be emitted. Your understanding of these products of behavior is due to a history provided by the verbal community for reacting to them in commonly agreed upon ways. For example, you can look words up in a dictionary and "find out what they mean" based solely on the form or structure of the words themselves. A structural analysis of these products of behavior is not the same as a functional analysis of the behavior of saying or writing them.

The behavioral analysis of language is based on understanding the behavior of speaking and listening by analyzing contingencies. Terms are to be understood by identifying the conditions under which they are used and the effects their use has. Literal meaning is part of this picture (because the socially-established structure of language must participate in its function) but it is not synonymous with it. Thus, rejecting terms as irrelevant because they are "non-behavioral" when that is based purely on logical or literal inconsistency with behaviorism is itself nonbehavioral — not because the logic is incorrect but because that kind of analysis is not a behavioral analysis.

There is a second and related problem with rejecting terms based on literal meaning. In a radical behavioral view terms have *literal* meaning only within the structure of language achieved by social agreement. Terms are recognized to "mean" things based in part upon their participation in equivalence classes (Sidman, 1971; Sidman & Cresson, 1973) established by the verbal community. Thus, for example, by agreement the term "matter" is not equivalent to "spirit." You cannot interchange the terms and secure reinforcement from the verbal community for doing so. In a behavioral view, however, public agreement is not a shortcut to the truth or validity of terms or observations (Skinner, 1945). We can all agree something is so, and it can nevertheless not be so. The scientific validity of observations depend not on agreement about them but upon the contingencies controlling the observations. There is little reason to suspect that public agreement within the behavioral verbal community ensures contact with the actual contingencies any more than does agreement within the mainstream culture.

For both of these reasons, argument by literal analysis is based on a non-behavioral view of the analysis of psychological terms. A behavioral analysis can be done of any term, even those which are literally incompatible with behaviorism (e.g., see Hayes & Maley, 1977). That is my purpose in this paper.

A second type of response behaviorists sometimes make to "non-behavioral" terms is more satisfactory, but is not always ultimately adequate. When confronted with the need to explain the use of difficult terms or rules, behaviorists often point to the immediate social conditioning that gave rise to an individual's use of such terms or control by such rules. We might, for example, speak generally about how a child came to use the word "spirit" based on the contingencies exerted by family or church. More abstractly, we might wonder about the contingencies of cultural survival that might have supported the use of such terms. Both of these tacks are behaviorally sound, and in many cases may be fully adequate to the analytic demands of the situation. If, however, the term has tact properties, these two tacks are not adequate because we must then also understand the actual physical conditions that gave rise to the term.

An essential characteristic of much of verbal behavior is the way it is controlled by (and can form stimulus equivalence with) elements in the natural and social environment. Much of human verbal behavior is, to some degree, a tact. Under these conditions, understanding the stimulus situation is critical. To understand the term "apple" it is not enough to speak broadly about social conditioning or cultural survival. We must also deal with apples. To the extent that it is a tact, apples are a necessary precondition for the way we use the term "apples."

The same might be true in the matter/ spirit distinction. Of course, behaviorists (while behaving as behaviorists) would not believe that dualism is literally true. The danger is to *presume* that, based solely on our agreement that dualism is incorrect, that talk of spirituality cannot be a tact. This falls back into the trap of literalism just discussed. The matter/ spirit distinction either is in part a tact or it is not. Public agreement will not decide this for us. A primitive tribe may tact all airplanes as "God." The fact that this is in formal disagreement with our view does not make it any less a tact. Furthermore, were we to study this verbal community, we could not understand "God" without dealing with the physical phenomenon of airplanes.

Thus, a third approach is to try more comprehensively to identify the sources of control over the origin of such talk-to identify the actual physical conditions under which such concepts and distinctions might arise and the functions they might serve. Looking for events that might have first supported the matter/ spirit distinction seems especially reasonable when you realize that matter/ spirit distinctions are nearly universal in modern culture. How did it first come to be that matter was distinguished from spirit? If we can provide plausible physical stimuli that occasion the word "spirit," then it could be tact. If not, then this may be another mentalistic term that is due purely to social-verbal conventions. The strategy I intend to follow in this paper is to search for real, physical events that occasion the matter/ spirit distinction, while recognizing fully that simply because we have a term for something does not mean that it literally exists.

#### WHAT IS "SPIRIT"?

If you want to understand what a term "means" it is reasonable (though not ultimately satisfactory) to start with what social agreement has to say, that is, to look it up in the dictionary. As I've already discussed, any functional account must encompass a structural account, so formal definitions delineate what must be encompassed. The following definitions can all be found in the Oxford English Dictionary. The OED defines "spirit" as an "incorporeal or immaterial being" and as a "being or intelligence distinct from anything physical." In essence, then, spirit is said to be knowable but it is nevertheless said to be neither material nor physical. If you look up "matter" you will find that it is related to the word for timber or building materials. Matter is the "stuff of which a thing is made." So matter is "thing-stuff." A "thing" is defined as "that which is or may be an object of perception, thought, or knowledge." The word "object" comes from a word meaning "to throw." It is a "thing thrown down to the senses or the mind." We can go no further, because this definition refers us back to "thing." If we go back and pick up the word "physical" we find we can go no further there either. The word "physical" comes from a word for nature (thus the science of physics) and is defined as "of or pertaining to the phenomenal world of the senses; matter."

Putting these various definitions together, if we are to take the words literally, we are first looking for events that are not publicly observable. "Spirit," furthermore, could not be

just any private event because it is not experienceable as a thing or object (as most private events surely are) though it must somehow be experienceable if the term is under the control of any event at all.

### THE ANALYSIS

Where might we turn to begin to understand behaviorally such a strange concept as "spirit"? It seems illogical on the face of it and certainly nothing like what we know in the world of behavior. That is the appearance, but I want to argue that it is not the truth. There is a behaviorally sensible event that corresponds quite well to the characteristics mentioned. To see it we will have to examine an obvious area: verbal behavior.

Let the word "seeing" represent all of the major things we do with regard to the world (feeling, moving, etc.). To non-verbal organisms there is just the world and seeing. Seeing is controlled entirely by the direct contingencies (of survival and reinforcement). Seeing is simply a response to these non-arbitrary contingencies.

With the advent of verbal behavior this changes. According to the traditional behavioral analysis, something else called self-awareness or self-knowledge is added. Skinner has described it this way:

There is a ... difference between behaving and reporting that one is behaving or reporting the causes of one's behavior. In arranging conditions under which a person describes the public or private world in which he lives, a community generates that very special form of behavior called knowing... Self-knowledge is of social origin. (1974, p. 30)

In other words, the verbal community establishes additional arbitrary contingencies for a behavior that is hard to imagine could emerge any other way: not only seeing but what we might call "seeing seeing" or self-knowledge. Supposedly this happens through such things as questions like "What happened to you yesterday? What did you see? What did you eat?" and so on. There emerges a generalized tendency to respond discriminatively to one's own behavior so as to establish a correspondence between it and verbal behavior and thereby give the verbal community access to what we see. As Skinner says, "It is only when a person's private world becomes important to others that it is made important to him" (Skinner, 1974, p. 31).

So far there is nothing here that truly smacks of spirituality. The world of the senses ("seeing") is explicitly what is not spiritual. It is thing-like in the sense that now we see this, now that, so there is a distinction between this and not-this. Such a distinction is the requirement for things to be things.<sup>1</sup> Seeing seeing is not quite as thing-like, but it is also experienceable as a thing. For example, we say that we are conscious, asleep, or hypervigilant. Our seeing seeing changes; it comes and goes. This quality of distinction within the world of seeing seeing means that it is experienceable as a thing, and thus (according to the dictionary) cannot be the stuff of which spirit is made.

What seems to have been missed in most behavioral accounts is that seeing seeing cannot be all there is to self-awareness. It is also critical to the verbal community that this behavior occurs from a given and consistent perspective, locus, or point of view. That is, we (the verbal community) must not only know that you see and that you see that you see, but that *you* see that you see. Reports of seeing (i.e., seeing seeing) must be from the point of view of you. This behavior might emerge in several ways. First, words such as "here" and "there" are acquired which do not refer to a specific thing but to a relation to the child's point of view. For example, "there" is always anywhere else but "here" and "here" is always "from this locus

or point of view." Second, children are taught to distinguish their perspective from that of others. Young children have a hard time with the issue of perspective. For example, young children seated across from a doll will, when asked, report that the doll sees what they are seeing. Gradually, however, a sense of perspective emerges. A child learns what he or she sees is seen from a perspective. Similarly, a young child, asked what she had for breakfast, may respond with what her brother actually ate, but an older child will not make such a mistake. Through correction ("No, that is what your brother ate. What did you eat?") a child must learn to see seeing from a consistent locus. Finally, it is also possible that a sense of locus emerges by a process of elimination or by metaphorical extension. Suppose a child can give correct answers to the question "what did you x?" where "x" is a wide variety of events such as eat, feel, watch, and so on. The events constantly change. In our terms, the seeing and the seeing seeing change. Only the locus does not. Thus, the one consistency between the word "you" in such questions and behavior is not seeing or seeing seeing but the behavior of seeing that you see from a particular locus or perspective. Thus, in some real sense, "you" *are* the perspective.

The behavior of seeing seeing from a perspective is a very odd behavior. For the person engaging in the behavior, it is not truly possible to see it as an object. It is only experienceable in its effects, the feelings associated with it, or as a kind of fleeting after-image when we attempt to grab it and look at it directly. If we were to see our own perspective (i.e., as an object) from what perspective would we see it?

An analogue to this issue (which is not directly the same thing, but may serve as a convenient metaphor) may help us see the issue. Consider the event of looking from one's eyes. It is impossible truly to look at looking from one's eyes where the object is the same as looking at the object. If you could leap aside yourself faster than the speed of light you would see yourself looking (as you might if you took a snapshot) but you would be doing so from a changed perspective. Your eyes would be elsewhere. If you look in a mirror you see yourself head on-you are essentially looking back at yourself-but what you are looking at is not the same perspective as looking *from* your eyes. No matter where you are, your eyes are there. You cannot truly see your perspective and at the same time view from that perspective. To see perspective, perspective must change. (This same basic issue has been widely discussed in the philosophy of science literature where philosophers have pointed out that the assumptions of a theory cannot themselves be explained by the theory).

The sense of perspective or locus as a behavioral event is like that of the eye as a structural event. Most of you undoubtedly have experienced the phenomenon of talking, then suddenly seeing that you are talking, then realizing that in some sense *you* are seeing yourself talk. At that very instant, you realize that *you* are one step behind the *you* that saw yourself talking. This kind of tail chasing is as ultimately unsuccessful as it is fascinating. There simply seems to be no way to see your own seeing-from-perspective without doing so from a now-shifted perspective. This means that you-as-perspective is not itself fully experienceable as a thing or object by the person looking from that perspective.

The verbal community uses the word "you" in many ways, of course. Sometimes it means "you" as a physical system, such as "I saw you asleep yesterday." Most often, however, it seems explicitly to refer to you-as-perspective. Consider the following question: "If you lost your arms and legs, would you still be you?" Given one sense of the question ("You as a physical structure") the question could reasonably be answered "no." If the sense of the question, however, refers to the verbally established you-as-perspective, then the obvious answer is yes. In fact, our bodies change regularly, but we are still said to be the same person. The same principle applies to any aspect of ourselves that can be held as an object,



such as our thoughts, emotions, behavioral predispositions, and so on. If you are asked to remember what it was like to be 10 years old-to remember looking out at the world at that age-and you are asked "Was that *you* then?" or "Deep down, is the *you* that is here now the *you* that was there then?" again the obvious answer is yes. Logically, this is not at all true in terms of you-as-object. Your thoughts are different, your body is different, your feelings are different, and so on. But now look at the previous sentence. Though it sounds normal, note that the "you" in this sentence refers to some sort of agent *independent* of all of the things about you. When I say "your body" it is as if you possess a body-not that you are your body. For a behaviorist (or any materialist) this seems literally impossible. The verbal community, however, is not making a scientific statement in such phrases. Rather the "you" referred to by the verbal community is seeing seeing from a set context. As long as this behavior itself does not change, you are still you. *What* you see will change radically--your body will age, your thoughts will change-but the locus or context of self-knowledge will not and cannot.

You have never seen seeing from a different perspective than your own. You can imagine what it might be like to do so, (it may even be important to do this in order to acquire a sense of perspective), but even as you imagine this you see these imaginings from the self-same perspective. Thus, while the *content* of your life may change, *you-as-perspective* cannot.<sup>2</sup> If it were allowed to do so, we could not get generally reliable answers to questions such as "what did you do yesterday?" If you really could view events from a different locus, you would no longer *be* you. A verbal community that permitted anything else would collapse in chaos.

#### IMPLICATIONS FOR SPIRITUALITY

Spirit is defined as an "immaterial" being; and matter is the stuff of things. Spirit is thus a being non-experienceable as a thing. You-as-perspective seems to fit this definition rather well. As was argued earlier, the essence of a thing or object is "this-not that." To see a thing we must also see "not-thing." Thus, all things must be finite-they must have edges or limits. It is the edges or limits that allows us to see a thing. If a thing was absolutely everywhere, we could not see it as a thing. For the person experiencing it, you-as-perspective has no stable edges or limits-it is not fully experienceable as a thing. Perspective is precisely the aspect in which things are held. As soon as perspective is viewed as content from what perspective is it viewed? Perspective must move one step back. It seems plausible, then, that the matter/ spirit distinction has as its source the content/ perspective distinction established as a necessary side effect of language. Quite literally, it may be that verbal behavior gave humankind a soul.

The matter/ spirit distinction is an ancient one, and originated long before a scientific perspective emerged. Rather than rejecting this distinction, the present analysis suggests that it is a very reasonable and sophisticated one-allowing us to use language in a situation where the normal use of language (to tact events that are experienceable as things) does not readily apply. Obviously, the present analysis suggests that perspective is in fact a thing-it is a socially established behavior of importance to the verbal community. We can readily examine other people and see their "you-as-perspective behavior" as a thing. Even as we do this, however, we are observing this from our own you-as-perspective behavior, and *this* context or perspective is not experienceable as a thing by ourselves. Thus, you-as-perspective behavior can be a stable thing only when it is someone else being observed. For the person doing it, it is not observable and describable in the same way as all other events are observable and describable.

Talking in this way helps us understand some of the characteristics that are said to be part of the world of the spirit. Consider the characteristics of temporal immortality or physical infinity. This means undying; without limit or end; boundless. So far as you can directly know, you have never been anywhere you-as-perspective have not been. There is nothing you have ever done or experienced that you know about that wasn't known in the context called you. On experiential (not logical) grounds, so far as you know you have no limits and no end. At least you have never experienced any limits, or boundary, or end that you know about, by definition. If you know about it, you were there to know about it.

Other aspects of spirituality also become clear in the same way. It is commonly believed that the spiritual side of humankind participates in the divine. For example, humans are said to be made in the "image and likeness of God." Let us now examine the characteristics of a metaphysical God and see how this relates to you-as-perspective. Consider these terms that have been used to describe God.

*a. Absolute, The One, Perfect Identity, Unity*

You can directly experience no divisions in your own perspective. We do recognize, however, that others exist, so while we participate in or model ultimate unity, we don't usually claim it for ourselves. God's "Perfect Identity" is, in a sense, a logical extension of our own experience of ourselves as context or pure perspective.

*b. Nothing/ Everything*

This more Eastern view of God is easily understandable in the same way. You are not experienceable as a thing. Therefore you are "no thing" (the word "nothing" was originally written as "no thing"). The only events which are without edges (they are not things) are nothing and everything. Experientially, we are everything/ nothing.

*c. Unchangeable, Eternal, Omnipresent*

Since you-as-perspective can *hold* content but is itself not experienceable as content there is no thing about you-as-perspective to change. You have been you your whole life. You are everywhere you have ever been. The words listed are perfectly good ways of saying this. Obviously, however, we recognize logically that we do die, and change; that we are here and not there. Thus there is a logically-induced tension that makes it difficult really to accept what our experience tells us about you-as-perspective. God is an entity without any such contradictions.

*d. Love*

When people speak of "God as love" they usually are referring to a quality of a metaphysical God of absolute acceptance. In a sense, God is seen as the context of all contexts. Note that you-as-perspective is perfectly accepting of all content. Pain and pleasure is equally welcome. The fact that we don't like pain (and so on) is just more content that is also equally welcome. A metaphor for perspective might be a flat floor going in all directions endlessly. The floor will hold something ugly as well as it holds something beautiful. Love is a reasonably good word for this in our personal lives (when someone really accepts "who we are" completely), and by extension the context of all contexts is in its essence loving in this sense.

What I am claiming is that the qualities of a metaphysical God can be understood as a metaphorical extension of the experienced qualities of seeing-seeing-from-perspective behavior. If the soul is a by-product of language, then a metaphysical God is another, when viewed from this perspective.<sup>3</sup>

Previous behavioral analysis in the area of religion have tended to dwell on the moralizing aspects of religion, or the possible superstitious behavior that brings it about. Without the experience of our spiritual aspects (in the sense used here) such institutions may have developed anyway, but it seems their universality is more easily explained by a common original source. Advanced use of language, then, might set the stage for dualism, spirituality, *and* religion, by the inherent distinction or "dualism" of content and perspective. Most religions have mystical and spiritual traditions in addition to their moralizing and rule-giving ones. Paradoxically, spirituality may be the *source* of many of these rules, in that it may be easier to contact the actual contingencies (and then generate rules about them) from a spiritual viewpoint- a topic to which I now turn.

#### WHY MIGHT SPIRITUALITY BE IMPORTANT?

It is one thing to provide, as I hope I have, a plausible behavioral account of the spirit/matter distinction. It is another to explain why this distinction should be the subject of so much attention. There are strong cultural traditions that support the search for our spiritual dimensions. Why might this be?

Perhaps one clue is that, from this analysis, only verbal organisms can establish a matter/spirit distinction. Yet this very verbal system creates other problems. There is a growing literature suggesting that verbal organisms make contact with the world in a very different way than do non-verbal organisms (Baron & Galizio, 1983; Hayes, in press-a). One particularly intriguing finding is that control by rules or verbal stimuli produce an insensitivity to changes in the natural or direct contingencies (Hayes, Brownstein, Zettle, Rosenfarb, & Korn, in press; Hayes, Greenway, Brownstein, Haas, Russell, Squittiare, Rosenfarb, Zettle, Herbert, Herbert, Meinhold, & Thompson, 1984; Matthews, Shimoff, Catania, & Sagvolden, 1977; Olson & Hayes, 1984; Shimoff, Catania, & Matthews, 1981). There may be several sources of control over this effect (Hayes et al., in press), but the fundamental basis of the differences between control by verbal stimuli and control by nonarbitrary stimuli may be that rules have their discriminative or other effects based not just on direct training but also upon their participation in equivalence classes or other symbolic classes established by the verbal community (Hayes, in press-a; Hayes, in press-b; Hayes et al., in press). In other words, when our behavior is controlled by rules it is controlled by the indirect effects of symbolic stimuli (or "concepts") *because* of their symbolic or conceptual nature. This is a fundamentally different kind of stimulus control and greatly increases the impact of the verbal community on our behavior, even when the direct contingencies would be more efficient in guiding our behavior. The resultant insensitivity to direct contingencies may produce great benefits to the culture but also great costs to the individual. Because of our verbal abilities, we are constantly analyzing, explaining, figuring out, and so on, even when the direct contingencies would more efficiently produce effective behavior. To take a trivial example, we may try to "figure out" how to hit a tennis ball and become so attached to these analyses that we have to take "Inner Tennis" lessons to learn to be quiet and just hit the ball. Rule-governed behavior thus may present a major impediment to direct contingency control.

Because verbal behavior, once established, requires no environmental support for its occurrence, there is little to stop the "internal dialogue"-that is, private speaking and



listening. This means that rules will always be readily available to participate in the control of our behavior once we have acquired verbal behavior. If rules incur a significant cost in some areas, it is difficult to imagine how we might escape this form of verbal control. This seems frequently to be a central focus of psychotherapy.

Consider the following situation, which is drawn from a therapeutic package known as "comprehensive distancing" (Hayes, in press-b; Hayes, Korn, Zettle, Rosenfarb, & Cooper, 1982). Imagine that I have you wired up to the world's best polygraph, and that there is absolutely no way that you can be anxious without me knowing it. Now suppose your task is simply to relax-not to be anxious. To help motivate you to perform this simple task I bring out a gun and explain that as long as you remain relaxed, you will not be shot. In such a situation it seems obvious that you will be anxious if you try not to be anxious. That is, following the rule, "At all costs, I must not be anxious" is itself something to be anxious about. The anxiety is not just due to the gun, because the same reaction seems likely if you would lose a million dollars by getting anxious. The point is that following a rule is often counter-productive when it seeks to get rid of particular autonomic reactions, emotions or thoughts: trying not to lose an erection is one of the surest ways to do so, trying not to think a thought automatically creates that thought, and so on (for a more complete analysis of this issue see Hayes, in press-b). This seems to be very much the situation many clients are in – especially those clients dealing with unwanted emotions and thoughts (such as agoraphobics), who are caught in an often unsuccessful struggle to get rid of certain reactions deliberately (that is, by following a rule).

The problem is that it is nearly impossible in such a situation not to generate such a rule. Rule-governed behavior may be ineffective (even disastrously so) in this situation, but the rule is nevertheless present.

You-as-perspective, however, might provide a partial solution. From the perspective developed here, the socially-created "you" is distinct from the content (e.g., private speech) within you. It seems more possible from this perspective to *see* a rule, without having to follow that rule. A metaphor I often use in therapy might help make the point. (The "copy theory" overtones of this example are due to its use clinically and should not be taken literally). Imagine two people sitting in front of two identical computers. Given a particular set of programming, a given input will produce a given output. In this case, suppose the output shown on the screen is "Deep down you are a bad person." In one case let's imagine that the person sitting in front of the screen is well aware of the distinction between himself and the computer. When the read-out appears on the screen it may be interesting, something to consider, or something to show to others. It will probably not be something that has to be struggled with, covered up, followed, not followed, and so on. The second person, however, is completely absorbed by the screen. In fact, like a person totally involved in a movie, he has forgotten that there is a distinction between the screen and himself as observer of the screen. In this situation the read-out is probably much more impactful. It is something to be gotten rid of, denied, forgotten, believed, and so on. In other words, it will control a good deal of behavior.

Thus, it may be that destructive rule control can be undermined by distinguishing you-as-perspective from the content that is there. This is what is claimed by a variety of mystical writers, who term this aspect of self-awareness such things as "the observing self" (Deikman, 1982) or by religious leaders who distinguish between a person's soul and their body, behavior, thoughts and so on. It has been said that "By dis-identifying with automatic sequences (of thoughts) we lessen their impact and provide free space in which to choose an appropriate response...By identifying with the observing self, we can make a more realistic



assessment ... permitting more effective and creative behavior" (Deikman, 1982, p. 108). Despite the mentalistic language, the point is fairly clear. Control by self-rules can be weakened by viewing them from the point of view of you-as-perspective, and perhaps more creative (presumably contingency-shaped) behavior can then emerge.

Mystical traditions are explicitly oriented toward enhancing the distinction between the verbally-held *content* in peoples' lives and the *context* of pure-perspective established in verbal organisms. Perhaps one way to think of this is to think of a second kind of contingency-shaped behavior. In non-verbal organisms, all behavior is contingency-shaped, either in the life time of the individual or the species. In verbal organisms, even originally contingency-shaped behavior can be described, labeled, rationalized, and so on. That is, events can enter into pre-existing symbolic (e.g., equivalence) classes established by the verbal community. These classes are often then available to control future behavior. Other behavior was rule-governed to begin with, in the sense that it was originally controlled by arbitrary stimuli organized into symbolic classes by the verbal community. Thus, in verbal organisms rules come to encompass a good deal of the available behavioral repertoire. Pure perspective-taking, however, does not involve taking a perspective in the sense of having an opinion. The behavior cannot enter into equivalence (or other symbolic) classes and still perform its function. Perspective-taking is not a symbolic activity. The behavior is *produced* by verbal behavior. It may be thought of as a second type of purely contingency-shaped behavior-but in this case the contingencies are those produced by the verbal community in the process of establishing self-awareness. Any procedure which breaks down the literal quality of rules will tend to enhance the salience of this second type of contingency-shaped behavior.

Consider the "concentrative meditation" characteristic of, for example, Transcendental Meditation, in which a mantra is repeated over and over again. As any intrinsic meaning in the content of the mantra collapses (by repetition and, perhaps, satiation) what is left is more context than content. In other types of meditation, more characteristic of the Buddhist tradition, a dispassionate observation of spontaneous thoughts is encouraged. In this case, rules appear but are not reacted to in any way-what might be thought of as a kind of extinction procedure for control by the literality of self-talk. Other examples can be given. Monks enter monasteries where talk is eliminated or greatly restricted. Other traditions encourage repeated rhythmic chanting. In no form of meditation, as that term is usually used, does the meditator engage in discursive, analytical thought (Deikman, 1982). Said in another way, none of these traditions encourage the individual to react to the qualities of terms established by their participation in equivalence classes, such as "meaning," "logic," or "reference." What is common to all these traditions is the selection of procedures that might weaken the literal quality and thus the rule-control exerted by self-talk while enhancing the salience of you-as-context.

It is remarkable how common this move to create a distinction between content and context is within psychotherapy. Beck has his "distancing" (Hollon & Beck, 1979), for example, and even Freud asked clients to adopt an attitude of "quiet, unreflecting self observation" (in Strachey, 1964, p. 287). Thus, although the language differs greatly, western psychotherapeutic thought has been guided (often not deliberately) by the content/ context distinction.

Language has been said to have produced a "loss of innocence" in humankind. The story of Adam and Eve is perhaps a reflection of this thought. Spirituality is said by some to reestablish a kind of "experienced innocence." Like the Zen koan that asks "does a dog have Buddha-nature?" we find that we cannot really go back, but that spirituality (you-as-context) offers one possible solution to the dilemma. Through a second type of contingency-



shaped behavior, it may weaken automatic rule-control and allow the direct contingencies themselves to take more control. As one Eastern monk puts it "When I am hungry, I eat; When I am tired, I sleep."

In summary, then, a behaviorally sensible interpretation of spirituality suggests not only a source, but also possible maintaining contingencies for a matter/ spirit distinction. It is possible to make an argument that in these perilous times we are even more in need of a kind of spirituality that will allow our behavior to come under more effective control by the direct contingencies. It is ironic, but science and materialism may provide a good rationale for the functional utility of aspects of the dualism it seeks to supplant.

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## Notes

<sup>1</sup> Hineline (1980) and others have warned that it is dangerous to view behavior as a thing. It is better considered to be a verb than a noun. For our purposes, however, things are events that allow us to see that they are "this" and "not that." Running is not talking, for example, and in this sense even verbs are things. In general use, however, I would agree strongly with Hineline's analysis.

<sup>2</sup> This distinction is crucial to the procedure known as the est training. Persons who have taken this training will recognize the intellectual debt the present argument owes to it and I would like formally to acknowledge that debt.

<sup>3</sup> This statement, and to some degree this entire paper, might be thought by some to be sacrilegious. It is not my interest, however, to say literally that God or spirit in a religious sense does not exist independent of humankind. To the contrary, God could have created the very mechanisms I am describing that makes spirituality knowable. The paper is only meant to talk about spirituality within the game we call science.

